



Undergraduate Catalog

Catalog Announcements

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Announcements contained in this publication are subject to change without notice and may not be regarded in the nature of binding obligations to the University. The University reserves the right to change any provisions or requirements. Only the Provost or designee can approve changes to the Catalog except where otherwise stated within.

When students matriculate with Old Dominion University, they come under the academic requirements of the edition of the Catalog at that time. Students may graduate under these academic requirements within a period of six years even though subsequent Catalogs may change. Academic requirements include competency requirements, general education requirements, grade point average requirements, major and minor course requirements, foreign language requirements, overall unit requirements and related curriculum matters. Grading practices, tuition, fees and other matters are not considered to be “academic requirements” and are subject to change at the discretion of the University.

Should new changes be to their advantage, undergraduate students may graduate under the conditions of the newer catalog. However, because academic programs are subject to requirements imposed by outside accrediting or certifying agencies, the Commonwealth of Virginia, and the United States of America, such outside requirements take precedence.

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Student Responsibility for Catalog Information

Students are held individually responsible for the information contained in the Undergraduate and Graduate Catalogs. Failure to read and comply with University regulations will not exempt students from whatever penalties they may incur.

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Old Dominion University

The Mission of the University

Mission

Old Dominion University (ODU) is a preeminent public research university located in Coastal Virginia. Our world-class faculty fosters dynamic on-campus and global online learning for undergraduate and graduate students that enriches their lives, promotes insightful and perceptive leadership, and motivates the pursuit of excellence in dedicated fields and professions. We collaborate with strategic partners to address challenges and propose solutions that impact the economy, environment, health and wellness, and social justice. In pursuit of equity and inclusion, ODU provides opportunities for educational, artistic, and professional growth to our diverse Monarch community.

Background

Old Dominion University is located in Hampton Roads, one of the world's major seaports. Since the early seventeenth century, Hampton Roads has been the state's gateway to the rest of the world and the world's gateway to Virginia in commerce and industry, in recreation and culture, and in national security. Now a complex of seven major cities, it is a microcosm of the opportunities and challenges of contemporary urban America. It is also a major center for research and development and a home for extensive scientific and technological activities in marine science, aerospace, ship design and construction, advanced electronics, and nuclear physics.

The University takes its unique character from Hampton Roads as it provides leadership to the state and nation in teaching, research, and service. Thus the University has a special mission for the Commonwealth in commerce, and in international affairs and cultures. It has a significant commitment in science, engineering and technology, particularly in fields of major importance to the region. As a metropolitan institution, the University places particular emphasis upon urban issues, including education and health care, and upon fine and performing arts.

As one of America's major ports, Hampton Roads is the locus of national and international military commands, and the home of a culturally diverse population. The University therefore has natural strengths in activities having international outreach. Faculty members in such fields as business, economics, international studies, geography and the sciences strive to design curricula, teach courses, and encourage foreign exchanges that enhance the University's role as Virginia's international institution.

The Hampton Roads scientific environment provides special opportunities for science and engineering faculty to emphasize research and graduate programs in such fields as marine science, aerospace, and advanced electronics. Global ocean studies and cooperative research at NASA receive particular attention, as University researchers collaborate with U.S. and foreign engineers and scientists.

Urban issues are addressed by programs in public administration, education, the social sciences, and the health professions. The richness of Hampton Roads' artistic life gives great vitality to the University's programs in the visual arts, music, theater, and dance.

Mission Support

Old Dominion University serves the needs of several internal and external constituents with its resources. These include: current and prospective students seeking undergraduate, graduate, and continuing education programs; business and industry; government agencies at all levels; the military; research organizations; and the community at large regionally statewide, nationally, and internationally. These constituencies are discussed in greater detail in the following paragraphs.

Old Dominion University offers a wide array of undergraduate programs, all of which meet national standards of excellence. Every Old Dominion undergraduate student follows a general education program that is designed to develop the intellectual skills of critical thinking and problem solving and to encompass the breadth of understanding needed for personal growth and achievement and for responsible citizenship. This general education

program places special emphasis upon appreciation of the arts and upon understanding the perspectives of women, minorities, and non-Western cultures. Each undergraduate chooses a major program in the liberal arts or sciences or in a technological or professional field.

Old Dominion University's graduate offerings are focused on society's need for advanced professional education and on specialized programs at the master's and doctoral levels for which the institution is prepared through unusual strength of faculty or special geographic advantages. All graduate programs meet national standards of excellence.

As a national leader in the field of technology-delivered distance learning, the University strives to enhance the quality of the educational experience, wherever education is delivered, by applying emerging technologies. It also supports research to explore the impact of these technologies on the teaching-learning process. By utilizing these technologies and by partnering with institutions of higher education, corporations, and governmental entities, the University is able to provide undergraduate and graduate degree programs to students across time and geographic boundaries.

Because of its commitment to Hampton Roads and its emphasis on creative innovation, Old Dominion University offers life-long learning opportunities through credit and noncredit courses and brings educational services and programs to the people of Hampton Roads at several off-campus centers. The University has a responsibility to serve the many members of the military services and their families. The military forms a unique combination of national and international constituents because they are from other locales in the United States and are looking to become, among other things, internationally capable in an international environment.

As a center of learning, Old Dominion University is committed to the principle of free inquiry. The University faculty of distinguished teacher-scholars seek to pass on the best in academic tradition while establishing themselves at the forefront of discovery and creativity. As partners in the development of the University's future, the faculty enjoy full academic freedom and have a recognized role in the decision-making process of the University. Mindful of present and future needs for a multicultural academic climate, the University deems recruitment and retention of minority and women faculty members and staff to be essential.

The University is committed to providing the highest quality instruction to all of its students. Teaching excellence is encouraged through faculty development programs and appropriate recognition of superior instruction.

The discovery of new knowledge through research and creative endeavor is a central function of Old Dominion University, which values and supports faculty participation in the discovery, synthesis, application and creation of new knowledge and art forms. The institution shall promote and preserve excellence in basic and applied research as a Carnegie Foundation Doctoral Research-Extensive University which is a key production and coordination force in technology development.

The University encourages the involvement of its faculty and staff in community service. The enrichment of the lives of students and residents of Hampton Roads is fostered through University sponsored cultural activities, fine and performing arts events, and intercollegiate athletics. In addition, through applied research, consulting, and other activities, the University plays a prominent role in the development of local business and industry and serves as a resource of government agencies and both public and private educational institutions.

The University seeks in its student body a diversity of age, gender, ethnic, religious, social, and national backgrounds. It actively recruits American minority students along with students from other countries worldwide in such numbers as to have their presence make a discernible impact upon the University's educational processes. Old Dominion recognizes its mandate to serve both the academically gifted and those who have the potential for academic success despite educational, social, or economic disadvantages.

Extracurricular activities and experiences are offered that challenge students to develop a personal system of values, to think and act autonomously, to achieve physical competence, and to establish a sense of their own identity. Other services help students meet educational, personal, and health needs.

Old Dominion University depends on its alumni for advice, leadership, and support. In close collaboration with the University, the Alumni Association provides to former students opportunities to continue their participation in various aspects of university life, to advance their personal and professional development, and to sustain communication and strengthen bonds with their alma mater and fellow alumni.

To evaluate its accomplishments against its goals, a continuing process of systematic assessment is given high priority by the University. Information gained from such efforts is utilized to ensure the highest possible quality for all University programs. The Board of Visitors will conduct a periodic review of the University's mission and major goals in conjunction with representatives of the major University constituencies. The review will ensure that the mission clearly identifies the University's unique role in Virginia's public higher education system and assures that the University is focusing its resources to be the best that it can be in that role to achieve its mission and accomplish the major goals.

Adopted by the Board of Visitors
June 10, 1971
Revised January 17, 1989
Revised April 15, 1999
Revised June 14, 2002
Revised April 8, 2010
Reaffirmed December 10, 2020

Major Goals of the University

1. Students

Old Dominion University is a selective admission institution. The University strives to serve those students in the immediate geographical area as well as attract students from the national and international communities. Additionally, the University seeks to attract and serve a culturally and ethnically diverse student body. The University pays particular attention to identifying and admitting students who are academically gifted. As a major metropolitan university, Old Dominion University has a special commitment to serve those students who have been academically, socially, or economically disadvantaged, but who have the potential for academic success.

2. Faculty

Old Dominion University seeks to attract and retain a distinguished faculty of teacher-scholars. Its faculty enjoy academic freedom and have a recognized role in the decision-making process of the University. The University is committed to strengthening its faculty through the recruitment and retention of minorities and women.

3. Academic Programs

Undergraduate Programs

As a comprehensive university, Old Dominion University offers and develops quality liberal arts, science, technology and professional programs. Old Dominion University undergraduate students follow a general education program that emphasizes intellectual skills and the breadth of intercultural understanding necessary for personal growth and achievement and responsible citizenship. All Old Dominion University degree programs meet national standards of excellence.

Graduate Programs

Old Dominion University's graduate offerings are focused on society's need for advanced professional education and on specialized programs at the master's and doctoral levels for which the institution is prepared through unusual strength of faculty or special geographic advantages. In selected graduate programs, the University aspires to international leadership.

Special Emphasis Areas

Because Hampton Roads is a major international maritime and commerce center that is Virginia's window to the nation and world, the University has a special mission for the Commonwealth in commerce, and in international affairs and cultures. With the principal marine and aerospace activities of the Commonwealth concentrated in Hampton Roads, the University has a

significant commitment to science, engineering and technology, specifically in marine science, aerospace and other fields of major importance to the region. Due to its location in a large metropolitan area, Old Dominion University places particular emphasis on urban issues, including education and health care, and on fine and performing arts.

4. Teaching

Old Dominion University is committed to providing the highest quality instruction to all of its students. Teaching excellence is encouraged through faculty development programs and appropriate recognition of superior instruction.

5. Research, Scholarship, and Creativity

Old Dominion University is a center of learning committed to the principle of free inquiry. The University seeks to participate in the acquisition, discovery, synthesis, application, and creation of new knowledge and art forms through research, scholarly endeavor and creative undertakings by faculty and students. In selected areas of research, scholarship and creativity, the University strives for international recognition.

6. Digital Learning

As a national leader in the field of technology-delivered distance learning, Old Dominion University is committed to providing academic programs to a diverse national and international population. The University seeks partnerships and alliances that will facilitate delivering those programs to place-bound students.

7. Life-long Learning

Old Dominion University is committed to the concept of life-long learning, and offers credit and noncredit courses throughout the region. The University seeks to develop off-campus centers to bring educational services and programs to the citizens of the region. Because of the major Armed Forces presence in Hampton Roads, the University is particularly cognizant of its responsibility to serve members of the military services and their families.

8. Community Service

Community service is an important part of the University's mission. Particular importance is attached to the enrichment of the lives of students and residents of Hampton Roads through University cultural activities, fine and performing arts events, and recreational, intramural and intercollegiate athletics. The University acts as a resource to business, industrial, health care and educational organizations, as well as to the agencies of local, state and federal government. The University is committed through applied research, consulting and other activities to playing a major role in advancing the overall development of Hampton Roads.

9. Student Life

The University provides opportunities for student development outside of the classroom. Programs are offered to enhance personal and social growth of individual students, to provide an exciting and stimulating collegiate environment and to enable students to cope with educational, career, and health needs. Students choosing to live in on-campus housing benefit from programs especially designed to promote student educational and personal development.

10. Alumni

Alumni are an important part of the University community. Through outreach programs, participation on advisory committees, and a variety of professional and social activities, the University maintains a close relationship with its alumni and seeks alumni involvement and support for planning and development purposes.

11. Quality

Improvement of the University is a continual process. The foregoing goals provide criteria for the rigorous and regular evaluation of the quality, pertinence and effectiveness of academic and other University programs.

These goals also provide criteria for the assessment of student achievement and the performance of members of the faculty, administration, and staff.

Adopted by the Board of Visitors
January 17, 1989
Revised April 15, 1999
Reaffirmed December 10, 2020

General Statement of Policy

Within the limits of the University's facilities as to numbers that can be accommodated, admission to Old Dominion University is open to all qualified students regardless of race (or traits historically associated with race including hair texture, hair type, and protective styles such as braids, locks, and twists), color, national origin, age, marital status, sex (including pregnancy, childbirth, or related medical conditions), political affiliation, marital status, sexual orientation, gender identity, genetic information, disability, religion, or veteran status; the facilities and services of the University are open to all enrolled students on those same bases, and all policies and standards of the University, including those governing employment, are applied accordingly. Students having concerns of this nature should contact the Office of Institutional Equity and Culture.

Old Dominion University Notice of Non-Discrimination

Old Dominion University does not discriminate in admissions, treatment, employment or access to its programs or activities on the basis of race (or traits historically associated with race including hair texture, hair type, and protective styles such as braids, locks, and twists), color, religion, national or ethnic origin, age, sex (including pregnancy, childbirth, or related medical conditions), political affiliation, marital status, veteran status, family medical and genetic information, sexual orientation, gender identity, gender expression, or disability, as required by The Civil Rights Act of 1964; The Americans with Disabilities Act of 1990, as amended; The Age Discrimination Act of 1975; Title IX of the Education Amendments of 1972; Section 504 of the Rehabilitation Act of 1973; the Virginia Human Rights Act; the Governor's Executive Order Number One (20184); and other state or federal laws and University policies <https://www.odu.edu/about/policiesandprocedures/university/1000/1005> (<https://www.odu.edu/about/policiesandprocedures/university/1000/1005/>) and <https://www.odu.edu/about/policiesandprocedures/university/1000/1008> (<https://www.odu.edu/about/policiesandprocedures/university/1000/1008/>). ODU prohibits sexual and sex-/gender-based misconduct, discrimination, harassment and interpersonal violence, including sexual assault. ODU also prohibits discrimination against employees or applicants because they have inquired about, discussed or disclosed their own pay or the pay of another employee or applicant.

As an affirmative action and equal opportunity employer, ODU promotes the full realization of employment opportunity for all persons, including minorities, women, individuals with disabilities and veterans. ODU bases all employment decisions only on job requirements. These efforts apply to all employment actions, including but not limited to recruitment, selection, hiring, promotion and compensation.

Any member of the ODU community has the right to raise concerns or file a complaint regarding discrimination without fear of retaliation. Any and all inquiries regarding the application of this statement and related policies may be referred to: Kimberly Cain, Director of Equity and EO/AA, Institutional Equity and Culture, Innovation Research Park I, 4111 Monarch Way, Suite 106, Old Dominion University, Norfolk, VA 23529, (757) 683-3141, kcain@odu.edu.

The University's designated **Title IX Coordinator** is Kate Couch, Institutional Equity and Culture, Innovation Research Park I, 4111 Monarch Way, Suite 106, Old Dominion University, Norfolk, VA 23529, (757) 683-3141, titleixcoordinator@odu.edu.

Title IX Coordinator

Kate Couch
4111 Monarch Way Ste. 106

Norfolk, VA 23529
757-683-3141
titleixcoordinator@odu.edu

Deputy Title IX Coordinators

Student Enrollment, Engagement & Services, Vicki Williams
Dean of Students and Associate Vice President
2008 Webb Center
Norfolk, VA 23529
757-683-3442
vswillia@odu.edu

Athletics, Carolyn Crutchfield
Executive Senior Associate Athletic Director
Senior Woman Administrator
Jim Jarrett Athletic Administration Building
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cacooper@odu.edu (cacopper@odu.edu)

Equity and Culture, Kimberly Cain
Director of Equity and EO/AA
4111 Monarch Way Ste. 103
Norfolk, VA 23529
757-683-3141
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Title IX Liaisons

Academic Affairs, Dr. Shanda Jenkins
Director of Faculty Recruitment and Retention
2102-B Dragas Hall
757-683-4327
sjenkins@odu.edu

Talent Management and Culture
Spong Hall, 5255 Hampton Blvd
757-683-3042

Complaints of discrimination, harassment, and retaliation may be directed to Institutional Equity and Culture (<https://www.odu.edu/equity/>) at <http://www.odu.edu/equity> (<http://www.odu.edu/equity/>). Complaint procedures may be found at <https://www.odu.edu/about/policiesandprocedures/university/1000/1005> (<https://www.odu.edu/about/policiesandprocedures/university/1000/1005/>). Complaints may also be filed with the Department of Education Office for Civil Rights (<http://www2.ed.gov/about/offices/list/ocr/docs/howto.html>), Equal Employment Opportunity Commission (<https://www.eeoc.gov/field/norfolk/charge.cfm>), Commonwealth of Virginia Division of Human Rights (<http://www.dhrm.virginia.gov/equal-employment-opportunity/>), and the Department of Human Resources Management (<http://www.dhrm.virginia.gov/>).

Title IX Nondiscrimination Statement

As part of its commitment to providing an educational environment free from discrimination, Old Dominion University complies with Title IX of the Education Amendments, which prohibits discrimination and harassment based upon sex in an institution's education programs and activities. Title IX prohibits sexual harassment, including sexual violence, of students at Old Dominion University-sponsored activities and programs whether occurring on-campus or off-campus. Title IX also protects employees from sexual harassment and discrimination. Prohibited harassment includes acts of verbal, nonverbal or physical aggression, intimidation or hostility based on sex, even if those acts do not involve conduct of a sexual nature; sex-based harassment by those of the same sex; and discriminatory sex stereotyping. Old Dominion University will take prompt action to investigate and resolve reports of sexual harassment or sexual violence in accordance with Title IX. Old Dominion University's Title IX Coordinator is Kate Couch, Innovation Research Park I, 4111 Monarch Way, Suite 106, Norfolk, VA 23529, akgriffi@odu.edu. Retaliation against any person who initiates an inquiry

or complaint or participates in the investigation of a complaint is prohibited. Such conduct will be further cause for disciplinary action.

Accreditations

Old Dominion University is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award baccalaureate, masters, education specialist, and doctoral degrees. Old Dominion University also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of Old Dominion University may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website (<https://www.sacscoc.org> (<https://www.sacscoc.org/>)).

Numerous programs of study at the University are accredited by specialized accrediting agencies that are recognized by the Council on Higher Education Accreditation (CHEA), the U.S. Department of Education, and other agencies.

College of Arts and Letters

The F. Ludwig Diehn School of Music is a full member of the National Association of Schools of Music (NASM):

11250 Roger Bacon Drive, Suite 21
Reston, VA 20190-5248
(703) 437-0700 Phone

Strome College of Business

- The undergraduate and graduate business programs of the Strome College of Business are accredited by The Association to Advance Collegiate Schools of Business (AACSB)-International.
- The undergraduate and master's degrees in accounting are also accredited by the AACSB-International.
- The master's degree in public administration is accredited by the National Association of Schools of Public Affairs and Administration (NASPAA).

Darden College of Education and Professional Studies

- The undergraduate human services program is accredited by the Council for Standards in Human Service Education.
- The mental health, school, and college counseling master's and counselor education doctoral degree programs are accredited by the Council on Accreditation of Counseling and Related Educational Programs (CACREP).
- The Children's Learning and Research Center is accredited by the Southern Association of Colleges and Schools Commission on Colleges and Council on Accreditation and School Improvement (SACS/CASI).
- The graduate program in library and information studies has been awarded candidacy by the American Library Association Committee on Accreditation (ALA).

Education Programs

- The education programs in the Colleges of Arts and Letters, Education and Professional Studies, and Sciences are accredited by the Council for the Accreditation of Teacher Education (CAEP). These include: art education, biochemistry (licensure in chemistry), biology, chemistry, computer science, early childhood education, earth science, educational leadership, elementary education, English, world languages, library science, marketing education, mathematics, math specialist, vocal and instrumental music, middle school science education, health and physical education, physics, reading specialist, school counseling, social studies, special education, Teaching English as a Second Language, technology education, and theatre and dance.
- The graduate program in music education is accredited by the National Association of Schools of Music (NASM).

Batten College of Engineering and Technology

- The baccalaureate degrees in civil engineering, computer engineering, electrical engineering, and mechanical engineering are accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org/>.
- The engineering technology programs in civil engineering technology, electrical engineering technology, and mechanical engineering technology are accredited by the Engineering Technology Accreditation Commission of ABET, <http://www.abet.org/>. (<http://www.abet.org/>)

School of Health Professions

- The Master of Health Sciences, Pathologists' Assistant program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N River Road, Suite 720, Rosemont, IL 60018, 773-714-8880.
- The Master of Physician Assistant program is accredited by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA).
- The Master of Science in Counseling and Art Therapy is accredited by the Accreditation Council for Art Therapy Education (ACATE).
- The Master of Surgical Assisting program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

College of Health Sciences

- The program in dental hygiene is accredited by the American Dental Association Commission on Dental Accreditation (ADA).
- The medical laboratory science program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N River Road, Suite 720, Rosemont, IL 60018, 773-714-8880.
- The physical therapy program is accredited by the American Physical Therapy Association, Commission on Accreditation in Physical Therapy Education (CAPTE).
- The graduate program in athletic training is accredited by the Commission on Accreditation of Athletic Training Education (CAATE).
- The nuclear medicine technology program is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT).
- The cytology program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).
- The undergraduate program in exercise science is accredited by the Commission on Accreditation of Allied-Health Education Programs (CAAHEP).
- The Doctor of Occupational Therapy program is a candidate for accreditation by the Accreditation Council for Occupational Therapy Education (ACOTE).
- The graduate program in speech-language pathology is accredited by the Council on Academic Accreditation in Speech-Language Pathology of the American Speech-Language-Hearing Association (CAA/ASHA).

Joint School of Public Health

- The environmental health program is accredited by the National Environmental Health Science and Protection Accreditation Council (EHAC).
- The health services administration major in the Bachelor of Science in Public Health program is certified by the Association of University Programs in Health Administration (AUPHA).
- The Master of Public Health program is accredited by the Council on Education for Public Health (CEPH).

College of Sciences

- The doctoral program in clinical psychology is accredited by the American Psychological Association (APA).
- The doctoral program in psychology (human factors) is accredited by the Human Factors and Ergonomics Society.

School of Nursing

- The baccalaureate nursing program is accredited by the Commission on Collegiate Nursing Education (CCNE) and approved by the Virginia Board of Nursing (VBN).
- Graduate nursing programs (MSN and DNP) are accredited by the Commission on Collegiate Nursing Education (CCNE).
- Specialty tracks in graduate nursing programs are approved by the Pediatric Nursing Certification Board, the National Nurses Certification Corporation, American Nurses Certification Corporation, and the American College of Nurse Practitioners.
- The certified registered nurse anesthetist specialty track is accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs (CoA-NA).

Affiliations

The University is a member of the Southern Association of Colleges and Schools, the American Council on Education, the Council of Graduate Schools in the United States, the American Association of State Colleges and Universities, the American Association for Higher Education, the Association of American Colleges and Universities, the Association of Governing Boards of Universities and Colleges, the Council for the Advancement and Support of Education, the Southeastern University Research Association, the American Association of University Women, the University Extension Association, the Universities Space Research Association, the American Association of Collegiate Schools of Business, the National Council for Accreditation of Teacher Education, the Association for Continuing Higher Education, the North American Association for Summer Sessions, the Association of Virginia Colleges, the Association of Schools of Allied Health Professions, the American Society for Engineering Education, the Consortium for Oceanographic Research and Education, the Conference of Southern Graduate Schools, the Council for Standards in Human Service Education, and the National Council for State Authorization Reciprocity Agreements (NC-SARA), and a partner of the Southern Regional Education Board's Electronic Campus (SREB Electronic Campus). The University is also a Division I member of the National Collegiate Athletic Association (NCAA) and the Sun Belt Athletic Conference.

The Master of Engineering Management program is certified by the American Society for Engineering Management (ASEM). The undergraduate program in chemistry is American Chemical Society certified.

Old Dominion University is authorized by the Washington Student Achievement Council and meets the requirements and minimum educational standards established for degree-granting institutions under the Degree-Granting Institutions Act. This authorization is subject to periodic review and authorizes Old Dominion University to offer specific degree programs. The Council may be contacted for a list of currently authorized programs. Authorization by the Council does not carry with it an endorsement by the Council of the institution or its programs. Any person desiring information about the requirements of the act or the applicability of those requirements to the institution may contact the Council at P.O. Box 43430, Olympia, WA 98504-3430.

University Addresses

Physical Address:

Old Dominion University
5115 Hampton Boulevard
Norfolk, VA 23529

Mailing Address:

1 Old Dominion University
Norfolk, VA 23529

Academic Calendar

Fall Semester 2025-26

Date	Day	Event
August 23	Saturday	Classes begin
September 1	Monday	Labor Day Holiday - no classes held
October 11-14	Sat-Tues	Fall Holiday - no classes held
November 4	Tuesday	Election Day - no classes held
November 14	Friday	Last day to withdraw from classes
Nov 26-30	Wed-Sun	Thanksgiving Holiday - no classes held
December 5	Friday	Classes end
December 6	Saturday	Exams begin
December 12	Friday	Exams end
December 13	Saturday	Commencement
December 13	Saturday	Degree Conferral date*

* Degrees may be conferred on additional dates during the semester pending completion of all degree requirements.

Winter Session 2025-26

Date	Day	Event
December 15	Monday	Classes begin
December 25	Thursday	Christmas Day Holiday - no classes held
January 1	Thursday	New Year's Day Holiday - no classes held
January 2	Friday	Classes end

Spring Semester 2025-26

Date	Day	Event
January 17-19	Sat-Mon	Martin Luther King, Jr. Holiday - no classes held
January 20	Tuesday	Classes begin
March 16-21	Mon-Sat	Spring Holiday - no classes held
April 17	Friday	Last day to withdraw from classes
May 04	Monday	Classes end
May 05	Tuesday	Reading Day
May 06	Wednesday	Exams begin
May 13	Wednesday	Exams end
May 15, 16	Friday, Saturday	Commencement
May 16	Saturday	Degree Conferral Date*

* Degrees may be conferred on additional dates during the semester pending completion of all degree requirements.

Summer Term 2026

Date	Day	Event
May 18	Monday	Maymester begins
May 18	Monday	Session 1 and 3 classes begin
May 25	Monday	Memorial Day Holiday - no classes held

June 05	Friday	Maymester ends (including exams)
June 19	Friday	Juneteenth Holiday observed - no classes held
June 27	Saturday	Session 1 classes end (including exams)
June 29	Monday	Session 2 classes begin
July 3	Friday	Independence Day Holiday observed - no classes held
August 7	Friday	Session 3 classes end (including exams)
August 8	Saturday	Session 2 classes end (including exams)
August 21	Friday	Degree Conferral date*

* Degrees may be conferred on additional dates during the semester pending completion of all degree requirements.

Fall Semester 2026-27

Date	Day	Event
August 22	Saturday	Classes begin
September 7	Monday	Labor Day Holiday - no classes held
October 10-13	Sat-Tues	Fall Holiday - no classes held
November 3	Tuesday	Election Day - no classes held
November 13	Friday	Last day to withdraw from classes
Nov 25-29	Wed-Sun	Thanksgiving Holiday - no classes held
December 4	Friday	Classes end
December 5	Saturday	Exams begin
December 11	Friday	Exams end
December 12	Saturday	Commencement
December 12	Saturday	Degree Conferral date*

* Degrees may be conferred on additional dates during the semester pending completion of all degree requirements.

Winter Session 2026-27

Date	Day	Event
December 14	Monday	Classes begin
December 25	Friday	Christmas Day Holiday - no classes held
December 31	Thursday	Classes end
January 1	Friday	New Year's Day Holiday - no classes held

Spring Semester 2026-27

Date	Day	Event
January 16-18	Sat-Mon	Martin Luther King, Jr. Holiday - no classes held
January 19	Tuesday	Classes begin
March 15-20	Mon-Sat	Spring Holiday - no classes held
April 16	Friday	Last day to withdraw from classes
May 03	Monday	Classes end

May 04	Tuesday	Reading Day
May 05	Wednesday	Exams begin
May 12	Wednesday	Exams end
May 14, 15	Friday, Saturday	Commencement
May 15	Saturday	Degree Conferral Date*

* Degrees may be conferred on additional dates during the semester pending completion of all degree requirements.

Summer Term 2027

Date	Day	Event
May 17	Monday	Maymester begins
May 17	Monday	Session 1 and 3 classes begin
May 31	Monday	Memorial Day Holiday - no classes held
June 04	Friday	Maymester ends (including exams)
June 18	Friday	Juneteenth Holiday observed - no classes held
June 26	Saturday	Session 1 classes end (including exams)
June 28	Monday	Session 2 classes begin
July 05	Monday	Independence Day Holiday observed - no classes held
August 06	Friday	Session 3 classes end (including exams)
August 07	Saturday	Session 2 classes end (including exams)
August 20	Friday	Degree Conferral date*

* Degrees may be conferred on additional dates during the semester pending completion of all degree requirements.

Fall Semester 2027-28

Date	Day	Event
August 21	Saturday	Classes begin
September 06	Monday	Labor Day Holiday - no classes held
October 09-12	Sat-Tues	Fall Holiday - no classes held
November 02	Tuesday	Election Day - no classes held
November 12	Friday	Last day to withdraw from classes
Nov 24-28	Wed-Sun	Thanksgiving Holiday - no classes held
December 03	Friday	Classes end
December 04	Saturday	Exams begin
December 10	Friday	Exams end
December 11	Saturday	Commencement
December 11	Saturday	Degree Conferral date*

* Degrees may be conferred on additional dates during the semester pending completion of all degree requirements.

Winter Session 2027-28

Date	Day	Event
December 13	Monday	Classes begin
December 25	Saturday	Christmas Day Holiday - no classes held
December 31	Friday	Classes end
January 1	Saturday	New Year's Day Holiday - no classes held

Spring Semester 2027-28

Date	Day	Event
January 15-17	Sat-Mon	Martin Luther King, Jr. Holiday - no classes held
January 18	Tuesday	Classes begin
March 13-18	Mon-Sat	Spring Holiday - no classes held
April 14	Friday	Last day to withdraw from classes
May 01	Monday	Classes end
May 02	Tuesday	Reading Day
May 03	Wednesday	Exams begin
May 10	Wednesday	Exams end
May 12, 13	Friday, Saturday	Commencement
May 13	Saturday	Degree Conferral Date*

* Degrees may be conferred on additional dates during the semester pending completion of all degree requirements.

Summer Term 2028

Date	Day	Event
May 15	Monday	Maymester begins
May 15	Monday	Session 1 and 3 classes begin
May 29	Monday	Memorial Day Holiday - no classes held
June 02	Friday	Maymester ends (including exams)
June 19	Monday	Juneteenth Holiday - no classes held
June 24	Saturday	Session 1 classes end (including exams)
June 26	Monday	Session 2 classes begin
July 04	Tuesday	Independence Day Holiday - no classes held
August 04	Friday	Session 3 classes end (including exams)
August 05	Saturday	Session 2 classes end (including exams)
August 18	Friday	Degree Conferral date*

* Degrees may be conferred on additional dates during the semester pending completion of all degree requirements.

Admission to Old Dominion University

Web Site: <http://www.odu.edu/admission> (<http://www.odu.edu/admission/>)

Office of Admissions

The mission of the Office of Undergraduate Admissions is to recruit, admit and enroll students from throughout the United States and abroad who will benefit from, and contribute to, the overall collegiate experience. Old Dominion University is open to all qualified students regardless of race (or traits historically associated with race including hair texture, hair type, and protective styles such as braids, locks, and twists), color, national origin, age, marital status, sex (including pregnancy, childbirth, or related medical conditions), political affiliation, marital status, sexual orientation, gender identity, genetic information, disability, religion, or veteran status. All students submitting an application for admission must certify the content is true and correct. Applicants also agree to abide by and support the rules, regulations, and Honor Code of Old Dominion University. Please refer to the Office of Undergraduate Admissions website for application requirements and deadlines.

Programs available online and on-campus are subject to change. Please consult the application for admission for the specific semester for the most up-to-date information.

Undergraduate Admission

Freshmen Admission

Traditional freshman applicants are typically under the age of 21 and currently enrolled in high school or have graduated from high school within the past two years and have not attended any regionally accredited college or university (not to include dual enrollment).

Admission to the University does not imply admission to a specific degree program. The following programs require a secondary admission process once the student has been admitted to the University. Please contact the department directly for secondary admission information.

- Cytology
- Dental Hygiene
- Medical Laboratory Science
- Nuclear Medicine Technology
- Nursing

Academic Preparation

The University encourages students to participate in a college preparatory program of study. Preference is given to students enrolled in Advanced Placement (AP) or International Baccalaureate (IB), honors and college-level dual enrollment courses.

The most qualified applicants' high school curriculum includes course work in the following areas:

- English - 4 units
- Social Sciences - 3 units (World History, United States History and United States Government)
- Mathematics - 3 units (Algebra, Geometry, Algebra II)
- Sciences - 3 units of laboratory sciences
- Foreign Language - 3 years of one foreign language or two years of two foreign languages

Note: Batten College of Engineering and Technology intended applicants who have taken advanced courses, particularly in math, chemistry and physics, are best prepared for the academic rigor of the Batten College of Engineering and Technology and are more competitive in the admissions process. Students are encouraged to complete four units of mathematics that include one unit of higher-level math courses such as trigonometry, analysis, or calculus. Science units should include one unit of chemistry, one unit of

physics, and one unit in another area of science, such as general science, physical science, environmental science, and anatomy and physiology.

Academic Criteria

The weighted cumulative high school grade point average (HS GPA) and performance on the Scholastic Assessment Test I (SAT) or the American College Testing (ACT) Program are primary considerations during the application review. Applicants should consult <http://sat.collegeboard.org/home> (<http://sat.collegeboard.org/home/>) or <http://www.act.org/> for test registration procedures and to request scores be sent to Old Dominion University. Freshman applicants may choose whether to submit standardized test scores. Applicants choosing to exclude test scores should provide evidence of a challenging academic curriculum indicative of future college success via their submitted high school transcript and possess demonstrated leadership in extracurricular, work, or service experiences. Applying test-optional does not guarantee admission.

Admission of Homeschool Graduates

Students who received secondary instruction at home are encouraged to apply using the regular admissions application by visiting <http://www.odu.edu/apply> (<http://www.odu.edu/apply/>). In addition to the application and \$50 non-refundable fee, students should also submit a transcript outlining their curricula and grades awarded by the parent instructor, who should also sign the document attesting to its authenticity. Students who are not eligible for or who do not wish to be reviewed as a test-optional candidate for admission should also submit results from the SAT or ACT.

Additional Credentials

Applicants are encouraged (not required) to submit a resume, essay, and/or letters of recommendation as part of their application materials. These additional credentials, combined with the academic qualifications, provide the Office of Undergraduate Admissions with a comprehensive profile of an applicant's potential for academic success and ability to contribute to the academic community. Students with unique talents and abilities in art, music, leadership, and other endeavors should provide such information.

Deposits for Admission

All new undergraduate applicants who wish to accept their offer of admission to the University are required to submit a non-refundable \$200 admissions deposit.

Deferring Admission

Under certain circumstances new undergraduate applicants may request to defer their admission up to one year. All deferment requests must be submitted in writing to the Office of Admissions.

Gifted High School Students

High school students with demonstrated exceptional academic abilities may take classes before completing the full program of high school studies. Students must submit a non-degree online application accompanied by a high school transcript, letters of recommendation supporting the student's request for early enrollment into college-level courses from the high school principal and designated parent/guardian. If available, SAT or ACT test scores should be included. NOTE: Admission to the University does not imply admission to a specific course or program. Departmental approval may be required.

Freshmen Early Action Admission

Freshman applicants who submit the application for admission, fee, and all credentials by the early action deadline receive priority consideration and decision notification. Early action decisions are non-binding. Please refer to the Office of Admissions website for more information and deadlines.

Freshmen Regular Admission

Freshman applicants who submit the application for admission, fee, and all credentials by the regular admission application deadline are reviewed and notified on a rolling basis.

Non-Traditional Freshmen

Non-traditional freshman applicants are typically over the age of 21 and have graduated from high school or received a General Education Development (GED) Certificate two or more years ago. Additionally, they have not enrolled in any regionally accredited college or university (excluding dual enrollment) since the completion of high school. Non-traditional freshman applicants must submit the application, the application fee, and an official high school transcript or GED transcript presenting a minimum composite score of 500. If the applicant has graduated from high school or received the GED certificate within the past two years, official SAT or ACT standardized test scores may be requested. The submission of a resume and statement of goals is strongly encouraged.

Freshmen Guaranteed Entry and Undergraduate to Graduate Degree Linked Programs

High-ability freshmen may be guaranteed entry into professional and graduate school in a number of areas. The dental hygiene program offers a guaranteed freshman entry option, and the BS/MD program in the College of Sciences (guaranteed admission to medical school) allows students to begin professional school after three years.

Information on undergraduate to graduate linked degree programs may be obtained on the University's website, program sections in this Catalog, or by contacting the individual programs or departments. A listing can be found at the linked programs (p. 71) page in this Catalog.

Advanced Placement, International Baccalaureate and A/AS Level Credit

Old Dominion University recognizes the rigor and challenge of the Advanced Placement (AP), International Baccalaureate (IB) and Cambridge Advanced (A/AS Level) programs. Credit may also be awarded for A/AS Level Examinations from examining boards other than the Cambridge Advanced Program. Advanced standing credit is awarded to students who earn qualifying scores on AP, IB and Cambridge Advanced (A/AS Level) subject examinations. See the AP and IB equivalency charts on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>). For further information on credit awarded for A/AS Level Examinations, contact the Office of Undergraduate Admissions.

Most credits awarded for AP, IB, and Cambridge Advanced (A/AS Level) examinations satisfy individual course requirements in ODU's General Education curriculum. Course credit will not be awarded until final and official examination scores are received. Students must request that their official exam results be sent to the Old Dominion University Office of Undergraduate Admissions.

-Approved by the Board of Visitors

Transfer Admission

Transfer applicants are students who have attended an institution of higher education accredited by accrediting agencies recognized by the U.S. Department of Education for Title IV purposes (https://www2.ed.gov/admins/finaid/accred/accreditation_pg9.html) or international equivalent after graduating from high school or receiving a GED. Transfer applicants must submit official transcripts from all previously attended institutions (including post-secondary institutions outside of the U.S.) regardless of whether or not the transfer credit will apply toward an Old Dominion University degree. All students submitting an application for admission certify the content is true and correct. Deliberate falsification of application information will result in immediate withdrawal and a potential forfeiture of credits. By submitting an application, applicants agree to abide by and support the rules, regulations and Honor Code of Old Dominion University.

Transfer Guaranteed Admission (GAA)

Old Dominion University guarantees admission to applicants completing a transfer-oriented degree program or an articulated applied associate degree program at a Virginia community college (VCCS) with a cumulative grade point average (GPA) of 2.5 or higher on a four-point scale. Submission

of the Letter of Intent to Transfer is required for eligibility under this guaranteed articulation agreement (GAA) program. Graduates of an articulated applied associate degree program must have met all degree/course requirements outlined in the specific curriculum articulation agreement.

Some degree programs at Old Dominion University require a secondary admission process; thus, guaranteed admission into Old Dominion University does not imply admission to these specific degree programs. Applicants admitted to Old Dominion University via the Letter of Intent should contact the relevant department for information regarding secondary admission requirements, deadlines, and criteria.

Transfer Academic Criteria

The Office of Undergraduate Admissions will consider the cumulative grade point average and the grade point average (based on a four-point scale) of the most recent 24 credit hours. Performance on the Scholastic Assessment Test I (SAT) or American College Testing (ACT) Program may be required if the applicant has completed fewer than 24 semester hours of academic work at a regionally accredited college or university.

Transfer Admission

Transfer applicants must submit the application, fee, all official transcripts from any previously attended institution, as well as all other required credentials by the appropriate deadline. Applicants who have completed the application process will receive notification on a rolling basis.

Evaluation of transfer credit. Subsequent to notification of admission, a formal evaluation of credit is completed by the Office of Undergraduate Admissions, and students will be notified via email when the evaluation is available for review at <https://www.leonline.odu.edu>. Transfer credits may be awarded for specified equivalent courses, electives within a discipline or free electives. Please note, admitted transfer applicants who do not attend the University within one year of their admitted term must re-apply.

Transfer of Credit

Old Dominion University considers transfer credit from institutions of higher education accredited by accrediting agencies recognized by the U.S. Department of Education for Title IV purposes (https://www2.ed.gov/admins/finaid/accred/accreditation_pg9.html) or international equivalent. A grade of C (2.00) or above must be earned in the course. Credits will be applied as equivalent college courses offered at Old Dominion University after evaluation from the appropriate faculty member in the corresponding academic department or the Office of Undergraduate Admissions. Courses are evaluated by reviewing the course content (syllabus, assignments, catalog description) regardless of the mode of instruction. Students are required to submit academic transcripts from all institutions attended. In general, all liberal arts credits and professional and technical courses parallel to those of Old Dominion University are transferable. Graduate credit will not be accepted for undergraduate degree requirements.

Transfer Policies for General Education Requirements

1. Students wishing to transfer academic credits into Old Dominion University to satisfy the General Education Requirements must apply individual transfer courses to the academic skills, Ways of Knowing, and upper-division categories as listed in this catalog. Students must submit transcripts to the Office of Undergraduate Admissions for evaluation. Decisions regarding the equivalency of transfer courses to satisfy General Education Requirements will rest with the chair of the academic department responsible for the subject matter involved. Students should be aware that even though University General Education Requirements might be met through transfer courses, departmental and college requirements must still be met.
2. With regard to the fulfillment of General Education Requirements, students will be able to apply transfer credit on a course-by-course basis rather than hour-by-hour as long as the course is determined to be commensurate with content categories of the curriculum used to fulfill General Education Requirements at Old Dominion University. Questions regarding such equivalency will be directed to the chair of

the academic department responsible for the subject. Any such course transfer will carry the number of academic credits assigned by the institution where the credits were earned. In the case of quarter system credits, the standard conversion of quarter hours to semester hours (3:2) will be used.

- Students who have received an AA, AS, or AA&S from Richard Bland College or the Virginia Community College System (including the AA&S degree in general studies) have met all lower-division General Education requirements except those specified as major or college requirements and requirements for completion of the Undergraduate Writing Program.

Applicants who have received the AS degree in general studies offered by institutions whose general studies degrees are recognized as transfer degrees by the State Council of Higher Education for Virginia will be guaranteed acceptance as meeting lower-division General Education Requirements. AS degrees in general studies received from institutions whose general studies degrees are not recognized by the State Council of Higher Education for Virginia will be examined individually to determine whether they are university parallel and eligible for lower-division General Education requirement waivers.

Students who have earned an Associate of Applied Science (AAS) degree from the Virginia Community College System that includes the required General Education courses have met all lower-division General Education requirements except those specified as major or college requirements and requirements for completion of the Undergraduate Writing Program.

Associate degrees awarded outside the Virginia Community College System are examined individually to determine whether they are university parallel programs (consistent with the requirements of degrees from the Virginia Community College System) and eligible for lower-division General Education requirement waivers.

Students who transfer into the University from a campus of the Virginia Community College System without having completed the AA, AS, or AA&S degree may receive credit for General Education courses, even if these courses are not full equivalents of Old Dominion University courses.

The University evaluates transcripts of all transfer students from two- or four-year institutions at the time of the matriculation and assigns appropriate transfer credit for General Education courses judged as compatible with corresponding Old Dominion University General Education courses. Students must earn a grade of C (2.0) or better in order to receive the credit hours associated with classes taken at other regionally accredited institutions.

- Substitutions for General Education Requirements can be made only by the dean of the college offering the General Education skill or Ways of Knowing area.
- Students earning high school diplomas before December 31, 1985 will be exempted from the General Education foreign language requirement as part of the skills area of General Education at Old Dominion University. This does not waive departmental or major requirements.
- Students who have earned a baccalaureate degree at another regionally accredited institution and who wish to acquire a second baccalaureate degree from Old Dominion University will be considered to have fulfilled the lower-division writing requirement and University General Education Requirements with the exception of the writing intensive (W) course in the major; such students must complete the writing intensive course in the major at Old Dominion University and must earn a grade of C (2.0) or better. Second degree students will be expected to meet all college, school and departmental requirements as well as complete a minimum of 30 semester hours at Old Dominion University for a second degree.

Special Transfer Credit Policies. Transfer students admitted to the Department of Art must submit a portfolio for evaluation by the faculty to determine the number of art credits that will be accepted from previous study. Information on portfolio requirements may be obtained from the chair of the department. For more information, refer to the Department of Art

section of this catalog. Transfer students interested in music must have an audition to determine placement and number of credits transferable from previous study. Information on the audition may be obtained from the chair of the department. For more information, refer to the Department of Music section of this catalog.

Military Service and Prior Learning Assessment Credit. Old Dominion University recognizes the specialized training and skills of our military service members. Credit may be awarded for various types of military experiences and other experiential learning skills.

Evaluation of Transfer Credit. Subsequent to notification of admission, a formal evaluation of credit is completed by the Office of Undergraduate Admissions. Transfer credits may be awarded for specified equivalent courses, electives within a discipline or free electives.

Appeals of Transfer Credit Evaluations

Students who wish to appeal their transfer credit evaluation may consult with the Office of Undergraduate Admissions, their academic advisor, or the academic department relevant to the course in question. Course descriptions and/or syllabi are required for departmental review. Once a course equivalency is approved, the department will request the Office of Undergraduate Admissions to update the student's record.

Students with Foreign Credentials

U.S. Citizens and Permanent Residents who have attended high school (secondary) and/or post-secondary (college or university) institutions outside the United States must submit official credentials to the Office of Undergraduate Admissions. Official transcripts are delivered in a sealed envelope bearing the official seal and signatures of the issuing institution. Transcripts should be sent directly from the previous institution to Old Dominion University. All transcripts that are not issued in English must be supplemented with a literal (word-for-word) translation. These translations should be official and stamped by a school official or certified by an acceptable translation service. For a list of acceptable translation companies, please visit the Office of Undergraduate Admissions website. Notarized copies are not considered official documents. Old Dominion University will not accept unattested photocopies or documents verified by a local notary public. All submitted documents become property of Old Dominion University and will not be returned. Old Dominion University conducts in-house evaluations of foreign credentials. Evaluations completed by a credential evaluation service or agency (AACRAO, WES, ECE, etc.) will serve as an English translation only.

Second Baccalaureate Degree Admission

Second baccalaureate degree applicants are students who have earned a bachelor's degree from a regionally accredited college or university and wish to pursue an additional bachelor's degree in a different course of study. Second baccalaureate degree applicants must submit the application form, fee, all official transcripts from any previously attended institution, and all other credentials by the appropriate deadline for their intended term of entry. Applicants who have completed the application process will receive notification on a rolling basis. Please refer to the Office of Undergraduate Admissions website for the application form and deadlines. Second baccalaureate degree students who do not attend the University within one year of their admitted term must re-apply by submitting a new application, fee and updated credentials. Additional information can be found in the section of this Catalog on Second Baccalaureate Degree.

Non-degree Admission

Non-degree entry is available to applicants who do not choose to apply for admission to a degree program but wish to enroll in course work at Old Dominion University. Federal financial aid is not available for non-degree students, except for those in approved teacher certification programs. The option of non-degree admission is available for the following student types.

- Visiting students – those taking course work at Old Dominion University with the intention of transferring the course credit to their home degree-granting institution.

- Certificate program students – individuals expanding their academic background or seeking teacher certification. For information related to registering for a certificate program, please contact the academic department directly. Financial aid is not available for non-degree students, except those in approved teacher certification programs.
- Adult learners – students taking courses for personal and/or academic growth.
- Gifted High School Scholars – high school students taking college-level courses (permission is needed from the high school principal and parent/ or legal guardian).

Additional Information

- All students taking prerequisites (undergraduate, second degree or graduate) for a degree-seeking program should seek the approval of the academic department before registering for course work as a non-degree student. Financial aid is not available for non-degree students, except those in approved teacher certification programs.
- Students under suspension from Old Dominion University or another college or university are not eligible to attend Old Dominion University.
- Applicants denied admission to Old Dominion University are not eligible for non-degree admission without a change from the original application type (i.e. attended a community college or became non-traditional by definition).
- Academic advisors are not assigned to non-degree-seeking students, but students are strongly encouraged to contact their academic department of interest prior to registering for courses.
- Undergraduate students are advised to take no more than 24 semester hours as non-degree students.
- All students, degree and non-degree alike, must meet the continuance requirements as stated in the current Undergraduate Catalog. Failure to meet these requirements will subject students to probation or suspension.
- Non-native speakers of English must provide evidence of English language proficiency.

Non-degree Admission Procedures

In addition to the applications, non-degree seeking students must submit the application fee. The link to the online application is located on the Office of Undergraduate Admissions website. Official credentials may not be required at the time of application; however, unofficial records or a personal interview may be requested for course registration. It is understood that all student information stated on the application is truthful. Deliberate falsification of application information will result in immediate withdrawal and a potential forfeiture of credits. By submitting an application, applicants agree to abide by and support the rules, regulations and Honor Code of Old Dominion University. Non-degree students who do not attend the University within one semester of their admitted term must re-apply by submitting a new non-degree application and fee.

Admission Reactivation

Returning applicants are students who previously attended Old Dominion University on a degree-seeking basis and left the University in good academic standing. Degree-seeking students separated from the University for more than 12 months are required to complete a returning student application available on the online application portal by selected "Undergraduate Returning Student Application." If the separation from the University was longer than five years, applicants are required to resubmit all official transcripts and other required credentials.

Students who are returning from academic suspension must participate in the Academic Continuance Experience for Success (ACES) program prior to the start of classes for the returning semester. More information about readmission from suspension can be found at [http://www.odu.edu/academics/academic-records/grades/academic-performance/reinstatement/](http://www.odu.edu/academics/academic-records/grades/academic-performance/reinstatement) or by contacting the Center for Advising Administration and Academic Partnerships in the Student Success Center

(also see Undergraduate Continuance Regulations and Adjusted Resident Credit information in this Catalog).

The deadlines to apply for admission from suspension are as follows.

- Fall semester – second Friday in August
- Spring semester – second Friday in December
- Summer semester – second Friday in April

Reactivation applications submitted after the deadline will not be considered. Students must resubmit the reactivation form and required credentials by the next deadline.

Graduate Admission

Refer to the Graduate Catalog.

English Proficiency Requirements for Non-Native Speakers of English

Admission to all levels of University study is contingent upon successful completion of English language proficiency requirements. Non-native speakers of English can provide evidence of English language proficiency through a variety of options. Admission to the on-campus English Language Center (ELC) and subsequent enrollment in English language courses at the center does not imply admission to the University. Further information for non-native speakers of English is available from the Office of Admissions (permanent residents and naturalized citizens) and from the Office of International Admissions (all non-immigrants).

Fulfillment of any one of the following will satisfy English language proficiency requirements for admission to Old Dominion University:

1. Submission of one of the following English proficiency test scores: TOEFL of 79 (550 paper based); IELTS overall band of 6.5; PTE score of 53; Duolingo English Test of 120; new SAT Reading Test of 26 or SAT Critical Reading of 480; GRE Verbal Reasoning of 150; GCSE or GCE "O" level pass in English language; CPE grade of A, B, or C.
2. Possession of a bachelor's or master's degree equivalent from an accredited institution located in a country where English is the native language.
3. Successful completion of two university- or college-level English courses at a regionally accredited U.S. institution. Successful completion is defined as obtaining a minimum grade of C (2.00) in each of these courses. These courses must be equivalent to the University's English composition course(s) (see General Education Requirements, Lower-Division Written Communication section) and any other advanced composition or technical writing course. In addition, matriculated Old Dominion University/English Language Center students must receive prior approval from the Office of International Admissions to take English composition courses at another institution for the purpose of satisfying the English Proficiency Requirement.
4. Successful completion of Old Dominion University's English Language Center (ELC) Monarch English Transition Program (formerly the ELC Bridge Program). Successful completion is defined as satisfying the following two criteria: a.) Securing a minimum grade of B and demonstrating 85% attendance in each English Language Center class; and b.) Securing a minimum grade point average of 2.50 in academic courses taken during the Monarch English Transition Program.

Undergraduate students who choose to satisfy English language proficiency requirements through the on-campus English Language Center will be placed according to the following criteria:

1. Students with a TOEFL iBT score below 61 (below 500 paper-based) are automatically eligible to enroll in the ELC's Intensive English Program (IEP). Conditional admission to the university is available for most academic programs.
2. Students with a TOEFL iBT score between 61 - 78 (500 - 550 paper-based) will be placed in the Monarch English Transition Program,

which includes both academic and semi-intensive English Language Center course work.

English Language Center - IEP students may enter the Monarch English Transition Program directly without TOEFL test scores after satisfying the following requirements: a.) Successful completion of level 5 in the IEP program with a 'B' grade or higher; and b.) Receive passing scores on level exit assessments. This option is only available to students that have progressively enrolled in the Intensive English Program.

Students whose native language is not English and who have satisfied English language proficiency requirements through one of the avenues detailed above are exempt from fulfilling the foreign language requirement for general education. Students pursuing degrees that require proficiency beyond the 100 level must be certified by the Department of World Languages and Cultures to obtain a waiver of the 200-400 level courses. Native speakers are not eligible to earn credit for foreign language courses below the 300 level through coursework or external testing services such as CLEP. These students should consult a foreign language faculty member for advising.

Transfer credit is not granted for English composition classes taken at an institution located in a non-native English-speaking country. Exceptions to this policy may be made in instances in which the University has entered a formal agreement with an overseas institution.

All undergraduate students who have not earned credit for ENGL 110C through dual enrollment, Advanced Placement (AP), the College Level Examination Program (CLEP) or transfer from another institution are **required** to complete the Writing Success Placement Tool (WSPT) in order to enroll in first-year writing courses. Additional information can be found in the section of this Catalog on Academic Testing and Placement. In addition, all undergraduate students must earn a grade of C or better in ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major in order to graduate.

International Student Admission

International students should apply only through the Office of International Admissions. U.S. Permanent Residents and Green Card holders should apply only through the Office of Admissions. The primary method of application is web-based; however, a paper application is available upon request. Along with the application and fee, officially issued academic records (transcripts) and evidence of English language proficiency are required. As a service to applicants, the Office of International Admissions evaluates all foreign academic credentials.

Application Process and Dates

Applicants must strictly adhere to international admission and specific program deadlines to allow for the evaluation of academic and financial credentials. Additional timeline considerations include the student visa application process and required attendance at various orientation programs conducted during the week prior to the beginning of classes. Admission deferments are granted for up to one calendar year (two semesters); beyond this allotted time, a new application, fee and academic credentials are required. Along with the application and fee, all academic transcripts, translations and standardized tests must be official, sealed, stamped by the institution or testing agency and sent directly to the Office of International Admissions at Old Dominion University (CEEB code 005126). Officiating authorities include an institution's Registrar or Principle of Exams. When English is not the language of instruction, academic transcripts and course descriptions are required in one's native language and officially translated into English. Photocopies, notarized copies, or faxed copies of required official documents will not be accepted. Certified translations by a licensed or professional translator must accompany academic documents not written in English. Translations of official documents completed by the student/family member/friend will not be accepted. Credentials submitted during the application process become the property of Old Dominion University and cannot be returned.

Transfer of Undergraduate Course Credit

The determination of the equivalency and number of undergraduate transfer credits to be awarded for post-secondary work completed at a foreign institution is based on grades, credit value assigned per course (or number of hours per week spent in class) and the duration (in weeks) per course. All transfer credit policies listed in the Transfer Admission section of this catalog are parallel and apply to the transfer of credit from non-U.S. institutions. It is the responsibility of the student to provide this information to the Office of International Admissions. Course descriptions or syllabi must be officially translated into English. The Office of International Admissions may provide the transfer credit evaluation upon admission; however, the final evaluation may be determined by the academic department upon the student's enrollment.

F-1 & J-1 Student Visas

Students seeking an F-1 or J-1 non-immigrant student visa must demonstrate to both Old Dominion University and the U.S. consulate the financial ability to cover all expenses related to study and living in the U.S. Funding requirements include tuition, health insurance, living and personal expenses for the first year of study, in addition to a reasonable expectation of funding for the remaining years of study. Old Dominion University issues forms I-20 (F-1) or DS-2019 (J-1) for the nine-month academic year with the submission of Old Dominion University's Financial Affidavit of Support, along with any corresponding original, bank issued financial statements or financial sponsorship guarantees.

Tuition, Fees, and Financial Information

Tuition

As used by the University, the term tuition refers to a comprehensive fee that includes payment of instructional programs, academic services, student services and activities, recreational sports, and intercollegiate athletics. All fees are subject to approval and/or change by the Board of Visitors.

Information related to the comprehensive tuition can be found on the website for the Office of Finance (<https://www.odu.edu/tuition/rates> (<https://www.odu.edu/tuition/rates/>)).

Students who are eligible to enroll in a combination of undergraduate and graduate courses in any given semester must pay tuition for the courses at the appropriate levels as prescribed. Graduate hours are available at graduate tuition rates, and undergraduate rates apply for undergraduate hours.

Room and Board Charges—2025-26 Academic Year

See <https://www.odu.edu/housing> (<https://www.odu.edu/housing/>) for room and board rates.

Eligibility for In-State Tuition for Certain Individuals Using G.I. Bill Benefits

<https://www.odu.edu/tuition-aid/tuition/military> (<https://www.odu.edu/tuition-aid/tuition/military/>)

G.I. Bill is a registered trademark of the U.S. Department of Veterans Affairs. More information about education benefits offered by the VA is available at the official U.S. government website at <http://www.benefits.va.gov/gibill> (<http://www.benefits.va.gov/gibill/>).

In-State Tuition Status (Residency)

Current information about eligibility for in-state tuition rates can be found at: <https://odu.edu/tuition-aid/costs-tuition/tuition/in-state> (<https://odu.edu/tuition-aid/costs-tuition/tuition/in-state/>).

Billing Cycle/Tuition Deadlines

Through the act of registration, either by registering online or by registration form, students accept responsibility for charges incurred. All University charges are due and payable by the established deadlines. The total amount due must be received by 5:00 p.m. on the deadline date shown on the statement to avoid financial penalties. Students unable to pay the total due by the tuition deadline may opt for participation in the University payment plan (fall and spring only). If charges remain unpaid 30 days after the due date, a 5% late payment penalty is assessed. Once the account is 120 days past due, it is forwarded to a collection agency and assessed an additional 25%. Tuition deadlines are published for each term: <https://ww1.odu.edu/tuition-aid/tuition/billing> (<https://ww1.odu.edu/tuition-aid/tuition/billing/>).

Billing Statements

All itemized Student Account billing statements are only available online at www.LeoOnline.odu.edu (<http://www.leoonline.odu.edu/>). Billing activity, notifications, and alerts are sent to the student's ODU.EDU provided email address. For more information, please visit the website (<https://ww1.odu.edu/tuition-aid/tuition/billing/>).

Failure to Pay Tuition

Students' registrations will not be canceled for failure to pay tuition. Nonpayment will not release students from the financial obligation for tuition charges. Students are strongly encouraged to follow University procedures and meet published deadlines to officially drop classes and be released from charges. Stopping payment on a tuition draft does not constitute a cancellation of the student's registration.

Payment/Student Accounts (Cashiers' Windows)

Students may pay for tuition and fees with personal checks, money orders, cash, or credit card (VISA, MasterCard, Discover, and American Express). The Office of Finance no longer accepts credit card payments at the cashiers' windows. Cash payments should be made at the Office of Finance cashiers' windows ONLY. Check/money order payments may be mailed to Office of Finance, Student Accounts, Old Dominion University, Alfred B. Rollins, Jr. Hall, Norfolk, VA 23529-0045. Personal checks will be accepted for the exact amount of fees and/or other amounts owed the University. Students may make credit card payments via Leo Online only. Students who pay using a credit card will be charged a convenience fee. Third party payments are accepted upon submission of authorization documents. Payments on all financial obligations to the University will be applied on the basis of age of the debt. The oldest debt will be paid first. Postdated checks are not scrutinized and will be deposited upon receipt. The cashiers do not cash checks or make cash refunds. Checks must be provided in U.S. dollars. Over-payments on students' accounts of \$5 or less that are not created by a financial aid disbursement will not be refunded unless students request the refund from the Student Accounts Office.

Cash Payments over \$10,000

In accordance with the Internal Revenue Service (IRS) requirements and the University Policy, any cash payment received by ODU exceeding \$10,000 will require completion of a Cash Intake Form (<https://www.odu.edu/sites/default/files/documents/cash-intake-form.pdf>). For more information, visit the Departmental Deposits (<https://ww1.odu.edu/finance/accounts-receivable/departamental-deposits/>) page.

Third-Party Payment Authorizations

A "Third Party" is an employer, a military unit, a service organization, embassies, or a federal, state or local governmental agency agreeing to pay tuition and fees on the student's behalf, and requests that ODU bill them for these debts. These payments require a written authorization (<https://ww1.odu.edu/tuition-aid/tuition/billing/payments/third-party/>) for processing.

Student Account Inquiry

The University reserves the right to request information on the student identification number and/or a photo identification when releasing information or conducting other financial transactions. Specific account information will be released only to the student. Each student account can be viewed using any Internet browser. Students are strongly encouraged to access records directly through their secure access site on www.leoonline.odu.edu (<http://www.leoonline.odu.edu/>). Students are expected and required to assume responsibility for their own financial matters and to abide by the laws of the Commonwealth and the rules and regulations of the University. Failure to read and comply with University regulations will not exempt students from whatever penalties they may incur.

Delinquent Accounts

The University will not issue a degree, diploma, grade report, or permit registration for future terms to any student who has not paid all debts in full. Students with account holds are permitted to drop classes to reduce debt or withdraw to prevent academic penalty.

Collections

Virginia State law requires that the University make every attempt to collect past due amounts owed to state agencies. If, after 120 days, full payment of a debt has not been received, the account will be placed with a collection agency. Account holders are responsible for any collection costs incurred at a rate of 25% of the total due. Several other actions may be taken including the following: the account can be listed by the Credit Bureau as a bad debt; a delinquent account can be collected in full from income tax refunds, lottery winnings or other refunds due from the state (for Virginia residents); and the account may be turned over to the Virginia Attorney General's Office for

litigation. Timely payment is strongly encouraged so that collection efforts can be avoided.

Set-off Debt Collection Act

Under the provisions of this act, an individual's Virginia income tax refund or lottery winnings will be subject to the University's claim for any unpaid balance of tuition and fees to the University. For more information, please visit <https://ww1.odu.edu/tuition-aid/tuition/penalties/collections/>).

Dishonored Checks and Charge Cards

A \$50.00 fee will be charged for each returned check or charge on a student's account, with a maximum allowable of three returned checks after which check payments will no longer be accepted. For more information, please visit <https://ww1.odu.edu/tuition-aid/tuition/penalties/>).

University Payment Plan (Fall & Spring Semesters)

Students may setup a payment plan (<https://www.odu.edu/tuition/billing/payments/payment-plan-agreement/#:~:text=Fall%2FSpring%20Semester%20Plans&text=Old%20Dominion%20University%20offers%20a,%2Drefundable%20set%2Dup%20fee>) in Leo Online, where charges for each semester are divided into four equal payments with a \$40 nonrefundable setup fee, to be paid at the time the payment plan is established. **Payment plans may not be available on past due balances.**

Tuition Refund Policy

The total tuition is considered fully earned by the University once scheduled classes have begun. Students desiring to withdraw from the University must formally notify the University of their intention by executing an official withdrawal with the Office of the University Registrar (<https://www.odu.edu/registrar/>). If completed by the posted deadlines each semester, students will be refunded (<https://ww1.odu.edu/tuition-aid/tuition/refunds/>) the costs and fees associated with dropped courses.

Tuition Differentials (Add/Drop Policy)

In accordance with the refund periods, a full or partial refund of the difference between tuition paid and the new tuition charges will be granted if the per credit rates differ. In those instances where the revised tuition charges are greater, the additional tuition charges will be assessed.

Special Situations

For classes of less than one semester/session in length, refunds will be granted only before the first meeting of the class. Administrative withdrawals, as in the case of classes canceled by the University or the case of academically suspended students, entitle the student to a full refund of tuition. For refund purposes, the beginning of a semester is defined as the opening day of classes as shown in the course schedule and Undergraduate and Graduate Catalogs. For additional information, visit <https://ww1.odu.edu/tuition-aid/tuition/refunds/>).

Return of Title IV Funds

According to federal regulations, financial aid funds are returned to the government when charges were paid by financial aid and a refund is given to a student who fully withdraws from the University. For more information or further assistance, please visit the Refunds (<https://ww1.odu.edu/tuition-aid/tuition/refunds/>) page or contact the Office of Financial Aid (<https://www.odu.edu/finaidoffice/>).

Tuition Appeal Policy

Students may request tuition financial charges be dropped if a student meets the approved requirements by completing an official Tuition Appeal (<https://ww1.odu.edu/tuition-aid/tuition/refunds/appeals/>) and providing necessary paperwork.

Senior Citizen Tuition Waiver

In accordance with the Senior Citizen's Higher Education Act of 1974 (Code of Virginia, § 23.1-639, et seq.), a senior citizen* may take courses without paying tuition or required fees, except for course materials, under certain conditions. If the senior citizen has taxable individual income of not more than \$23,850 in the preceding year, the individual may take a course for academic credit free of tuition and fees, except for fees established for the purpose of paying for course materials, such as laboratory fees, books, etc. Proof of income in the form of a Virginia Resident Form 760 or an IRS Verification of Non-Filing must be provided at the time of registration, along with the Senior Citizen Tuition Waiver Application & Registration Form. This form can be downloaded at <https://odu.edu/registrar/forms/>).

A senior citizen, regardless of income level, may audit a course that is given for academic credit or take a noncredit course free of tuition and fees, except for fees established for the purpose of paying for course materials, such as laboratory fees or books.

No limit is placed on the number of terms or semesters in which a senior citizen who is not enrolled for academic credit may register for courses, but the individual can take no more than three noncredit courses in any one term, quarter, or semester. There will be no restriction on the number of courses that may be taken for credit in any term, semester or quarter, or on the number of terms, semesters or quarters in which an eligible senior citizen may take courses for credit.

The two additional conditions listed below shall be met before an individual may take a course under the provisions of this program:

1. Senior citizens wishing to use this benefit must be admitted as degree-seeking or non-degree students before registering, and
2. The senior citizen may be admitted to a course only on a space-available basis after all tuition-paying students have been accommodated on or after the first day of classes for the session in which the class is scheduled. Exceptions to this procedure may be made when the senior citizen has completed 75% of the requirements for a degree.

* "Senior citizen" means any person who, before the beginning of any term, semester or quarter in which such person claims entitlement to the benefits of this chapter, (i) has reached 60 years of age, and (ii) has had his legal domicile in this Commonwealth for one year. (Code of Virginia, § 23.1-639)

Deferment for Veterans

Old Dominion University offers a deferment for veterans, which extends the payment deadline for students whose veterans' benefits are not available by the tuition deadline. More information may be found here: <https://ww1.odu.edu/tuition-aid/tuition/military/>).

Federal Student Aid Refunds

Students who have a credit balance on their account may be eligible to receive a refund. The type of credit on a student's account will determine the method of initiating the refund and the length of time for a student to receive their refund. If there is a credit balance, then funds will be returned to the student in the form of a check or e-Refund. Additional information may be found here: <https://ww1.odu.edu/tuition-aid/tuition/refunds/>).

Replacement Checks

Checks that are lost, mutilated, or destroyed can be replaced by issuing a Stop Payment Request Form (<https://www.odu.edu/sites/default/files/documents/stop-payment-request.pdf>). For more information, please visit <https://ww1.odu.edu/tuition-aid/tuition/refunds/>).

Education Tax Credits

The IRS regulations require ODU to provide a statement of tuition and charges billed each calendar year via a 1098T Tax Form, issued no later than January 31 of each calendar year to all eligible students. For more

information, please visit <https://ww1.odu.edu/tuition-aid/tuition/education-tax-credits> (<https://ww1.odu.edu/tuition-aid/tuition/education-tax-credits/>).

Contact Information

Information related to tuition and fees, billing, refunds, payment options and related forms may be directed to Customer Relations located in the downstairs lobby of Alfred B. Rollins, Jr. Hall:

Local (757) 683-3030

Toll-free (800) 224-1450

FAX (757) 683-4100

e-mail tuition@odu.edu

Payment address:

Office of Finance

Old Dominion University

Alfred B. Rollins, Jr. Hall

Norfolk, VA 23529

Student Financial Aid

The Office of Student Financial Aid supports the mission of the University by assisting students and families seeking educational programs at Old Dominion University. The Office administers financial aid programs funded by federal, state, University, and private sources in the form of grants, federal work-study programs, and merit and need-based scholarships. Also, federally supported loans are offered to qualified applicants through Federal Direct Subsidized loans, the William D. Ford Federal Direct Unsubsidized Loan and the Federal Direct PLUS loan programs. Alternative loan options are also available to support educational goals.

Regulations governing the administration of student financial aid are subject to unanticipated changes. For updated information, visit the website at www.odu.edu/finaidoffice (<http://www.odu.edu/finaidoffice/>) or the Old Dominion University home page at www.odu.edu (<http://www.odu.edu>).

Scholarships, Grants, Loans, and Student Employment

The University offers a variety of awards each year to qualified students who have been admitted into degree programs. Financial aid is offered on the basis of academic achievement and/or financial need. Financial need is defined as the difference between the total cost of education at Old Dominion University and the amount of money an applicant and his or her family are expected to make available from income and assets to meet those expenses. The eligibility for non-need-based loans programs, Federal Direct Unsubsidized loans and Federal Direct PLUS loans is determined by multiple factors such as dependency status, student classification (undergraduate/graduate, grade level), cost of attendance, and total amount borrowed to date.

To be eligible for assistance from the most aid programs, a student must be a citizen or an eligible non-citizen. Some awards are designated only to Virginia residents while others are not restricted by residency. A student must be admitted and enrolled in an eligible degree program, must be registered with the Selective Service (if required), must not be in default or owe a repayment or refund on a federally guaranteed loan or grant, and must be in good academic standing (making satisfactory academic progress). Certain aid programs require a student to maintain a full-time status. One exception to the requirement that students must enroll in a degree-seeking program applies to students admitted for purposes of teacher certification who apply for a William D. Ford Federal Direct Loan.

Financial aid eligibility is determined on an annual basis, for one academic year (Fall, Spring). Students must submit the summer aid request form to request summer aid review. Not all students will be eligible for summer aid. Students must reapply each year for continued eligibility. Applications for financial aid should be submitted as early as possible beginning in October preceding the academic year requested. Priority awards of grants funded by the Commonwealth of Virginia and the Federal Supplemental Educational Opportunity Grant (FSEOG) Program are awarded to eligible students whose Free Application for Federal Student Aid (FAFSA) is received by the federal processing agency no later than the established University priority deadlines each academic year of interest. Awards are offered on a first-come, first-served basis and dependent on fund availability.

To be considered for the Annual and Endowed Scholarships administered by the University, an Admissions application or the Scholarship Application for Continuing Students must be received by the University by March 1 preceding the academic year of interest. All admitted students are automatically considered.

An entering student must be accepted for admission into a degree-seeking program before receiving a financial aid eligibility notification email; however, a student who has not yet been accepted for admission may apply for financial assistance. Once admitted into an eligible degree program, the student will automatically receive a notice of tentative financial aid eligibility. Announcements of financial aid eligibility for early applicants are generally made before May 1. The applicant will be notified by the Office of Student Financial Aid. In addition, the admitted student is encouraged to monitor the status of his/her application for aid and its subsequent processing

by accessing his/her records on the University's secure online site, LEO Online. Students may be notified by email to their Old Dominion University email accounts throughout the year. Alerts, reminders, and student-specific information are emailed through the University's secure email system throughout the year, and students are responsible for reading and responding to these communications.

The information regarding financial aid contained in this Catalog is subject to changes or deletions without notification. Additional information concerning financial aid is available through the Office of Student Financial Aid. The federal Student Guide, which describes the federal student financial aid programs and how to apply for them, is also available free of charge from the Federal Student Aid Information Center (1-800-433-3243). The U.S. Department of Education provides efficient and secure access to information and government services and benefits for students via <https://studentaid.gov/>.

Application Requirements

To be considered for financial aid, a student must complete the FAFSA as soon as it becomes available preceding the academic year for which application is made. For example, a student planning to attend during the Fall Semester, 2025 would submit a financial aid application on or after October 1, 2024. The documents and deadlines are described below. The FAFSA for the 2026-27 aid year is expected to be available on October 1, 2025.

Note: The Free Application for Federal Student Aid (FAFSA) is required of all applicants who wish to be considered for financial aid.

Document 1: The Free Application for Federal Student Aid (FAFSA)

Submitting a completed and signed FAFSA initiates the process of applying for financial aid. The information provided by the student (and his/her parents) is used by the University and other awarding agencies to determine financial need and general financial aid eligibility. When filing the 2025-26 FAFSA, tax information for 2023 will be submitted. When completing the FAFSA, use Old Dominion University's Title IV Institution Code (003728). Old Dominion University encourages students to take advantage of the electronic FAFSA option on the web at <https://studentaid.gov/>, which is a secure and convenient method for completing the application process. All applicants and parents of dependent applicants should apply for a FAFSA ID with the Department of Education at <https://studentaid.gov/fsa-id/create-account/launch/> in order to be able to sign the FAFSA application electronically. The FAFSA must be filed each year for which the student is requesting aid. FAFSAs received by the federal processor before university established priority deadlines receive priority consideration. The FAFSA priority date is March 1 for all students (priority consideration as funds are available).

Document 2: FAFSA Submission Summary

Once the FAFSA is received and processed, the federal processing center will email the FAFSA Submission Summary to the applicant. Students are strongly encouraged to review and keep their FAFSA Submission Summary and all other financial-aid-related documents for future reference. The FAFSA Submission Summary contains valuable information as well as a unique data release code. Students should also keep copies of all documents used to complete the FAFSA, as they may be requested by the Office of Student Financial Aid as part of the federally required verification process.

Document 3: Employment Eligibility Verification (Form I-9)

I-9 verification, also known as Employment Eligibility Verification, is a critical process in the United States that ensures employees are legally authorized to work. This process requires both employers and employees to complete specific forms and provide documentation, verifying the employee's identity and work authorization status. Old Dominion University employees are required to submit an I-9 form prior to starting work. Additional information is found at the links below.

Document 4: Consortium Agreement and Dual Enrollment Forms

ODUGlobal students completing classes remotely may be required to submit these forms. These students should consult with their Student Success Director to determine if these forms are required.

Verification Process

Continuing/returning students selected for verification will be required to complete the verification process prior to receiving a financial aid award. This means that required verification documents must be received and processed prior to the receipt of an aid offer. The verification review process may take up to two weeks or longer during peak processing periods.

Satisfactory Academic Progress for Financial Aid Eligibility

Satisfactory Academic Progress (SAP) Policy

To be eligible for federal, state, and institutional financial aid, all students are required to maintain Satisfactory Academic Progress (SAP.) The regulations provided by the U.S Department of Education are geared toward improving program integrity. Old Dominion University has established its own policy to adhere to these guidelines while ensuring student success.

The following information provides a more in-depth understanding of the minimum progress requirements a student must meet in order to be eligible for financial aid. It is important to note these requirements may differ from that of the University and individual colleges.

Federal regulations are continuously updated, and the Office of Financial Aid is required to verify that their policy meets any changes. If any changes occur, the Office website will be updated, and notifications will be sent to those students affected.

Satisfactory Academic Progress Review Procedure

The Office of Financial Aid evaluates Satisfactory Academic Progress (SAP) annually at the end of the spring semester once grades are posted. Students who are included in this review include undergraduates, graduates, both full-time and part-time, who have filed the Free Application for Federal Student Aid (FAFSA.) This is a cumulative review of all semesters regardless of whether or not the student received financial aid during a particular academic year. The evaluation is based on the student meeting three criteria, which are described below:

- Meeting a minimum cumulative grade point average (GPA)
- Earning a minimum number of credits (Pace of Progress)
- Cumulative attempted hours not exceeding program requirements (Maximum Timeframe)

Students who fail to meet any one of the criteria are considered ineligible for financial aid.

Financial Aid, including loans, is limited and the Office of Financial Aid must ensure students obtain their degree in a reasonable amount of time with reasonable debt.

To maintain Satisfactory Academic Progress, students must maintain the following minimum cumulative GPA:

Qualitative/Grade Point Average (GPA)

Undergraduates - minimum 2.0

Graduates - minimum 3.0

PACE of Progress

This standard is calculated by dividing the cumulative number of credits successfully completed by the cumulative number of credits the student has attempted.

To be eligible for financial aid, an undergraduate student is required to complete a minimum of **67%** of cumulative attempted credits.

Graduate students are required to complete minimum of **80%** of cumulative attempted credits.

Credits completed are those for which grades of A, B, C, D and P, are earned. An **I-incomplete** grade and **W-withdrawal** are not earned and therefore cannot be counted.

Old Dominion University does not round up when determining PACE percentage.

Audit classes are not counted towards Pace of Progress nor counted in enrollment for financial aid eligibility.

Maximum Timeframe

No student may exceed 150% of the published length of their educational program. Students will be notified and will need to appeal for financial aid when they are approaching 150%. Students must complete their degree within a specified amount of time. This standard will depend on the student's enrollment status and degree. Old Dominion University requires an appeal at 125% of degree hours. When a student exceeds 125%, they will be required to submit an appeal for the following semester to determine if they will continue to receive financial aid.

Undergraduate student students pursuing their first degree must complete the requirements for their program without exceeding 180 attempted credits. **Students who have a major with a minor are included.**

Undergraduate students pursuing a second degree or who have a double major should note that once a student has completed the requirements for one major or degree, financial aid eligibility will be limited. Students must complete degrees within 150% of credits needed for a double major, second degree, and teacher licensure, not to exceed 225 attempted credits.

Students with a double major will be flagged at each report and **required** to self-identify on the academic plan of the satisfactory academic progress Maximum Timeframe Appeal, if the second degree or double major status is not seen in the student's record in Banner. The appeal will be placed in the student's extender file to refer to and the account will be noted. An additional academic plan will **not** be required until they reach 125% of the program.

If a student fails any of the above SAP standards, the student's financial aid eligibility is suspended.

Example: An undergraduate student that is required to complete 120 credits to graduate will be eligible for financial aid up to 150 attempted credits at which point an appeal will be required.

Undergraduates working on a second degree, double major, and teacher licensure will be eligible for financial aid up to 188 attempted credits at which point an appeal will be required.

Note: Transfer credits are included, and completion of the first undergraduate degree must be conferred.

Graduate students may attempt a maximum of 90 hours. Graduate students working on a second degree will be given an additional 45 credit hours to earn their second degree; however, they may not exceed 150% of the published length/credits required for their degree program of study.

Note: Transfer credit hours are included.

Special programs such as Clinical Psychology, Nursing Anesthesiology, Physical Therapy, etc., may require additional credits to complete the program and thus may be allowed additional credits based on the program.

Credit hours are counted starting with the semester the student entered school, even semesters in which a student did not receive financial aid.

Students who are aware of learning or other disabilities should immediately contact the Office of Educational Accessibility so that appropriate accommodations can be made. A student with a documented disability and

functional limitations is still held to the same academic expectations as other students.

Students who have completed all undergraduate course requirements, but do not graduate (for any reason) are ineligible for funding. Reasons not acceptable for further funding include but are not limited to raising GPA to meet graduation requirement, needing to pass writing proficiency requirements, and wanting to complete a minor or second major (double majors).

Students with an academic history showing patterns of enrollment of inability or unwillingness to progress, withdrawals, repeats, incomplete grades, or enrollment inconsistent with the student's educational objective may be regarded as ineligible for future financial aid.

Notification of Satisfactory Academic Progress

Students who have met these requirements will not receive any type of notification. ODU will send a notification to students who have not met SAP standards stating ineligibility for financial aid. The notification will be sent by email to the student's ODU email address and will outline the academic standards, reason(s) the student failed, and other pertinent information regarding appeal reasons and procedures.

SAP Evaluations

If a student who failed SAP later self-identifies that they now meet the SAP standards at a point prior to an official SAP evaluation/checkpoint, the institution can only make formal SAP determinations during an official SAP evaluation/checkpoint at the end of a payment period. Any updates or changes to a student's SAP status can only be made during official SAP evaluations. ODU reserves the right to recalculate SAP due to grade changes; however, these will be done a case-case basis and on rare occasions.

Appeal Procedures

Appeals must be submitted 10 days after notification of appeal or by the deadline on the appeal form. These dates vary from year to year; however, the deadline will be the Friday before classes begin. The deadlines are listed on the SAP appeal form.

Deadlines for appeal submission for summer 2025 and 2025-26 academic years

Summer 2025 - June 27, 2025, regardless of summer session(s) enrolled

2025-26

Fall term - August 22, 2025

Spring term - January 16, 2026

Summer - June 26, 2026

Students awaiting a response from the SAP Appeal Review Committee are responsible for paying their tuition and other fees by the payment deadline to avoid late and collection fees.

The decision of the Financial Aid Office is FINAL and cannot be appealed.

The complete packet including the advisor's portion and all documentation needed must be submitted or appeal will be denied.

The University will consider appeals for uncontrollable events, special circumstances that happen in a student's life such as death of a family member, student illness, and transition to college issues that can be documented, or being called to the military, etc. The student must describe what impact the circumstance had on academics, what the student has done to address the impact and how the student plans to be successful. If the student is not yet prepared to vigorously focus on academics with assistance, if necessary, the student should not submit an appeal.

Some examples include but are not limited to:

- Death in the family. State how this person was related (i.e., parent, spouse, sibling, etc.). **A copy of the death certificate or related documentation must be provided.**

- Disabling illness or injury to the student. **Please provide supporting documentation from the medical provider.**
- Disabling illness or injury of immediate family member that required the student's care. **Please provide supporting documentation from the family member's medical provider.**
- Emotional or mental health issue (for student) that required professional care. **Please provide supporting documentation from the medical provider, social worker or other professional.**
- Other special circumstance beyond the student's control (transition that may lead to depression, anxiety, and other problems that can be documented, divorce/separation, natural disaster, extreme change in financial or legal circumstances, etc.)

Documentation or evidence that supports the reason(s) must be included with the appeal. This might include a letter from a doctor, court documents, death certificates or copies of university documents, layoff notices, foreclosure notices, etc. Attach copies; original documents will not be returned.

Potential Delay of Disbursements

Financial aid may not be disbursed to a student's account until SAP has been evaluated. This process cannot be completed until after grades have officially posted from the prior semester.

Students who have failed SAP may experience a delayed financial aid disbursement if grades are not made official before the start of the subsequent semester. No exceptions can be made to this process.

Regaining Financial Aid Eligibility

Regaining Financial Aid Eligibility with a Grade or Degree Change

Students who have received a SAP failure notice due to GPA or Pace of Progress and have received a grade change will need to notify the Office of Financial Aid for a re-evaluation of SAP. If the student is back in compliance with SAP standards, the Office will update the student's SAP status and make any other necessary adjustments. Also, if a student is failing for undergraduate maximum timeframe and is now accepted to Graduate School, they will need to contact the Office so the system can be updated. The SAP process is run with prior semester information.

Regaining Financial Aid Eligibility with Maximum Timeframe

Undergraduate and graduate students who need additional time to complete their first degree must complete the SAP Appeal explaining why the student has not completed the degree and a SAP Advisor form signed by an advisor/department chair explaining what classes remain, what terms they will be taken in and note the student's expected graduation date.

NOTE: Students who do make SAP while on a Maximum Timeframe Appeal are disqualified from receiving further financial aid, including loans, and will be unaided until or unless they are able to reestablish eligibility. Reinstatement of aid will not be automatic, will be reviewed on a case-by-case basis, and requires achieving SAP standards and taking courses only from the approved Maximum Timeframe Appeal.

Regaining Financial Aid Eligibility with a GPA or Pace of Progress

Students may also appeal for failing GPA and/or Pace of Progress. The following will be considered: injury or illness of the student or family member, death of a close relative, emotional or mental health issue (for student) that required professional care, or other reasons resulting in undue hardship to the student such as divorce/separation, natural disaster, extreme change in financial or legal circumstances or transition that may lead to depression, anxiety, and other problems that can be documented. Undergraduate and graduate students would need to submit the SAP appeal explaining why the student has failed and what changes they have or will make to successfully complete their degree and supporting documentation for their appeal. This might include a letter from a doctor, court documents, death certificates or copies of university documents, layoff notices, foreclosure notices, etc. Copies should be attached; original documents will not be returned.

Notification of Appeal Decision

SAP appeals will be reviewed once **ALL** required documentation is received. Notification of the decision will be emailed to the student's Old Dominion University email address within 10 business days.

Approved Decision

If the appeal is approved, the student will be placed on an academic plan/contract whereby specific conditions must be satisfied to demonstrate progress toward degree completion. The academic plan/contract is an agreement with the student and Financial Aid Office that may be stricter than the above guidelines in order for a student to successfully graduate.

Acceptance of the approved plan/contract supersedes all other SAP regulations. The student's approved academic plan/contract may be shared with his or her academic department.

The Financial Aid Office will evaluate all students that have a SAP plan/contract at the end of each semester. If a student meets the terms of the plan/contract but is not back in compliance, the contract will be extended for another term.

A student who fails to meet the terms of the plan/contract will lose financial aid eligibility until the student is able to meet all the SAP standards.

Students who fail to complete the probationary conditions cannot submit a new appeal.

Denied Decision

If the appeal is denied, the student may pay for the classes out of pocket or make monthly payments using the University payment plan with the Office of Finance. Students may regain eligibility for aid once they meet SAP standards.

Financial aid suspension does not prohibit students from continuing their education at Old Dominion University. It does prohibit students from receiving financial aid until they again meet the standards of Satisfactory Academic Progress.

Students awaiting a response from the SAP Appeal Review Committee are responsible for paying their tuition and other fees by the payment deadline to avoid late and collection fees.

The decision of the financial aid review committee is FINAL and cannot be appealed.

Students Who Do Not Appeal

Students who choose not to appeal will be required to meet the Satisfactory Academic Progress standards before regaining eligibility for financial aid. Once the student has regained SAP, the student is eligible to receive financial aid at Old Dominion University. The student cannot automatically regain eligibility by paying for classes for a semester, by sitting out a semester, or by taking classes elsewhere.

Academic Circumstances that Affect Students' Status

Changes in major, double majors, double degrees or minors may cause students to reach their maximum attempted hours and lose eligibility before earning a degree.

Withdrawing from courses

Withdrawing from courses may impact students' financial aid awards. Before withdrawing from class, students should contact the Financial Aid Office to determine the consequences.

Withdrawing from the University

Students who totally withdraw and receive aid may owe the University money. Before withdrawing from the University, students should contact the Financial Aid Office to determine the consequences.

Incomplete grades, missing grades and failing grades

Courses assigned a grade of "I" Incomplete are not considered complete and will not be included in the total credits earned until the final grade has been submitted. Incomplete grades, missing grades and failing grades reduce a

student's completion ratio, because they are counted as attempted, but not earned credits. They will also count against the maximum attempted hours.

Dismissal and Return

Students who are suspended academically or choose not to attend because of SAP Failure will not be automatically eligible for financial aid upon their return. Student must meet all standards of SAP. Student must appeal if eligible or use means other than financial aid for educational expenses.

Absence does not restore eligibility for financial aid. It is the student's responsibility to be knowledgeable of their SAP standard when returning to school after dismissal or choosing not to return because of SAP failure.

Audit Courses – Students are not eligible to receive financial aid for audit courses. Audited courses are not included in hours attempted or earned for SAP determination.

Transfer and Repeat Coursework

Accepted transfer credits must count as both attempted and completed hours. Repeat courses count as attempted credit hours each time students register for them. They also count against the allowed maximum. This can reduce a student's completion ratio because repeated credits count as earned credits only once. **NOTE: The U.S. Dept. of Education allows only one retake for Title IV credit.**

Students are allowed to repeat a previously passed course and have it count toward enrollment for financial aid eligibility only once. However, all repeats count against the maximum total attempted credits and reduce the pace/completion rate.

For federal student aid, passing grades higher than an "F" will be considered to have passed the course and considered as an attempt. **NOTE: This is regardless of any University or major program policy requiring a higher grade or measure for academic purposes.**

Remedial courses may be included, however, enrichment and English as a Second Language (ESL) courses ARE NOT taken into consideration

Other examples: PACE requirement

Undergraduate student attempts 30 credits for the academic year, earned 19; student would not be meeting satisfactory academic progress at the time of SAP review. Total credits needed would be 20.1 or 21 completed (30 X 67%).

Graduate student attempts 18 credits for the academic year, earned 17, student would be meeting the PACE standard for satisfactory academic progress at the end of SAP review. Number of minimum credits needed would be 14.4 or 15 (18 x 80%)

Note regarding the Office of Financial Aid policy on alternative loans:

Alternative loans may be certified if the student is not making satisfactory academic progress with a lender who will approve for students not meeting SAP standards. Please discuss with the financial aid counselor if you have questions.

The Office of Financial Aid reserves the right to review denied appeals, GPA's and completion rates on a case-by-case basis. On rare occasions when grades are updated before the formal SAP evaluation checkpoint, the Office of Financial Aid may update SAP eligibility and award aid. The official SAP evaluation checkpoint is completed at the end of the spring term. Students on financial aid probation are reviewed at the end of each term.

Federal Programs

Students must submit the Free Application for Federal Student Aid (FAFSA) to determine eligibility for all of the following federal financial aid programs.

Federal Pell Grant Program

A Federal Pell Grant, unlike a loan, does not have to be repaid. Pell Grants are only awarded to undergraduate students who have not earned a bachelor's degree. For many students, Pell Grants provide a foundation of financial aid to which other aid may be added. The amount of Federal Pell

Grants students may receive over their lifetime is limited to an equivalent of six years of Pell Grant funding.

Federal Supplemental Educational Opportunity Grant (FSEOG)

Like the Federal Pell Grant, this award assists undergraduate students only and does not have to be repaid. This grant is made to students who demonstrate exceptional financial need and must be Pell grant eligible. Students who meet all other eligibility criteria and whose FAFSAs were received by the federal processing agency by Old Dominion University priority deadlines are considered for this grant. It is awarded on a first-come, first-served basis. Federal funding for this program is extremely limited.

Federal Work Study (FWS) Program

This program provides jobs for undergraduate or graduate students with financial need, allowing them the opportunity to earn money for educational expenses. The FWS program encourages community service work such as tutoring and work related to the course of study. A student who qualifies for FWS is not automatically guaranteed employment. Students must apply for available positions and cannot be a participant of the Learn and Earn Advantage Program (***LEAP**). The Center for Career & Leadership Development, located at 2202 Webb University Center, maintains a listing of available positions as provided by offices across campus in Handshake through its website at <https://www.odu.edu/cds> (<https://www.odu.edu/cds/>) . CDS also manages the following FWS programs for the University: Student Temporary Assistance Team (STAT), Community Service Internship (CSI), America Reads Tutoring and America Counts Tutoring. Contact the CDS at (757) 683-4388 for information on completing the application process for these CDS managed programs.

***The Learn and Earn Advantage Program (LEAP)** offers first and second year undergraduate ODU students the opportunity to be selected for part-time on-campus jobs with ODU departments and Regional Higher Education Centers. Jobs over the last two semesters averaged 10-15 hours per week with students making \$12.00 per hour for a total maximum of \$3,000 per academic year. Students who do not have Federal Work Study awards and have financial need as determined by the Financial Aid Office will receive a LEAP award letter as funds allow. Students must meet minimum GPA requirements each semester, successfully complete the UNIV 130 LEAP course and have satisfactory work supervisor evaluations and recommendations to remain eligible. A limited number of positions are available each semester and are filled by the order of completed University employment application packets received by the Center for Career & Leadership Development. Contact the Center at (757) 683-4388 for more information about the application process.

Federal Direct Student Loan Programs

Old Dominion University participates in the William D. Ford Federal Direct Loan Program and thus receives loan funds directly from the U.S. Department of Education upon disbursement (payment) to eligible students. There are three kinds of loans:

William D. Ford Federal Direct Subsidized Loans

The federal government will pay the interest on these loans while students are in school and during deferments (postponements of repayment). Students must demonstrate financial need to receive this type of loan. Only undergraduate students may be eligible and must be enrolled at least half time. Like all other forms of aid, loans are disbursed to student accounts on a semester-by-semester basis, and eligibility must be re-confirmed prior to release.

William D. Ford Federal Direct Unsubsidized Loans

Loans are available to eligible students regardless of financial need, but students will be required to pay all interest charges, including the interest that accumulates during deferments.

The Federal Direct Parent Loan for Undergraduate Students (PLUS)

This is available for parents of dependent students who filed the FAFSA and who meet other general eligibility requirements. Applications for these loans are completed on-line at <https://studentaid.gov/>. The loans are subject to a Federal credit approval process at the time of submission. Parents are responsible for all payments and interest charges. PLUS loans are not automatically offered but are available upon the written request of the parent borrower by submission of a Parent PLUS Data Sheet found on-line at the Financial Aid website. Please note: The Federal on-line application found at <https://studentaid.gov/> **and** the Parent PLUS Data Sheet found on the Financial Aid website must be completed.

1-19: Children of Fallen Heroes Scholarship

On March 23, 2018, the President signed Public Law 115-141, the Consolidated Appropriations Act, 2018, which included an amendment to Section 473(b) of the Higher Education Act, authorizing the Children of Fallen Heroes Scholarship. Under this scholarship, beginning with the 2018-2019 award year, a Pell-eligible student whose parent or guardian died in the line of duty while performing as a public safety officer is eligible to receive a maximum Pell Grant for the award year for which the determination of eligibility is made. To qualify for this scholarship, a student must be Pell-eligible, have a Pell-eligible EFC and be less than 24 years of age or enrolled at an institution of higher education at the time of his or her parent's or guardian's death. In subsequent award years, the student continues to be eligible for the scholarship as long as the student has a Pell-eligible EFC and continues to be an eligible student.

All Title IV aid awarded to such eligible students must be based on an EFC of zero without regard to the student's calculated EFC. Thus, the student is eligible for the maximum Pell Grant for his or her enrollment status and cost of attendance. In addition, the student's eligibility for Direct Loans and for Campus-Based program aid must be based on an EFC of zero.

For purposes of the Children of Fallen Heroes Scholarship, a public safety officer is:

- As defined in section 1204 of Title I of the Omnibus Crime Control and Safe Streets Act of 1968 (42 U.S.C. 3796b); or
- A fire police officer, defined as an individual who is serving in accordance with state or local law as an officially recognized or designated member of a legally organized public safety agency and provides scene security or directs traffic in response to any fire drill, fire call, or other fire, rescue, or police emergency, or at a planned special event.

The Children of Fallen Heroes Scholarship requires the institution's financial aid administrator (FAA) to determine and document, in collaboration with the student, that the student was less than 24 years of age or enrolled at an institution of higher education at the time of his or her parent's or guardian's death.

Acceptable documentation that may be used to determine eligibility for this scholarship are:

- A determination letter acknowledging eligibility for certain federal benefits under the Public Safety Officers Benefit (PSOB) program administered by the Department of Justice.
- A written letter of attestation or determination made by a state or local government official with supervisory or other relevant oversight authority of an individual who died in the line of duty while serving as a public safety officer as defined above.
- Documentation of the student qualifying for a state tuition or other state benefit accorded to the children or other family members of a public safety officer consistent with the definition in 42 U.S.C. 3796b, or as a fire police officer as noted above or
- Other documentation the school determines to be from a credible source that describes or reports the circumstances of the death and the occupation of the parent or guardian.

State Programs

The Virginia Student Financial Assistance Program (VSFAP) was established to assist students with financial need. VSFAP Funds are used for need-based grants to Virginia resident undergraduates or for assistantships and fellowships to graduate students. As funds are limited, they are awarded on a first-come, first-served basis, with students meeting the priority FAFSA receipt deadlines established by the University given first consideration. Awards are limited to 125% of degree (cannot exceed 150 attempted credits). Specific Satisfactory Academic Progress requirements that are more rigorous than those for federal financial aid eligibility consideration apply. Interested students are encouraged to visit the State Council of Higher Education for Virginia web site at <http://www.schev.edu> for detailed information and program regulations and guidelines.

Commonwealth Award

In order to be eligible for a Commonwealth award, a student must be admitted into a Virginia public two- or four-year college or university, a domiciliary resident of Virginia as defined by the Code of Virginia 23-7.4, demonstrate financial need as determined by the institution (FAFSA required), be enrolled at least half-time in an eligible baccalaureate program, a U.S. citizen or eligible non-citizen, and otherwise eligible for federal financial aid. This is a grant and does not have to be repaid. The actual awards vary by institution and are based on funds available. The awards may not exceed tuition and required fees. Additional restrictions, such as minimum GPA or maximum hours attempted, affecting state grant eligibility may be enacted during the period covered by this catalog.

Virginia Guaranteed Assistance Program (VGAP)

In order to be eligible for a VGAP award, a student must meet all Commonwealth award requirements, and must also be a graduate of a Virginia high school, have a minimum cumulative high school grade point average of 2.5 on a 4.0 scale. A student generally enters the VGAP program as a freshman. Awards may be renewed for up to three additional years provided that the student meets the renewal conditions, and that funding is available. Renewal of the VGAP grant is dependent upon several factors: maintaining full-time continuous enrollment, maintaining domiciliary residency in Virginia, demonstrating continued financial need, maintaining a college grade point average of least 2.0 on a 4.0 scale, or equivalent, and maintaining the satisfactory academic progress standards of the institution for federal student aid programs. Students must also have advanced class levels upon completion of each full year of award received (VGAP is restricted to no more than one year – 12 months – per class level, freshman, sophomore, junior, senior). As with all other aid programs, audited courses do not count toward full-time enrollment. Participation in the VGAP program is limited to four years of eligibility. Additional restrictions, such as minimum GPA or maximum hours attempted, affecting state grant eligibility may be enacted during the period covered by this catalog.

Conditions for Disbursement of Financial Aid

The Office of Student Financial Aid publishes a “Statement of Student Responsibility & Conditions for Release of Financial Aid” document each academic year. This statement is included with the initial award notification mailed to the student and is also accessible on the Financial Aid Office page of the University web site <http://www.odu.edu/finaidoffice> (<http://www.odu.edu/finaidoffice/>). When students accept financial aid, they also acknowledge that they have read and agree to comply with the Statement. A limited sample of conditions is as follows:

Statement of Student Responsibility & Conditions for Release of Financial Aid

- **INITIAL NOTIFICATIONS OF FINANCIAL AID ARE TENTATIVE.** Initial financial aid notices are based on the assumption that students will enroll at the **full-time** level (12 or more credits for undergraduate and 9 or more credits for graduate). If students enroll less than full time (three-quarters-time, half-time or less than half-time), it is the student's responsibility to notify the Financial Aid counseling team if the enrollment level or **student type** changes (examples: change from

degree seeking to certificate program, from undergraduate to graduate, residency revisions out-of-state to in-state, etc.). It is essential that the student **communicate** any changes in enrollment level or student type with his/her Financial Aid team during the period leading up to the beginning of each semester as changes may impact the student's aid eligibility. **Undergraduate students must report December graduation plans (federal loans must be prorated per regulations).**

- Financial aid can be credited to students' University accounts only after certain conditions have been met, including but not limited to timely receipt of requested documents needed to verify information provided on the FAFSA and appropriate enrollment for the term. Students receiving loans must be enrolled at least half-time (6 hours undergraduate or 4 hours graduate) and maintain Satisfactory Academic Progress standards as stated in this Catalog. **Failure to meet the standards of Satisfactory Academic Progress will result in loss of eligibility and automatic cancellation of previously offered federal and state aid.**
- If financial aid has not been disbursed (paid to the student's account with the University) by the tuition deadline, **the student is NOT automatically dropped from classes for non-payment.** Students must actively drop or withdraw from courses prior to the tuition deadline to be relieved of charges for courses dropped. Drops and withdrawals after the tuition deadline are subject to the policies enumerated in this Catalog.
- **Financial Aid eligibility per allowable program length.** Undergraduate students at Old Dominion University may attempt a maximum of 180 credit hours. **Undergraduate students who have exceeded 180 credits are not able to appeal and are ineligible for aid.** Undergraduates working on a second degree are given an additional 90 hours to earn their second degree. **(Note: Transfer credits are included and completion of the first undergraduate degree must be conferred.)** Graduate students maximum allowable time to receive financial aid is 90 hours. Graduate students working on a second degree will be given an additional 45 credit hours to earn their second degree. **(Transfer credit hours are included).** **In each of these cases students are no longer eligible for financial aid and appeals are not accepted**
- Decisions made by financial aid administrators at other institutions relative to dependency status, special circumstances, or financial aid awards are not automatically accepted by Old Dominion University.
- **The student is responsible for repayment of any federal, state, or University and outside agency aid received as a result of unreported or misreported information discovered through verification, third-party notices, account reviews, and/or Quality Assurance findings.**
- The student is responsible for reporting additional educational assistance received through sources other than the Financial Aid Office. Financial aid may be adjusted in compliance with federal regulations as a result of additional educational assistance received and not reflected in the financial aid notification letter. **The student bears responsibility for reporting any additional aid in the form of scholarships from outside groups, Unfunded Scholarships, Graduate Tuition Waivers, Meal scholarship waivers, Senior Citizen Tuition Waivers, Employer Assisted Tuition Payments, Third-Party Payment Agreements involving any outside group or company etc., and all other forms of assistance.** The student must report these external sources of financial assistance in writing or via email immediately to his/her financial aid counseling team.
- New Federal Direct Loan student borrowers must complete an Electronic Direct Loan Master Promissory Note (E-MPN) online at <https://studentaid.gov/mpn/> before the loan process can be completed. Students will receive requirement notifications when their E-MPN is ready for completion.
- All **first-time loan borrowers** and students who have not borrowed through the Federal Direct Loan Program within the past two years must, by federal regulation, complete a **loan entrance counseling** session before loan proceeds can be credited to the student's financial account. **Failure to comply with this requirement will prevent release of loan funds and may result in cancellation of loans, even if the student has submitted a completed loan promissory note.**

This requirement may be satisfied online at <https://studentaid.gov/entrance-counseling/>.

• **ATTENTION – UNDERGRADUATE TRANSFER STUDENTS:**

Student loan eligibility is determined by student classification (freshman, sophomore, junior, senior). It is possible that not all academic transcripts from other institutions will have been evaluated at the time of initial aid eligibility determination; therefore, the classification entered by the student on the FAFSA is used to determine loan eligibility. **Once all transcripts have been evaluated, eligibility for Federal Direct Student Loans may require downward adjustment if the official classification is lower than the classification entered on the FAFSA.**

- Eligibility for financial assistance is based upon FAFSA (Free Application for Federal Student Aid) information provided by the student and his/her family. The FAFSA must be filed each year. FAFSA's received by the federal processor before **March 1** preceding the fall semester receive **priority** consideration. Aid for students whose FAFSA's are received by the federal processor after April 1 may not be ready by the fall semester tuition deadline. Students should make alternate financial arrangements for tuition payment, books, and other education-related expenses.

- **Financial aid eligibility changes when enrollment level or student type changes or students meet the allowable time eligibility.** Students who drop courses are responsible for notifying the financial aid counselor **immediately**. Aid will be reduced accordingly. If a student drops classes, **financial aid received must be repaid to the University.**

This also applies to "balance-of-aid" payments made to students before dropping.

- If the student adds a course(s) after the financial aid has been applied to the account and refund issued, the student is responsible for the balance owed.
- Students who withdraw from **all** courses are subject to regulations regarding the **Return of Title IV funds**. If the date of complete withdrawal from all courses precedes the date on which more than 60% of the academic semester has been completed, a prorated portion of all Title IV student financial assistance will be due back to the federal programs. State student financial assistance may also be due back. The University policy regarding tuition refunds following withdrawal is stated in the Catalog and is independent of the Return of Title IV funds regulations. *******Students who withdraw from the University before more than 60% of the semester has elapsed should anticipate repaying a significant portion of Title IV and state financial assistance. *****Additionally, students who failed to earn a passing grade during the term are subject to the same federal guidelines.**
- A notice of tentative financial aid eligibility assumes a level of federal and state appropriations that are frequently undetermined at the time of preparation. If legislative bodies fail to provide the anticipated funding level, it may be necessary to reduce or cancel certain types of aid, particularly grants. Students will be notified immediately if such changes become necessary. Students are strongly encouraged to check their ODU email accounts often.
- **The Office of Student Financial Aid reserves the right to review, modify or cancel financial aid at any time on the basis of information affecting student eligibility, including but not limited to changes in financial resources, residence, academic status, student type, enrollment level, the availability of funds or Satisfactory Academic Progress requirements.**
- **The student is responsible for Catalog information.** Students are held individually responsible for the information contained in the Catalog and on the Financial Aid webpage. Failure to read and comply with university regulations will not exempt students from whatever penalties they may incur.
- **Students may receive financial aid from only one institution during any given period of enrollment (semester).**
- **Students are limited to 12 semesters (or 600%) of Federal Pell Grant eligibility during their lifetime. This affects all students regardless of when or where they receive their first Pell Grant.**

- **There is a limit on the maximum period of time that students can receive Direct Subsidized Loans. In general, students may not receive Direct Subsidized Loans for more than 150% of the published length of their program.**

Scholarships

Merit-Based Scholarships

All entering fall freshmen students who submit their admission application, and ALL required credentials are considered for merit-based scholarships offered through the Old Dominion University Office of Admissions. The admissions application serves as the merit-based scholarship application.

Information related to First-Year Student Scholarships can be found on the Admissions web site.

Annual and Endowed University Scholarships

Scholarships at Old Dominion University have been established through the generosity of individuals, organizations and corporations to recognize outstanding academic performance and to assist students in pursuing their educational goals. Scholarship awards are based on a variety of criteria. For some awards, eligibility is entirely determined by academic merit or potential. Other requirements might include demonstrated financial need, field of study, state or city residency, graduation from a particular high school or participation in a specific program, organization or activity. Generally, recipients have earned at least a 3.4 grade point average (on a 4.00 scale) and are full-time, degree-seeking students.

All first-time freshmen and transfer students will automatically be considered for academic and endowed scholarships based on their admissions application. The majority of scholarships offered to Old Dominion University students are based on information already known to the University via the student's admissions application and the Free Application for Federal Student Aid (FAFSA).

New incoming freshman and transfer students have the opportunity to identify institutional scholarship interest by selecting "YES" to the institutional scholarship indicator when completing an admissions application. New students will be able to select from various scholarship options listed with in the admissions application.

Incoming freshmen are automatically considered for merit-based scholarships based on academic performance. Merit-based scholarships are managed by the Office of Admissions; financial need is not required.

The Scholarship Form for Continuing and Graduate Students is available for students who have a change in scholarship eligibility according to the Criteria Check List (included in the Scholarship Form). Continuing students who meet the above circumstances must complete and submit the form to the Office of Student Financial Aid, 2002 Rollins Hall, Norfolk, VA 23529-0052. **The form must be received by March 1 each year to be considered for scholarships for the following academic year.** The information provided on the Form for Continuing and Graduate Students will be maintained and used for scholarship selection for the duration of the student's attendance at Old Dominion University. **It is not necessary to complete the form more than once during attendance at Old Dominion University, UNLESS the required information has changed. To determine eligibility for need-based scholarships (designated by an asterisk (*), students must also file the Free Application for Federal Student Aid (FAFSA).** FAFSAs received by the federal processor before university established priority deadlines receive priority consideration. The FAFSA priority date is March 1 for all students (priority consideration as funds are available).

Selection procedures vary for these awards. All scholarships require admission to and enrollment in a degree program at Old Dominion University. For some scholarships, a portfolio, an audition, or participation in a specific program may be required. The additional steps, if required, are summarized following each scholarship description.

Students will receive written notification of any scholarship for which they have been selected. Most scholarships will be awarded in April through August of each year.

Awards for Entering Freshmen

The Old Dominion University Alumni Association (ODUAA) Legacy Scholarship Endowment was established to assist children of an Old Dominion University ("ODU") alumnus/ae. The recipient(s) must be a full-time undergraduate student in good academic standing. It is the intention of the ODUAA for the scholarship to be awarded to a freshman and follow the recipient during his/her time at ODU (up to four years).

The Nicholas Andrasz Academic and Social Service Endowed Scholarship was established by Nicholas Andrasz to assist an entering freshman who has graduated from a Virginia Beach high school. The recipient must have a minimum 3.25 grade point average, minimum 1000 combined SAT score and must have spent a considerable amount of non-paid volunteer time helping to make their community a better place. The recognized categories of non-paid volunteer time are: Hospital Volunteer, Public Safety, Mentoring/Tutoring, Shelters, and Elder Care. Students must provide reasonable documentation as proof of their public service. Preference is given to a student who has previously been awarded the Nicholas Andrasz Endowed Scholarship from Tidewater Community College.

The Edward N. Antoun, AH Environmental Endowed Scholarship in Engineering was established to assist a full-time undergraduate student intending to major in civil and environmental engineering. The recipient must attain a minimum high school GPA of 3.2 and be a U.S. Citizen or Permanent Resident.

The Beta Sigma Phi-Alice Brewer White Memorial Endowed Scholarship is made possible by an endowment established in 1985. This award assists an entering freshman who is from Southside Hampton Roads. Preference will be given to students with a 3.20 grade point average and Beta Sigma Phi affiliations, including mother, grandmother, or aunt. The student may also be a member of Beta Sigma Phi. Leadership ability and community involvement are factors in selection. This scholarship is renewable.

The James L. Bugg Scholarship was established in 1978 by the Old Dominion University Alumni Association to honor this former University president. The award is made to an alumnus' son or daughter who has participated in extracurricular activities and community service and displays top academic achievement.

The CHROME Scholarships are funded by the University and awarded to entering freshmen who have participated in a certified high school CHROME club. Recipients must intend to pursue a degree in engineering, mathematics, science, technology, or a related field.

The Claire Virginia Dabel Memorial Scholarship is funded through an endowment established by Dr. Virginia B. Newbern to assist one or more freshmen students majoring in the field of biology.

The Peter G. Decker Endowed Scholarship for Residents of Lambert's Point is funded by an endowment established by Peter G. Decker and the estate of Celia Stern. This scholarship is awarded to students who have recently graduated from a local high school who reside in Lambert's Point at the time of application to Old Dominion University. Recipients must maintain a GPA of 2.5 and demonstrate financial need.

The Haislip-Rorrer Presidential Scholars Endowment was established by Wallace Haislip and Linda Rorrer to assist one or more full-time entering freshmen with outstanding academic credentials. Recipients will be chosen according to the University's criteria for Presidential Scholars candidacy.

***The E. L. Hamm Endowed Scholarship** was established by Edward L. Hamm, Jr. to assist a student who is residing in or has resided in Norfolk Redevelopment & Housing Authority properties. The recipient must be a full-time undergraduate student who demonstrates financial need. (FAFSA)

***The Forrest H. Harrell, Jr. Scholarship Endowment** was established to assist an incoming freshman student who demonstrates financial need and maintains a minimum grade point average of 3.0. (FAFSA)

The Ellen P. Harvey Scholarship Endowment was established by Old Dominion University to assist one or more full-time entering freshmen with outstanding academic merit credentials. Preference is given to resident(s) of Lambert's Point, Highland Park, or Park Place neighborhoods surrounding Old Dominion University, or a graduate of the Lambert's Point Summer program sponsored by the University.

***The James W. Ingersoll Memorial Scholarships** are made possible by an endowment given by the Ingersoll family, their friends and the citizens of Portsmouth, Virginia. These awards assist entering freshmen who demonstrate financial need and are graduates of Churchland High School in Portsmouth. (FAFSA)

***The Ron Jet Jones Memorial Scholarship in English** was established by Barbara Ann Jones to assist one or more full-time entering freshmen with an intended English major and a high school grade point average of 3.75. Student (s) must have held leadership positions in clubs or organizations in high school and must demonstrate financial need. (FAFSA)

The James V. and Donna L. Koch Endowed Scholarship was established by the Old Dominion University Educational Foundation in 2001 to honor this former University president and his wife. This four-year scholarship assists an incoming freshman with a minimum 1300 SAT score, 3.80 cumulative grade point average and extracurricular involvement. The scholarship can be renewed if the student maintains eligibility criteria.

The Edgar and Kathleen Kovner Scholarships for outstanding high school scholars are awarded each year to entering freshmen in the Frank Batten College of Engineering and Technology. The awards are based on performance in a high school curriculum that emphasized mathematics and the sciences. These scholarships are renewable for three years for recipients who remain enrolled full time in the Frank Batten College of Engineering and Technology and maintain a 3.00 grade point average.

The A. D. Morgan Scholarships are supported by a trust established in 1968 by Dr. A.D. Morgan and Annye Lewis Morgan. The scholarships assist Old Dominion University students who are U.S. citizens and residents of the greater Norfolk area. Preference is given to the members of the Freemason Street Baptist Church of Norfolk. Recipients are selected by the trustees of the Scholarship Fund and coordinated through the Old Dominion University Office of Student Financial Aid.

***The Patricia Ann Vaughan Myers '57 Memorial Scholarship** was established by Hugh L. Vaughan in honor of his daughter, Patricia Ann. It assists an entering freshman who is a Virginia resident and a resident of the Tidewater area. The student must demonstrate financial need, academic merit and be a full-time student under the age of 24 who lives at home. (FAFSA)

***The Newport News Shipbuilding Engineering Endowment** was established to assist undergraduate students majoring in engineering or engineering technology who hold a minimum 2.5 cumulative grade point average. The recipient may also be an undergraduate student enrolled as engineering intended in the Engineering Fundamentals Division with a minimum 3.0 cumulative high school grade point average. Preference will be given to students who are Pell eligible. (FAFSA)

Norfolk School Board Scholarships are funded by the University and awarded to ten entering freshmen graduates of Norfolk public or private schools. Students are selected based on their high school academic achievement. The award equals full in-state tuition (up to 15 credit hours per semester). Recipients are selected by the Director of Guidance of the Norfolk Public School system, in conjunction with the high school guidance counselors. Recipients may qualify for a one-year renewal of the award by maintaining a 2.50 grade point average and completing 24 academic units at the end of the first academic year.

Norfolk Southern Alumni Endowed Scholarships was established to assist an entering freshman in the College of Engineering and Technology or the Strome College of Business and Public Administration who rank in

the top 10% of the student's high school class, demonstrate the potential for leadership, and has a minimum combined Scholastic Aptitude Test (SAT) score of 1200.

***The ODU CDC Scholarship Endowment** was established to assist a student who is a resident of Lambert's Point, Highland Park or Park Place neighborhoods surrounding Old Dominion University. The recipient must demonstrate financial need, and preference will be given to an incoming freshman student. (FAFSA)

The Pace Collaborative Endowed Scholarship in Engineering has been established by PACE Collaborative PC to assist an incoming freshman intending to major in engineering. The student must be a full-time student, have attained a minimum high school GPA of 3.0, and must be a U.S. citizen or Permanent Resident. The scholarship may be renewed up to three academic years if the student maintains a 2.5 GPA.

The Parents' Association of Old Dominion University Freshman Scholarship is funded by an endowment by the organization to assist an outstanding entering freshman who has demonstrated academic merit and leadership skills.

The Parents' Association of Old Dominion University Freshman '90 Scholarship is funded by an endowment by the organization to assist an outstanding entering freshman who has demonstrated academic merit and leadership skills.

***Regional Scholarship** awards are provided by the University in the amount of \$1,200 to entering freshmen from Accomack County, Chesapeake, Franklin, Hampton, Isle of Wight, Newport News, Northampton County, Portsmouth, Southampton County, Suffolk, Surry, and Virginia Beach public high schools. Students must demonstrate financial need. Students may qualify for a one-year renewal of the award if they maintain a 2.50 grade point average, complete 24 academic units for the year and demonstrate financial need. (FAFSA)

***The Rafael Torrech-Tecnico Endowed Scholarship in Engineering** was established by Tecnico Corporation in honor of Rafael Torrech III to assist entering freshmen from a local Hampton Roads high school with preference to children of parents who are employed at Tecnico Corporation. Students must be full-time, intending to major in the Batten College of Engineering and Technology, maintain a cumulative GPA of 3.0 or better, and demonstrate financial need. (FAFSA)

Old Dominion University Dominion Scholarships for Entering Freshmen

The Theodore F. and Constance C. Constant Dominion Scholarship was established by Theodore F. and Constance C. Constant to assist incoming freshmen who present a minimum 3.8 cumulative grade point average, rank in the top 10 percent of their graduating class, and score 1280 or better on the Scholastic Assessment Test. The recipient must be a Virginia resident, with preference given to Hampton Roads residents.

The Mary T. Cooper and Dudley Cooper Dominion Scholarship was established by Mary T. Cooper and Dudley Cooper to assist incoming freshmen who present a minimum 3.8 cumulative grade point average, rank in the top 10 percent of their graduating class, and score 1280 or better on the Scholastic Assessment Test. The recipient must also be a United States citizen.

The Clifford and Ann Cutchins, III Dominion Scholarship was established by Mr. and Mrs. Clifford A. Cutchins, III to assist incoming freshmen who present a minimum 3.8 cumulative grade point average, rank in the top 10 percent of their graduating class, and score 1280 or better on the Scholastic Assessment Test.

The Robert L. and Geraldine E. Fodrey Alumni Association Memorial Scholarship Endowment was established by the Old Dominion University Alumni Association to assist incoming freshmen who present a minimum 3.8 cumulative grade point average, rank in the top 10 percent of their graduating class, and score 1280 or better on the Scholastic Assessment Test.

The Harry H. and Marie Mansbach Dominion Scholarship was established by Harry H. and Marie Mansbach to assist incoming freshmen who present a minimum 3.8 cumulative grade point average, rank in the top 10 percent of their graduating class, and score 1280 or better on the Scholastic Assessment Test.

The Joseph M. Marchello Dominion Scholars Endowment was established by the Old Dominion University Alumni Association to assist incoming freshmen who present a minimum 3.8 cumulative grade point average, rank in the top 10 percent of their graduating class, and score 1280 or better on the Scholastic Assessment Test.

The Clark-Nexsen Dominion Scholarship in Engineering was established by Clark-Nexsen, PC, Architecture & Engineering, and the ODU alumni employees of Clark-Nexsen, PC to assist an incoming freshman who is a resident of Virginia, ranks in the top 10% of high school class, has attained a minimum combined Scholastic Assessment Test (SAT) score of 1200, and demonstrates potential for leadership.

The Sam H., Willie Mae, and Herbert L. Sebrein Dominion Scholars Memorial Endowment was established by Mr. Sam H. Sebrein, Sr. and Mrs. Lucille Sebrein to assist incoming freshmen who present a minimum 3.8 cumulative grade point average, rank in the top 10 percent of their graduating class, and score 1280 or better on the Scholastic Assessment Test.

The William B. Spong, Jr., Dominion Scholar Endowment was established by the Old Dominion University Alumni Association to assist incoming freshmen who present a minimum 3.8 cumulative grade point average, rank in the top 10 percent of their graduating class, and score 1280 or better on the Scholastic Assessment Test.

The College of Arts and Letters

The H. Lee Addison, III Scholarship in History was established to assist a full-time undergraduate or graduate student majoring in history who has a minimum GPA of 3.0.

***The Herbert Altschul Memorial Scholarship** in Humanities is made possible by an endowment given by the family of the late Herbert Altschul, a Norfolk businessman and former owner of Altschul's Department Store. This award assists juniors who demonstrate financial need, are U.S. citizens and are majoring in the Humanities. (FAFSA)

***The Nora Barnes Endowed Scholarship in Political Science** was established to help assist a full-time student majoring in political science. The recipient of this scholarship must have at least a 2.5 grade point average and demonstrate financial need. (FAFSA)

***The Bruce T. and Sarah Bishop Endowed Scholarship** was established to assist a full-time student in the College of Arts and Letters who has a cumulative GPA of 3.0 or better, demonstrates financial need, and demonstrates evidence of involvement in student activities. (FAFSA)

***The Linda H. and Edward Bradley Endowed Scholarship** was established to assist an undergraduate student in the College of Arts and Letters with a minimum GPA of 3.0 who is eligible for the Federal Pell grant. (FAFSA)

The Eliot S. Breneiser Memorial Scholarship was established to assist a full-time music major in either the piano performance program or the music education program with a concentration in piano. Information concerning audition requirements is available from the Music Department. (AUDITION, PARTICIPATION) (757) 683-4061

***The Martha Brown Endowed Scholarship** is made possible by the friends of Martha Brown. It is awarded to assist a full- or part-time student in the College of Arts and Letters. The recipient must be a sophomore or junior and maintain a minimum cumulative grade point average of 3.0 pursuing a minor in African American Studies. The student must also demonstrate financial need. (FAFSA)

***The Dr. James V. D. Card Scholarship Fund** was established to assist an undergraduate or graduate student who is majoring in English. The recipient must demonstrate financial need. (FAFSA)

The Claire Cucchiari-Loring Memorial Scholarship was established by the Cucchiari and Loring families in honor of Claire Cucchiari-Loring. A scholarship is to be awarded annually to one or more full- or part-time musically talented students to be chosen by the Director of the Jazz Program. The recipient must be an undergraduate with a major in performance or voice. Preferred criteria include membership in the ODU Jazz Choir, membership in the ODU Jazz Band, and membership in the ODU Madrigal Singers.

The College of Arts and Letters General Scholarship was established to assist a full-time student in the College of Arts and Letters.

***The Dance Endowed Scholarship** was established to assist a full-time undergraduate or graduate student(s) studying in the College of Arts and Letters who has a minimum grade point average of 2.75. Preference will be given to student(s) pursuing a degree in dance.

The Marie A. Dornhecker-French Language Endowed Scholarship is funded by the Marie A. Dornhecker Charitable Trust and was established in 1998. The recipient must be a full-time student living in the Hampton Roads area of Virginia and must be a French language major in his or her junior year of study. The scholarship is to be based primarily on academic merit.

***The Drewry Family Endowed Scholarship** was established in 2004 by William B. Drewry to be given to a declared undergraduate majoring in the College of Arts and Letters. The recipient must be academically average with a grade point average between 2.8 and 3.0. Preference will be given to a student with financial aid. (FAFSA)

The Lorraine '78 '83 and Dr. H. William Fink '34 Art Scholarship in Honor of Ken Daley was established to assist an incoming full-time graduate student in the MFA program. If there is no eligible graduate candidate who is qualified, the scholarship will be awarded to a rising senior in the BFA program who has a declared concentration in Print and Photo Media. The scholarship is based on merit and review of student's portfolio.

***The Dr. Jennifer Fish Endowed Scholarship for Social Justice** was established to assist an undergraduate student with an intended major in Women's Studies or African American & African Studies within the College of Arts and Letters. Preference is given to first generation student and student(s) whose work or volunteer activities serve humanitarian causes or causes of social justice. The recipient must demonstrate financial need. (FAFSA)

The Anne Tunyogi & Ildiko (Togi) Foldvary Endowed Scholarship was established to assist full-time rising sophomore students up through graduate student classification majoring in either of the Departments of History, Political Science, Sociology or in the Graduate Program in International Studies of the College of Arts & Letters. The recipient must maintain a minimum grade point average of 3.25, and complete an essay submission of no more than two pages outlining the student's interest in studies primarily relating to the historical, political, economic, ethnic, religious, cultural, linguistic and demographic forces in Central Europe, with particular focus on those of contemporary and historic Hungary in the Carpathian Basin, its neighbors and their indigenous ethnic Hungarian communities, especially, whenever possible, those living in Rumania's western province of Transylvania.

***The Daniel E. Frank Memorial Scholarship Endowment for Blacksmithing and Metalwork** was established by Mrs. Rita A. Frank to assist a full-time student enrolled in the College of Arts and Letters and classified as a sophomore, junior or senior. Graduate students are also eligible for consideration. The recipient must be enrolled in studio art, blacksmithing, metalwork, jewelry-making or equivalent courses. The scholarship recipient must have a minimum grade point average of 3.0 or better and demonstrate financial need. (FAFSA)

***The Friends of Women's Studies Scholarship** is funded by an endowment in honor of Carolyn Rhodes to assist students majoring in women's studies. Two scholarships are awarded: one to a graduate student seeking an M.A. in humanities and one to an undergraduate student. Undergraduate students must demonstrate financial need and have a minimum grade point average of 3.00. Graduate students must have a

minimum grade point average of 3.50. Recipients can be full- or part-time students. (FAFSA)

The Eddie and Sandy Garcia Art Scholarship Endowment was established to assist a full-time undergraduate senior majoring in art and working on their final project as they are nearing graduation.

***The Ralph and Dorothy Gifuni Endowed Scholarship** was established by Karin Gifuni Zumwalt in honor of her parents. The recipient of this scholarship must be a "first generation" college student, must be enrolled full-time in the College of Arts and Letters majoring in English, must maintain a cumulative GPA of 3.0 or better, and must demonstrate financial need. (FAFSA)

***The Barbara M. Gorlinsky Memorial Fine Arts Scholarship** is made possible by an endowment the Gorlinsky family established in memory of their daughter. It is designed to assist students with financial need who are fine arts majors. Information concerning portfolio requirements is available from the Art Department. (PORTFOLIO, FAFSA) (757) 683-4047

The L. Cameron Gregory Scholarship in Journalism was established by Frank Batten, in memory of Mr. Gregory, to assist a full-time undergraduate student majoring in English with an emphasis in journalism. The recipient must also have a cumulative GPA of 3.0.

The Eva May Morris Gregory Dance Scholarship honors someone who emulates Ms. Gregory's approach and perspective regarding dance. The recipient must be a rising senior majoring in dance with a minimum 3.00 grade point average.

The Carl Helwig Undergraduate Humanities Scholarship Fund was established to assist an undergraduate student with a declared major in a course of study in the humanities.

***The Ralph Jackson and Clara Jackson Kingsbury Memorial Scholarship Endowment** was established by Dr. Ralph Harrison Jackson in memory of his sister and himself. This endowment is to assist one or more undergraduate junior, senior and graduate student(s) majoring in English who has a cumulative GPA of 3.0 or better and demonstrates financial need. (FAFSA)

The Lee and Bernard Jaffe Family Endowed Scholarship Fund acknowledges excellence in spoken and written communications using the English language. The recipient must be a rising junior or senior with a declared major in English or Communications with a 3.50 grade point average and recommended by the department chair and dean.

***The Linda Holmgren Jensen Endowed Scholarship for the Arts** was established by George and Linda Jensen to support a full-time sophomore student studying in the College of Arts and Letters. Student must be an art major, and preference is given to a student with financial need. (FAFSA)

The Jerome J. Kern Music Prize was made possible by an endowment from the estate of Jerome J. Kern to assist a student who has declared a major in music. The award is determined by the Department of Music and based on academic merit and musical talent.

The Jerome J. Kern Music Scholarship was established by William A. Goldback in memory of his uncle. The recipient must be an undergraduate student of exceptional musical ability who is or plans to be a music major. Information concerning audition requirements is available from the Music Department. (AUDITION, PARTICIPATION) (757) 683-4061

The Amanda Kinzer Scholarship in Dance was established to assist full-time undergraduate or graduate student(s) studying in the College of Arts & Letters. Preference will be given to a student(s) pursuing a degree in dance. The recipient must have a minimum grade point average of 2.75 for undergraduate students and 3.0 grade point average for graduate students.

The Ashley Elizabeth Lawson Memorial Scholarship for Spanish Language Study Abroad was established to assist a student in the College of Arts and Letters enrolled in the Spanish Language Study Abroad Program at Old Dominion University. The recipient(s) must be full-time or part-time, Undergraduate or Graduate student.

The Marilyn Marloff and John Luker Dance Endowed Scholarship was established to assist a full-time undergraduate or graduate student(s) studying in the College of Arts and Letters who has a minimum grade point average of 2.75. Preference will be given to student(s) pursuing a degree in dance.

The Marilyn Marloff Dance Scholarship was established to assist a full-time dance major with outstanding ability/potential in dance. The recipient can be a freshman, continuing, or transfer student. Freshman recipients must have a minimum high school grade point average of at least 2.0. Continuing student recipients must have a minimum grade point average of 3.0 in dance course work, and overall institutional grade point average of at least 2.0. Transfer recipients with no transfer dance hours must have a minimum transfer grade point average of 2.0.

***The Robert James Markland Memorial Scholarship Endowment for Criminal Justice** was established to assist undergraduate students who may be past or present members of the Norfolk Police Department or a Virginia Marine Resource Commission Officer. The recipient must demonstrate financial need. Secondary preference is given to a student in the College of Arts and Letters with a declared major in criminal justice with intention to pursue a career in law enforcement. (FAFSA)

The James J. McNally, Ph.D. and Mary Elinor McNally College of Arts & Letters Scholarship was established to assist student(s) with an intended or declared major in the College of Arts & Letters. The recipient will have been raised by a single mother, to be determined by the Director of Educational Accessibility in consultation with the Vice President and Associate Vice President of Student Engagement & Enrollment Services. The recipient must be in good academic standing and maintain a grade point average (GPA) of 3.0.

***The Deborah L. Miller Scholarship** was established to assist full-time undergraduate students from the College of Arts and Letters majoring in graphic design or fine arts. The scholar must maintain a grade point average of 3.0 and demonstrate financial need. (FAFSA)

***The Agnes Mobley- Wynne Memorial Scholarship** was established to assist full-time undergraduate students with a declared major or minor in Vocal Music and be registered for Applied Voice Lessons. Recipient must demonstrate financial need and have a minimum grade point average of 2.8 or higher with a preference of at least 3.0. (FAFSA)

***The Patrick Morgan Scholarship** was established to assist a student with a declared major in either history or political science. Recipient must demonstrate financial need as determined through the Office of Student Financial Aid. (FAFSA)

The Perry Morgan Fellowship in Creative Writing established in 2005 by Frank Batten and is awarded to two or more first year full-time graduate students enrolled in the creative writing program. Recipients must maintain a minimum 3.5 GPA.

***The Helen and Richard Parker Scholarship Endowment in Art History** was established by Helen and Richard Parker to assist one full-time undergraduate student majoring in art history. The scholarship recipient must demonstrate financial need and must have a minimum cumulative GPA of 3.0 or better. (FAFSA)

The James Harrison Parker Scholarship Fund was established by the Thistle Foundation to assist a student majoring in English with an emphasis in composition. The recipient must be a rising junior and have a minimum cumulative 3.00 grade point average.

The Karen A. Polonko Memorial Scholarship Endowment for Advocates of Children's Rights was established to assist a student with a declared major in sociology, with a concentration in social welfare. Preference is given to a student with a declared minor in the children's rights interdisciplinary minor. Preference is given to a student with membership in good standing in the student group "In Support of Children."

The Kathryn Killam Porter Endowed Scholarship was established to assist a full-time student(s) pursuing a degree in the College of Arts and

Letters. Recipient(s) must maintain a grade point average equivalent to that of the current merit scholarship standards.

***The James B. Reece Endowed Scholarship** was established by William D. Brewer to assist undergraduate students majoring in English with a minimum 3.0 grade point average. The undergraduate must submit an essay on a general topic, such as the student's reason for choosing to major in English. Scholarship recipients will be selected based upon need, scholarship, and character. (FAFSA and Essay submission required)

***The Harvey Ronald Saunders Memorial Endowed Scholarship** was established by Mr. and Mrs. Louis M. Saunders to assist an undergraduate or graduate student majoring in the arts/fine arts with an emphasis in painting or drawing. The recipient must have a 3.00 minimum grade point average, demonstrate financial need and be a citizen of either the United States or Israel. Information concerning portfolio requirements is available from the Art Department. (PORTFOLIO, FAFSA) (757) 683-4047

The Charles K. Sibley Art Scholarship is funded by an endowment made possible by contributions from the friends and patrons of the former Old Dominion University professor. Awards are to assist graduate or undergraduate students majoring in studio art or art history. Information concerning portfolio requirements is available from the Art Department. (PORTFOLIO) (757) 683-4047

The Schwetz Scholarship Fund of the Tidewater Jewish Foundation was established by Ruth F. Schwetz through a bequest in her will to provide a scholarship that will assist a student participating in Hillel at Old Dominion University or a student taking courses in the Jewish Studies major and/or minor.

The Andrew Basil Tuck Memorial Scholarship for Music Business/ Production was established to assist full-time undergraduate students enrolled in the College of Arts and Letters pursuing a Bachelor of Science degree in Interdisciplinary Studies with a major in music business/production. The recipient must be classified as a sophomore or above. Preference will be given to students from Roanoke County, Roanoke City, or City of Salem.

The Caroline Heath Tunstall-Elizabeth Calvert Page Dabney Scholarship is funded by an endowment contributed in honor of two former members of the Old Dominion University English Department. This scholarship is awarded to an upperclassman in the College of Arts and Letters who has obtained at least a 3.50 grade point average.

The Charles E. and Frieda O. Vogan Music Scholarship assists undergraduate music students. Information concerning audition requirements is available from the Music Department. (AUDITION, PARTICIPATION) (757) 683-4061

The Forrest P. and Edith R. White Endowed Scholarship Fund was established by Edith R. White to provide scholarships to students studying acting in the Old Dominion University Communication and Theatre Arts Department. (AUDITION)

***The George William and Jennette Whitehurst Scholarship** was established to assist a student majoring in history with a minimum GPA of 3.0 who has financial need. (FAFSA)

***The Charles Edgar Wilson Jr. Scholarship Endowment** was established to assist a full-time undergraduate student(s) with sophomore, junior, or senior standing, demonstrate financial need, have declared major in the College of Arts & Letters, and must be a graduate of Tallwood High School or Kempsville High School. (FAFSA)

***The Dennis J. Zeisler Endowed Scholarship for Instrumental (Band) Music Education** was established to provide undergraduate students majoring in Instrumental (Band) Music Education. Student(s) must demonstrate financial need. (FAFSA)

The Strome College of Business

The Accounting Alumni Scholarship was established in 1993 by the Old Dominion University Accounting Alumni. It is awarded to a student who has

completed a minimum of 60 semester hours majoring in accounting with a grade point average of 3.00 or above.

The Agarwal and Yochum Endowed Scholarship was established by Drs. Vinod Agarwal and Gilbert Yochum to assist an undergraduate student classified as being the best upper-division undergraduate economics major. Preference will be given to the student who is most financially disadvantaged.

***The Jeffrey W. Ainslie Endowed Scholarship in Real Estate** was established in 2006 by Jeffrey W. Ainslie to assist a full-time student in the real estate track in the Strome College of Business. The student must have a grade point average of 3.0 or higher and must demonstrate financial need. Preference will be given to the student with the highest GPA and demonstrating the greatest financial need. (FAFSA)

***The Bagwell-Jones Endowed Scholarship** was established by Dorothy M. Jones in memory of her parents. The recipient must be a rising senior in the Strome College of Business with the highest-grade point average of three prior years at Old Dominion, as well as demonstrate financial need. (FAFSA)

***The Broyles Family Endowed Scholarship** was established to assist a full-time undergraduate student(s) studying in the Strome College of Business. Preference will be given to a junior or senior student(s) pursuing a degree in finance. The recipient must have a minimum grade point average of 3.2, and must demonstrate financial need. (FAFSA)

***The Stuart and Bet Cake Endowed Business Scholarship** was established to assist full- or part-time student(s) in the Strome College of Business. Student(s) must demonstrate financial need and maintain a 3.0 grade point average. (FAFSA)

***The Chesapeake Bay Wine Classic Foundation Scholarship Endowment** was established to assist student(s) that have graduated from a secondary high school located in the Hampton Roads region. The scholarship will be awarded to one or more full-time students who are declared business majors. The student should have a focus on real-estate related business and must demonstrate financial need. (FAFSA)

***The Lauren L. Conner '79 Scholarship Endowment** was established to assist full-time undergraduate students enrolled in the BSBA degree program. The scholar(s) must have completed a minimum of 30 semester hours, must be intended or declared major or minor in real estate, be in good academic standing, and cannot have any violations of the University's honor code. Preference is given to student(s) with demonstrate financial need. (FAFSA)

***The William R. Conrad Scholarship** was established to assist a full-time undergraduate student in the Strome College of Business who has a cumulative GPA of 3.0 or better. The student must demonstrate financial need. (FAFSA)

The Constant Dominion Business Scholarship was established as an endowment by Mr. and Mrs. Theodore F. Constant. The scholars selected will be among the best students selected to enter the University's Strome College of Business. The award will be given to at least two Virginia residents each year.

The Robert O. Copeland Endowed Scholarship in Real Estate was established to assist a junior or senior student in the Strome College of Business. The recipient must be a declared major in financial management with an emphasis in real estate and must have a grade point average of 3.0.

***The Larry J. and Elizabeth J. Creef Endowed Scholarship** was established as an endowment to provide a scholarship to a student with an interest in pursuing a career with the Federal Bureau of Investigation (FBI), the CIA, the Department of Homeland Security or other security agency of the U.S. government. The recipient must be a Virginia resident and a U.S. citizen, demonstrate financial need, be a full-time student enrolled in the Strome College of Business and have declared a major in accounting. (FAFSA)

***The Kim and Keith Curtis Endowed Scholarship** was established to assist a student in the Strome College of Business. The recipient must

demonstrate financial need, involvement in campus activities, and possess a GPA of 3.0. (FAFSA)

***The Mark Davis/Atlantic Bay Mortgage Group Memorial Endowed Scholarship in Business** was established by the Atlantic Bay Mortgage Group to assist a full-time rising junior or senior student in the Strome College of Business. The recipient must have a declared major in finance, real estate track, maintain a cumulative grade point average of 3.0 or better, and demonstrate financial need. (FAFSA)

The Dehority Accounting Alumni Scholarship was established to assist a student who has completed a minimum of 60 semester hours majoring in accounting with a grade point average of 3.00 or above.

***The Douglas G. and Marianne M. Dickerson Endowed Scholarship in Business** was established by the Douglas G. Dickerson and Marianne M. Dickerson Foundation. The scholarship is awarded to a full-time or part-time undergraduate student who has a declared major in the Strome College of Business and demonstrates financial need with a preference given to students ineligible for the Pell grant. The recipient must have a cumulative GPA of 2.5 to 3.0. The scholarship is renewable. (FAFSA)

The John F. Estes III Endowed Accounting Scholarship was established to assist a student in good academic standing in the Strome College of Business at the sophomore level or above who has declared a major in accounting and has a history of dyslexia. The scholar should exhibit a strong work ethic and ambition as evidenced by any of the following: extracurricular and/or successful business activities, entrepreneurship, or a written essay in support of the above criteria.

***The David W. and Rebecca D. Faeder Scholarship** was established by David W. Faeder to assist a full-time undergraduate student in the Strome College of Business. The student must demonstrate evidence of involvement in student activities, have a cumulative GPA of 3.0 or better and demonstrate financial need. (FAFSA)

***The Hannah Grace FitzGerald Memorial Scholarship** was established by Lawrence J. (Larry) FitzGerald to assist a full-time undergraduate student in the Strome College of Business. Preference is given to a student participating in the real estate program. The student must demonstrate financial need. (FAFSA)

***The Gerold Family Endowed Scholarship** was established to assist a full-time or part-time student(s) with a declared or intended major in accounting, finance, or marketing. The recipient must have a minimum grade point average of 3.0, and must demonstrate financial need. (FAFSA)

The Joan Gifford Scholarship in Real Estate was established to assist a full-time undergraduate in the Strome College of Business with a real estate major, who has a cumulative GPA of 3.0 or higher.

***The Gilmore Family Endowed Scholarship in Business** was established to assist full-time students enrolled or intending to enroll in the Strome College of Business. Consideration is given to Gary A. Gilmore's accounting background as a fundamental tool in his business success so that other considerations being equal, a prospective accounting major might have preference. The recipient must demonstrate financial need, and preference is given to students with at least a 2.8 grade point average. (FAFSA)

The Hampton Roads REALTORS Foundation Annual Scholarship was established to assist students enrolled in the Strome College of Business with a declared major in Real Estate. Recipient must be a U.S. citizen and a resident of the Hampton Roads area in Virginia. Student must have a grade point average of 3.0 or better.

The Richard and Melanie Hanson Endowed Scholarship in Accounting was established to assist a student(s) in the Strome College of Business with a declared major in accounting.

The Heymann Family Endowed Scholarship in Accounting was established to assist a full-time rising senior in the Strome College of Business. The recipient must have a declared major in accounting, a cumulative GPA of 2.5 or higher, and must be a Virginia resident.

***The Hunter A. Hogan Scholarship** is funded by an endowment established by Robert M. and Eleanor Stanton and Goodman Segar Hogan Inc. on the occasion of Mr. Hogan's retirement as chair of the firm and in recognition of his leadership in the real estate industry. This scholarship is awarded to one or more students who have demonstrated financial need and are enrolled in the real estate program in the Strome College of Business. (FAFSA)

The Jesse and Sue Hughes International Accounting Scholarship was established to assist a full-time international student in the Strome College of Business who is a declared major in accounting with a focus on public sector financial management. Preference is given to a student at the graduate level.

***The Janet L. Hume Scholarship** is funded by an endowment given by Julien Robert Hume III. This scholarship is provided to assist a junior with a declared major in the Strome College of Business who has demonstrated academic merit. Preference is given to a student at least 30 years old who has demonstrated financial need. (FAFSA)

***The Debra V. Jones Endowed Scholarship in Business** was established to assist a full-time, undergraduate student(s) with a declared major in information systems and technology in the Strome College of Business. The recipient must demonstrate financial need as determined by the Office of Student Financial Aid. Preference is given to student(s) from Northumberland County or Lancaster County on the Northern Neck of Virginia. (FAFSA)

***The Dorothy M. Jones Memorial Scholarship** has been given anonymously by a former student to honor Professor Jones, associate professor emerita in the Strome College of Business. This scholarship is awarded to a junior who has declared a major in the Strome College of Business. The student must be a resident of Eastern Virginia, enrolled full time, in good academic standing and demonstrate financial need. Preference is given to graduates of Matthews High School. (FAFSA)

***The Toykea S. Jones Endowed Scholarship in Supply Chain Management** was established by Toykea S. Jones to assist a full-time sophomore, junior or senior student majoring in maritime and supply chain management. The recipient must demonstrate financial need and have a minimum cumulative grade point average of 3.0 (FAFSA)

The Lori E. Kaplan Real Estate Endowed Scholarship was established in memory and honor of the late Lori E. Kaplan by Harvey Lindsay, Janet Abraham and Roslyn Kaplan and funded by an endowment given by Harvey Lindsay Commercial Real Estate, friends and family of Lori E. Kaplan and the proceeds of the annual Lori Kaplan Memorial Golf Tournament. Preference is given to students with a declared major in financial management or real estate, a minimum 2.75 grade point average, demonstrated interest in the profession of real estate, demonstrated commitment to the community and those currently employed full or part time.

***The Kilmer Accountancy Scholarship Endowment** was established to assist full-time undergraduate or graduate student(s) with a declared major in accounting. The recipient must demonstrate financial need. (FAFSA)

***The Pamela C. Kirk '88 and A. Russell Kirk Business Study Abroad Endowment** was established to assist full-time undergraduate and graduate students enrolled in the Strome College of Business to participate in Strome College of Business faculty-led study abroad experiences or an ODU-affiliated study abroad program approved by a committee if an ODU faculty-led program is not offered. Preference will be given to full-time undergraduate or graduate students that demonstrate financial need. (FAFSA)

***The Larry and Colgate Kittelberger Endowed Scholarship in Business** was established by Larry and Colgate Kittelberger to assist a full-time undergraduate student in the Strome College of Business. The recipient must demonstrate financial need. (FAFSA)

The Barry M. Kornblau Real Estate Endowed Scholarship was established by Barry M. Kornblau for a student who is a junior or senior in the Strome College of Business. A major in financial management with an emphasis in real estate and a grade point average of 3.25 are required.

***The Legacy Faculty Endowed Scholarship in Management** was established to assist full-time undergraduate students enrolled in the Strome College of Business with a declared major in management. This scholarship is merit-based with preference given to a student who has completed at least 75 undergraduate credit hours with demonstrated financial need. (FAFSA)

The Harvey L. Lindsay Jr. Real Estate Scholarship was established to assist student(s) who declared or have an intended major in finance with a real estate major, demonstrate financial need, and will be enrolled full- or part-time. The recipient must have a minimum grade point average of 3.0. Preference is given to Virginia residents and to student(s) who are engaged in volunteer service with the community or campus community.

Lobeck-Taylor Scholars was established to assist first-year student(s) enrolled in the Strome College of Business. Recipients must maintain a grade point average of 3.0 and express interest in entrepreneurial studies or starting their own business.

***The Gregory Lumsden Endowed Scholarship** was established by Gregory Lumsden in 2005 to assist an undergraduate student in the Strome College of Business working towards a degree in business (BSBA or BA in economics). The scholarship recipient must have a minimum cumulative 3.0 grade point average and must demonstrate evidence of involvement in student activities. Recipient must demonstrate financial need. (FAFSA)

The Prabhav Maniyar Endowed Scholarship in Economics was established to assist an undergraduate student(s) with a declared major in Economics. The recipient must be enrolled as a full-time student, maintain a cumulative GPA of 3.0 or better, and the scholarship is renewable so long as the recipient continues to meet the preferred criteria mentioned above.

***The McLaughlin Family Endowed Scholarship** was established in 2004 by Dennis McLaughlin and The Atlantic Group, Inc. to assist an undergraduate in the Strome College of Business who is a declared management major. The student must have a grade point average of 3.0 or higher, and the selection will be based on demonstrated financial need. (FAFSA)

***The Jean S. and Thomas W. Martin Jr. Endowed Accounting Scholarship** was established to assist a junior or senior undergraduate student in the Strome College of Business. The recipient must be majoring in accounting and must have a GPA of 3.3 or better. Preference is given to a Virginia resident, those who have served in the military and honorably discharged, and a student who demonstrates financial need. (FAFSA)

***The Michael & Karen May Endowed Scholarship in Accounting** was established to assist a student who demonstrates financial need and is intending to major in accounting or currently majoring in accounting. The recipient must be a graduate from one of the following schools: Booker T. Washington HS (Norfolk, VA), Granby HS (Norfolk, VA), IC Norcom HS (Portsmouth, VA), Woodrow Wilson HS (Portsmouth, VA), Achievable Dream HS (Newport News, VA), Heritage HS (Newport News, VA), Gretna HS (Gretna, VA), Bluestone HS (Skipwith, VA), Brunswick HS (Lawrenceville, VA), Central HS (Victoria, VA), Eastern Montgomery HS (Elliston, VA), Honaker HS (Honaker, VA). Preference will be given to a student who comes from a statistically underrepresented background. (FAFSA)

***The Hampton Roads Society of Financial Service Professionals Jane Martin Scholarship** was established to assist a junior or senior majoring in risk and insurance in the Strome College of Business. The student must be in good academic standing with the University. Preference is given to students who demonstrate a high-grade point average, extracurricular activities and financial need. (FAFSA)

***The Daryl and Marion Mitchell Family Endowed Scholarship in Business** was established to assist a student pursuing a degree in the Strome College of Business. Recipient must have demonstrated financial need as determined by the Office of Student Financial Aid. (FAFSA)

***The Robert W. Mitchell Endowed Scholarship in Real Estate** was established to assist a full-time student enrolled in the finance/real estate major in the Strome College of Business. The recipient must demonstrate

financial need and maintain a minimum cumulative grade point average of 2.8. (FAFSA)

***The Laura and William Morrison Endowed Scholarship in Business** was established to assist student(s) with a declared or intended major within the Strome College of Business. Student(s) must be enrolled full time, demonstrate financial need, and have a minimum grade point average of 3.0. Preference is given to a student(s) engaged in volunteer service to the community or campus community. (FAFSA)

***Christine C. Pantoya Endowed Scholarship** was established to assist a student(s) with a declared or intended major within the Strome College of Business. The recipient must have a minimum grade point average of 3.0 and demonstrate financial need. Preference is given to a student(s) who is engaged in volunteer service to the community or the campus community. (FAFSA)

***The Tevangudi P. Radhakrishnan Endowed Scholarship** was established by Rajesh Radhakrishnan to assist a full-time international student in the Strome College of Business. The scholarship may be awarded to the student with the highest GPA and demonstrating the greatest financial need. (FAFSA)

The Charles H. and Mary Kathryn Rotert Scholarship was funded by an endowment established by Mr. and Mrs. Charles H. Rotert Jr. This scholarship is awarded to a deserving student in the Strome College of Business.

The Strome College of Business General Scholarship was established to assist a full-time student in the Strome College of Business.

The Strome College of Business Endowed Study Abroad Scholarship was established to assist a full-time student in the Strome College of Business. Study abroad opportunity must be ODU sponsored, and the recipient must have a minimum 3.0 grade point average.

***The Scott and Lisa Thatcher Scholarship Endowment** was established to assist a full-time undergraduate or graduate student with a declared major in finance who demonstrates financial need. (FAFSA)

***Robert W. Thompson Endowed Accounting Scholarship** was established to assist students enrolled in the Strome College of Business with a declared accounting major or preference can be given to a student who intends to major in accounting. The recipient must have a grade point average of 3.0 and must demonstrate financial need. (FAFSA)

The Tidewater Association of Service Contractors (TASC) Scholarship was established to assist student(s) from the Strome College of Business degree program. Student shall be enrolled in a full-time undergraduate/graduate program, or a full/part-time Masters Verification in Government Contracting program or any other program supporting government contracting within the continuing Education Departments, demonstrate financial need, and must be in good academic standing. (FAFSA)

***The Shawn I. Tureman Scholarship Endowment** was established to assist full-time undergraduate or graduate students in the Strome College of Business who demonstrate financial need. (FAFSA)

***The Joseph and Donna Vestal Endowed Scholarship** was established by Joseph Vestal to assist a full-time student in the Strome College of Business who has a GPA of 2.5 or higher and demonstrates financial need. The recipient must also be involved in campus student activities in a leadership program. (FAFSA)

The Virginia Maritime Association/Carter T. Gunn Scholarship was established to assist undergraduate students enrolled in the Strome College of Business majoring in Maritime and Supply Chain Management and/or an MBA student pursuing a concentration in Maritime & Port Management and demonstrating financial need. (FAFSA)

The Vispo-Torgesen Accounting Endowed Scholarship for Upperclassmen was established to assist full-time junior or senior students. Preference is given to students who intend to join or are members of the Managerial Auditing and Accounting Club (MAAC) and/or to those who have been inducted into the National Honor Society for accounting students,

Beta Alpha Psi. The recipient(s) must exhibit extracurricular service outside of accounting activities such as part-time employment, an internship, or volunteer work. The recipient(s) must maintain a grade point average of 3.0.

The Vispo-Torgesen Marketing Scholarship for Upperclassmen was established by John R. Vispo '72 and Carol T. Vispo '75, graduates of the Strome College of Business with concentrations in marketing management, to establish an endowed scholarship, named in honor of their families. The scholarship recipients must be full-time students, at the junior or senior level, in the Strome College of Business with a major in marketing.

A strong preference is given to students who intend to join, or are members of, the University's student chapter of The American Marketing Association. Students must maintain a grade point average of 3.0 and exhibit extracurricular service outside of marketing activities such as part-time employment, an internship, or volunteer work.

***The Fred Whyte-STIHL Business Scholarship Endowment** was established to assist full-time undergraduate student(s) enrolled in the Strome College of Business. The recipient must be a junior or senior student, have a minimum grade point average of 3.0, and must demonstrate financial need. Student(s) are encouraged to participate in an internship with STIHL Inc., or its successor. (FAFSA)

***The Rolf Williams Memorial Endowed Scholarship** was established by the Propeller Club of the United States, Port of Norfolk to assist a full-time undergraduate or full-time graduate student in the Strome College of Business. The student must be a rising senior with a declared major in maritime and supply chain management or a graduate student in the Master of Business Administration program with a concentration in maritime, ports, and logistics management. Preference will be given to the student with greatest financial need and at least a minimum cumulative GPA of 3.0. (FAFSA)

Anne D. Wood Endowed Scholarship Fund was established by Richard B. Thurmond in 2001 to assist an undergraduate student enrolled in the real estate major in the Strome College of Business. The recipient must have a minimum grade point average of 2.50.

The Darden College of Education and Professional Studies

The Sarah E. Armstrong Scholarship Endowment was established in 2002 in memory of the donor, Sarah E. Armstrong. The recipient must be a full-time student who has been accepted into the Darden College of Education and Professional Studies and must have an overall cumulative 3.2 grade point average.

The Linda Zydron Bamforth Scholarship in Early Childhood Education was established to assist a student(s) enrolled in the Early Childhood Program of the Darden College of Education. The recipient(s) must be a full-time or part-time student, has a minimum GPA of at least 3.5, and demonstrate a commitment to young children and the profession as evidenced by their performance in related course work.

The Dana Burnett Endowed Scholarship for Emerging Leaders in Higher Education was established to assist admitted students in the Darden College of Education enrolled in the Education Foundations and Leadership program interested in pursuing careers in higher education.

***The Coca-Cola Scholars Endowed Scholarship Fund** was established by the Coca-Cola Foundation to assist a student enrolled in a financial aid-eligible program leading to teacher certification, licensure, and/or enhancement. Consideration will be given to all students studying via Digital Learning who have a minimum of 58 credit hours with a 3.00 cumulative grade point average. The recipient must also demonstrate financial need. (FAFSA, Essay))

The Costulis Family Scholarship was established to assist full-time undergraduate students with a declared major in mechanical engineering or an approved teacher education program at Old Dominion University. The recipient must be a graduate of Poquoson High School, Maury High School, or Indian River High School, and must maintain a minimum grade point average of 3.3.

***The James and Patricia Cross Endowed Scholarship** was established to assist full-time undergraduate student(s) enrolled in the Darden College of Education and Professional Studies. The recipient must have a minimum grade point average of 3.0 and must demonstrate financial need and merit as determined by the Office of Student Financial Aid. (FAFSA)

***The Robert B. Cunningham Endowed Scholarship** was established by Robert B. Cunningham to assist a student enrolled in the Darden College of Education and Professional Studies enrolled as a full-time student. The student must demonstrate financial need. (FAFSA)

The Darden College of Education and Professional Studies General Scholarship was established to assist a full-time student in the Darden College of Education and Professional Studies.

***The Lorraine Buser Halsch '80 Memorial Scholarship Fund in Special Education** was established by Paul Halsch in memory of his late wife, Lorraine Buser Halsch, an Old Dominion University alumnus who majored in special education. The recipient of this scholarship award must be a junior or senior with a declared major in special education, must have a grade point average of 3.0 or higher, and must demonstrate financial need. (FAFSA)

***The Dr. Elizabeth Dubovsky & Col. Thomas Kaugher Jr. Endowed Scholarship** was established to assist a Junior or Senior student in the Darden College of Education & Professional Studies attending classes at the Norfolk Campus. Recipient(s) must demonstrate financial need and maintain a 3.0 GPA or higher. (FAFSA)

The Higginbotham Endowed Scholarship Fund was established by Hal B. Higginbotham to assist a rising junior or senior in teacher education in the Darden College of Education and Professional Studies. The recipient must be a full-time student, child or grandchild of an ODU graduate, and must have a minimum grade point average of 3.0.

***The Ejner Emil "Karl" Karlsen Scholarship for Future Teachers** was established to assist student(s) seeking a degree in teaching education and/or licensure and fully admitted into a teacher education program. The student must be a Virginia resident qualifying for in-state tuition, must demonstrate financial need, and may be enrolled at full- or part-time status. (FAFSA)

***The Jan P. Lowrance '74 Scholarship in Human Movement** was established to assist full-time students who have declared a major in the human movement sciences program within the Darden College of Education and Professional Studies. The recipient must maintain a 3.0 grade point average and demonstrate financial need. (FAFSA)

The Dr. Helen Moore Scholarship Endowment was established to assist full-time undergraduate student(s) in the Darden College of Education and Professional Studies.

The Donald J. Musacchio Scholarship Endowment was established to assist students in the Darden College of Education and Professional Studies. The recipient must be in good academic standing and must have completed at least 24 credit hours. The recipient must submit a one-page personal statement and three letters of recommendation not to exceed two letters from ODU faculty or professors and one letter from a personal reference. The selection of the award will be determined by the Dean of the Darden College of Education and Professional Studies.

***The Nybakken-Graves Endowed Scholarship** was established to assist a full-time undergraduate student whose parent or legal guardian is a graduate of the Darden College of Education and who is licensed or a certified professional educator (teacher, school counselor, principal, speech pathologist or other professional educator). Student must be enrolled in the Darden College of Education and Professional Studies, demonstrate financial need, and have a minimum grade point average of 3.5. (FAFSA)

***The Hugo A. Owens Jr. and Rosa R. Owens Scholarship in Memory of Dr. and Mrs. Hugo A. Owens, Sr.** was established to assist a student in the Darden College of Education & Professional Studies demonstrating financial need. (FAFSA)

***The Annabel & Hal Sacks Family Endowed Scholarship** was established to assist a full-time student in the Darden College of Education and

Professional Studies who has met the requirements to enter into the teacher candidate internship at the graduate or undergraduate level. The student must demonstrate financial need and must be taking classes on campus. (FAFSA)

***The Peggy Ashford Scott Memorial Endowed Scholarship** was established by Simpson Ashford to assist a full-time undergraduate student majoring in elementary education. The student must have a grade point average of 3.0 or higher and a demonstrated financial need. (FAFSA)

The J. Frank Sellew Memorial Scholarship in Education was established by the friends and family of Mr. Sellew. The recipient must have a GPA of 3.0 and major in any teacher education program. The recipient must also meet all teacher education admission standards established by their program of study and the Darden College of Education and Professional Studies.

***The Strong Scholars Program Scholarship** was established by the Hattie M. Strong Foundation to assist students in their final year of study in an approved teacher education program. This scholarship will be awarded to undergraduate students who have exhibited outstanding success and enthusiasm in field experiences prior to the final year of the program OR graduate students whose life experiences prior to enrollment reveal the same traits. Students must have achieved a minimum GPA of 3.0 in the two semesters prior to their final year and must demonstrate financial need. (FAFSA)

The Dr. A. Rufus and Sara Tonelson Scholarship in Special Education was established by Dr. Stephen W. and Dr. Louis O. Tonelson in memory of their parents whose lives were dedicated to the education of students. Students must be accepted into the Darden College of Education and Professional Studies special education program, enrolled full time and have a minimum GPA of 3.0.

***The Jessica Rhea Turner Scholarship in Human Services Counseling** was established by Ulysses Turner to assist a full-time student majoring in human services with a minimum grade point average of 2.5. The recipient must demonstrate financial need. (FAFSA)

***The Ulysses Turner Scholarship in Educational Curriculum and Instruction** was established by Ulysses Turner to assist a full-time undergraduate student enrolled in the Darden College of Education and Professional Studies within the Department of Teaching and Learning with a focus on teaching from grades K-12. The recipient must demonstrate financial need and must have a minimum grade point average of 2.5. (FAFSA)

***The Patricia Goodman Waldo Scholarship Endowment for Special Education** was established to assist a full-time undergraduate junior or senior student admitted in the approved teacher education program with the special education general curriculum K-12 endorsement. The recipient must demonstrate financial need and must have a minimum grade point average of 3.2. (FAFSA)

***The Louise M. White Memorial Scholarship** was established to assist a student pursuing a degree in the Darden College of Education and Professional Studies, first generation student that demonstrates financial need (FAFSA)

***The Charles P. and Margaret B. Wildermann Endowed Scholarship for Future Teachers** was established by Charles P. Wildermann and the late Margaret B. Wildermann to assist a full-time undergraduate student majoring in English. The student must be accepted into an approved teacher education program as determined by the Darden College of Education and Professional Studies and demonstrate financial need. (FAFSA)

The Frank Batten College of Engineering and Technology

The American Society of Highway Engineers-Greater Hampton Roads Chapter Scholarship in Engineering (ASHE-GHR) is awarded to a full-time undergraduate civil engineering student with an emphasis in transportation. The recipient must be a U.S. citizen, a rising junior, and have a minimum cumulative GPA of 3.0.

The Edward N. Antoun, AH Environmental Endowed Scholarship in Engineering was established to assist a full-time undergraduate student intending to major in civil and environmental engineering. The recipient must attain a minimum high school GPA of 3.2 and be a U.S. Citizen or Permanent Resident.

***The Michael Baker International Scholarship Endowment** was established to assist full-time undergraduate students majoring in civil engineering or civil engineering technology. The recipient(s) must demonstrate financial need and must have a minimum cumulative grade point average of 3.0. Preference is given to undergraduate students from Virginia, but Virginia residency is not essential. (FAFSA)

The Batten College of Engineering and Technology General Scholarship was established to assist a full-time student in the Batten College of Engineering and Technology.

The BBG Incorporated Endowed Scholarship in Engineering was established by BBG Incorporated for a rising junior or senior majoring in electrical engineering, electrical engineering technology, computer engineering, or computer engineering technology who holds a minimum cumulative GPA of 2.5. The scholarship is also available to a graduate student majoring in electrical engineering or computer engineering with a minimum cumulative GPA of 3.0. The recipient will also be considered for an engineering cooperative education/intern position with BBG Incorporated.

The Stanley Blaxton Endowed Engineering Scholarship was established by the Stanley Blaxton Foundation to assist an undergraduate student majoring in engineering or engineering technology who holds a minimum 2.5 cumulative grade point average, or an undergraduate student enrolled as engineering intended in the Engineering Fundamentals Division with a minimum 3.0 cumulative high school or transfer grade point average. The recipient must be enrolled for at least half-time enrollment or co-op education/intern position. Preference will be given to Disabled Veterans of the United States Armed Forces.

***The Civil and Environmental Engineering Visiting Council (CEEVC) William M. Boone Memorial Scholarship** is awarded based on both need and merit to a full- or part-time junior civil and environmental engineering student. (FAFSA)

***The Bruce and Carol Conway Scholarship Endowment** was established to assist a student that is pursuing a degree within the Batten College of Engineering & Technology. The recipient must demonstrate financial need. (FAFSA)

The Corporate Circle Endowed Scholarship was established by The Corporate Circle of the Frank Batten College of Engineering and Technology in 2003. Recipients must be rising sophomores with excellent academic credentials and a declared major in either engineering or engineering technology. Preference will be given to someone with membership in one or more of ODU's student engineering societies.

The Costulis Family Scholarship was established to assist full-time undergraduate students with a declared major in mechanical engineering or an approved teacher education program at Old Dominion University. The recipient must be a graduate of Poquoson High School, Maury High School, or Indian River High School, and must maintain a minimum grade point average of 3.3.

***The Dr. Frederick J. Berger and Gary R. Crossman Endowed Scholarship in Engineering Technology** was established to assist a full-time undergraduate engineering technology student who will have completed 58 or more credits and will qualify as a junior in an engineering technology curriculum. The recipient must demonstrate financial need, attend Old Dominion University on campus and hold an overall minimum cumulative grade point average of 3.0. (FAFSA)

The Day-Helmick Family Endowed Scholarship in Engineering was established to assist a student in the Batten College of Engineering and Technology.

The Dewberry Endowed Scholarship was established to assist full-time students in the Batten College of Engineering and Technology in the civil engineering, electrical engineering, or mechanical engineering disciplines.

The Rolle Dubbe' and GET Solutions Civil Engineering Scholarship Endowment was established to assist a first-time, full-time undergraduate engineering student with preference given to a civil engineering major or civil engineering intended major. The recipient must have a minimum grade point average of 2.5 and/or have a cumulative high school or transfer grade point average of 3.0.

The Electrical and Computer Engineering Scholarship was established to assist undergraduate students majoring in electrical engineering or computer engineering. The recipient must be a rising sophomore, junior, or senior and must have a minimum GPA of 2.75.

The Jack and Jeanie Harris Endowed Engineering Scholarship was established to assist engineering students who have made a commitment to minor in biomedical engineering. This scholarship is based on merit; the recipient must maintain a minimum grade point average of 3.0 and must be a full-time student.

***The EWA-Joseph B. Vestal Endowed Scholarship** was established by Enterprise Wireless Alliance to assist a full-time student in the third year of study with at least 55 hours completed and a 2.5 grade point average. The recipient must be pursuing a course of study leading to a degree in either electrical engineering technology or information systems management. Preference will be given to a student focusing on a professional career in the expanding universe of wireless applications and/or telecommunications as determined by the submission of a 500 word essay describing the applicant's specific career objectives in the industry. Students must demonstrate financial need. (FAFSA)

***The Toykea S. Jones Endowed Scholarship in Engineering** was established by Toykea Jones to assist a full-time undergraduate (sophomore or above) majoring in civil engineering, who must have graduated from one of the following high schools in Hampton Roads, VA: Lake Taylor, I.C. Norcom, Norview, Booker T. Washington, Maury, or Granby. The student must demonstrate financial need and must have a minimum GPA of 3.0. (FAFSA)

The Edgar and Kathleen Kovner Scholarships provide several one-year scholarships: (a) for continuing engineering students who demonstrate academic achievement and (b) for engineering students who participate in extracurricular activities.

***The Labelle Endowed Scholarship in Engineering** has been established by William M. Labelle, Jr. to assist a full-time, rising sophomore or junior majoring in electrical and computer engineering. The recipient must demonstrate financial need, be a U.S. citizen and have a GPA of 3.0 or better. (FAFSA)

The Lewis Endowed Scholarship in Engineering was established by William Ashton Lewis Sr. and Louise B. Lewis to assist a full-time rising sophomore student majoring in mechanical engineering. The recipient must be a U. S. Citizen or Permanent Resident, must have attained a minimum undergraduate grade point average of 3.0, and must maintain a minimum grade point average of 2.5 to hold the scholarship. The scholarship may be awarded up to three academic years if the recipient maintains at least a 2.5 grade point average.

***The Mr. Winfred D. Nash and Patricia D. Nash Endowed Scholarship in Electrical and Mechanical Engineering Technology** was established to assist an undergraduate transfer student from a Virginia Community College majoring in electrical or mechanical engineering technology. The recipient must demonstrate financial need and have a minimum cumulative grade point average of 3.0. (FAFSA)

***The Richard H. Nettleton Endowed Scholarship for Civil Engineering** was established to assist students in the Batten College of Engineering and Technology majoring in civil engineering and demonstrate financial need. Strong preference is given to a student who promotes diversity amongst statistically underrepresented groups. (FAFSA)

***The Newport News Shipbuilding Engineering Endowment** was established to assist undergraduate students majoring in engineering or engineering technology who hold a minimum 2.5 cumulative grade point average. The recipient may also be an undergraduate student enrolled as engineering intended in the Engineering Fundamentals Division with a minimum 3.0 cumulative high school grade point average. Preference will be given to students who are Pell eligible. (FAFSA)

The Newport News Shipbuilding and Huntington Ingalls Industries Scholars Program was established to assist rising junior, senior and/or graduate students who are declared in a STEM major related to engineering, analytics, information technology, and/or computer sciences. Student must maintain a minimum undergraduate grade point average of 2.0, and a minimum graduate grade point average of 3.0. The recipient must be a U.S. citizen or permanent resident. First preference will be given to military-affiliated student or student veterans. Second preference will go to students interested in working and living in Hampton Roads.

***The Clarence Lee Ray Endowed Scholarship** is made possible by an endowment established by Clarence L. Ray, Jr. The scholarship is awarded to a full-time undergraduate student in the Batten College of Engineering and Technology who holds a 3.0 GPA or better. The recipient must demonstrate financial need and be a U.S. citizen. (FAFSA)

***The Christopher Kelly Rapp Memorial Scholarship in Civil & Environmental Engineering** was established to assist a student with a declared major in Civil and Environmental Engineering who has graduated from a Virginia High School and demonstrates financial need. (FAFSA)

The Stuart H. Russell Memorial Scholarship is made possible by an endowment established by the estate of Olive L. Spicer. The scholarship is awarded to a deserving student in the Batten College of Engineering and Technology with particular preference given to a student in the Electrical and Computer Engineering Department with an interest in electronics.

***The Sue Cotton Smith Endowed Scholarship in Engineering** was established to assist a full-time undergraduate student intending to major in civil and environmental engineering. The recipient must have attained a minimum high school GPA of 3.2, be a U.S citizen or Permanent Resident, and demonstrate need. The scholarship may be renewed for up to four academic years if the student maintains a 3.0 GPA. (FAFSA)

***The William D. Stanley Scholarship Fund in Engineering Technology** was established to assist an undergraduate transfer student in engineering technology with 58 or more credits at a two-year institution at the time of matriculation at Old Dominion University and a 3.0 grade point average. Recipient must demonstrate need. (FAFSA)

The Sumitomo Machinery Corporation of America Endowed Scholarship is awarded to an undergraduate student enrolled in the Batten College of Engineering and Technology or the Strome College of Business with preference given to students with additional international studies. The recipient will be eligible for a work experience in Japan with the Sumitomo Machinery Corporation. The recipient may be eligible for renewal on a semi-annual basis with the approval of the award committee and the maintenance of a 3.00 grade point average.

The Triton International Enterprises Scholarship Endowment was established to assist full-time undergraduate or graduate student(s) from the country of Turkey with preference given to student(s) residing in a city OTHER THAN Istanbul, Ankara, Izmir, Bursa, Antalya or Adana. The recipient must be enrolled in Old Dominion University's Frank Batten College of Engineering & Technology.

***The Clarke and Susan Vetrone Endowed Scholarship** is funded by an endowment established to assist one undergraduate and one graduate student with an intended or declared major in the Batten College of Engineering and Technology. The recipient must be enrolled full time and demonstrate financial need. An undergraduate student must have a minimum GPA of 2.75, and preference will be given to a student with learning disabilities. A graduate student must have a minimum GPA of 3.0. (FAFSA)

The Virginia Natural Gas Endowed Scholarship in Environmental Engineering was established by Virginia Natural Gas and the AGL

Resources Private Foundation to assist a full-time undergraduate student who has an educational focus in civil and environmental engineering.

The Virginia Society of Professional Engineers Scholarship, established in 1991, is awarded to a junior or a senior in the Batten College of Engineering and Technology. The student must have attended high school in Southside Hampton Roads, be active in Batten College of Engineering and Technology clubs and societies and be a U.S. citizen. An essay must be submitted to the Engineering Scholarship Committee. (ESSAY)

***The Edward L. White Endowed Scholarship** was established by Edward L. White, Jr. and Margaret W. Moore to assist a computer engineering student. The recipient must be a Norfolk resident, have a minimum 3.30 grade point average and demonstrate financial need. (FAFSA)

***The George C. Winslow Scholarship** is made possible by an endowment to assist a graduate or undergraduate student who has demonstrated financial need and has obtained at least a 2.50 grade point average while pursuing a degree in mechanical engineering. (FAFSA)

The Gordon Webster Zipperer III Endowed Scholarship was established by the Hampton Roads Chapter of the American Society of Heating, Refrigerating, and Air Conditioning Engineers, Inc. (HRC-ASHRAE) to promote heating, refrigeration, and air conditioning engineering education at Old Dominion University. The recipient must be a full-time undergraduate student studying mechanical engineering or mechanical engineering technology. The student must have a minimum cumulative GPA of 2.5 and be a rising senior or in the senior year. Preference is given to student membership in the ODU Student Chapter of ASHRAE.

The Anthony B. Woodell and Paul A. Woodell Aerospace Engineering Scholarship was established to assist a senior taking a senior concentration in aerospace engineering or pursuing an aerospace minor within The Batten College of Engineering and Technology. Preference will be given to the same student to continue their studies at ODU by pursuing a master's degree or Ph.D. in aerospace engineering. Preference will be given to full-time students, awarded on merit and/or financial need, and the student must maintain a grade point average of 3.0 at both undergraduate and graduate levels.

***The Captain Joseph F. Yurso Scholarship Endowment** was established to assist students in the Batten College of Engineering and Technology who demonstrate financial need and are in good academic standing. (FAFSA)

The Ellmer College of Health Sciences

The Thomas Charles Auclair ('78) Scholarship is made possible through an endowment given by Mr. and Mrs. George E. Auclair in memory of their son. The scholarship supports a student pursuing studies in environmental health.

***The Dr. Scott Sechrist Nuclear Medicine Technology Scholarship Endowment** was established to assist a full-time junior or senior enrolled in the nuclear medicine technology program. The student must have a minimum grade point average of 3.0 and must demonstrate financial need. (FAFSA)

***The Dr. Tapan K. Chaudhuri Endowed Scholarship** was established to assist a full-time junior or senior who has been admitted into the Old Dominion University nuclear medicine program. The recipient must demonstrate financial need and have the highest GPA amongst those eligible for the scholarship award. (FAFSA)

The College of Health Sciences General Scholarship was established to assist a full-time student in the College of Health Sciences.

***The Cathy Dowrick Memorial Endowed Scholarship** was established by Barbara Williams and the Clinical Laboratory Management Association (CLMA) to assist a full-time senior admitted into the medical laboratory science program. The recipient must be a declared major in medical laboratory science and demonstrate financial need. (FAFSA)

***The Gene W. Hirschfeld Scholarship** is supported by an endowment given by the former chair of the Department of Dental Hygiene and Dental Assisting. The scholarship is awarded to undergraduate or graduate students

who demonstrate financial need and are enrolled in the dental hygiene program. (FAFSA)

***The LifeNet Health College of Health Sciences Endowed Scholarship** was established to assist a full-time senior student(s) enrolled in Old Dominion University's School of Medical Diagnostic and Translational Sciences. Student(s) are encouraged to participate in a 3-4 week Internship at LifeNet Health or its successor (School of Medical Diagnostic and Translational Sciences will supervise). The internship must be completed prior to graduation. The recipient must demonstrate financial need. (FAFSA)

***The LifeNet Health Medical Laboratory Science Endowed Scholarship** was established to assist a full-time senior student(s) enrolled in Old Dominion University's College of Health Sciences. Recipient(s) must demonstrate financial need. Student(s) are encouraged to participate in a 3-4 week Internship at LifeNet Health or its successor (College of Health Sciences Dean's Office will supervise). The internship must be completed prior to graduation. (FAFSA)

***The Linda Fox Rohrer Endowed Scholarship for Dental Hygiene** was established by Mrs. Linda Fox Rohrer in 2004. Recipients must be either full-time graduate or undergraduate students. The scholarship will be awarded to a deserving student in the School of Dental Hygiene. The recipient must also demonstrate financial need. (FAFSA)

The Sentara Scholars College of Health Sciences Annual Scholarship was established to assist an in-state undergraduate or graduate student enrolled in a healthcare or healthcare-related program. Student(s) must demonstrate financial need, be in compliance with the institution's Student Code of Conduct and must be in good academic standing.

The Sharon C. Stull Oral Health Community Impact Scholarship was established to assist all enrolled dental hygiene student(s) in the BSDH and MSDH programs. Interested student(s) must have a minimum grade point average of 3.0 and must submit an application packet to the Dental Hygiene Scholarship Committee. The packet should contain information that describes his/her leadership, volunteer and extra-curricular initiatives to increase oral health literacy in the community and include a letter of support from impacted volunteer/community organization(s).

***The Rev. Dr. Russel J.-Dr. George E. Emig-Carole Ann Schrott Memorial Endowed Scholarship** was established by an anonymous donor to assist junior and senior undergraduate students with a declared major in dental hygiene, who upon graduation, intend to enter the workforce or a master's program. The scholarship recipient must have a minimum grade point average of 3.0, demonstrate financial need, and be a Hampton Roads resident. Secondary consideration may be given to a junior or senior declared nursing major who, upon graduation, intends to enter the workforce or a master's program. (FAFSA)

The Dr. Deanne Shuman Endowed Scholarship in Public Health was established to assist a full-time undergraduate student with regular admission status to the BS in Health Sciences program on the basis of completed and fully evaluated credentials and in good academic standing. The recipient must have a minimum of grade point average of 3.25.

***The J.M. Walton & Professor A.J. English Scholarship** was established to assist a full-time student admitted to the Old Dominion University Bachelor of Science in Environmental Health degree program. The recipient must have a minimum grade point average of 3.5 or greater and be in good academic standing. In addition, the recipient must submit an essay no longer than 500 words to the Environmental Health Faculty committee describing personal career goals in industrial hygiene or occupational safety and health and reason(s) for choosing this field of study. Recipient must be enrolled in the ENVH 441 Industrial Hygiene course or its successor.

The Melvin H. Williams Scholarship for Exercise Science was established to assist a student in the exercise science program in the Department of Human Movement Sciences. The recipient must be a rising senior, enrolled full time, and have at least a 3.0 cumulative GPA.

The Ellmer School of Nursing

***The Amerigroup Leadership Endowed Scholarship** is made possible by the Amerigroup Corporation. The scholarship is awarded to a student who is enrolled at least half-time as an undergraduate junior or senior in the School of Nursing. Priority is given to students who have dependent children. The recipient must demonstrate financial need. (FAFSA)

The Atlantic Anesthesia Endowed Scholarship for Nurse Anesthesia Students was established to assist full-time nurse anesthesia students in good standing. The scholarship will support tuition for any given semester of enrollment.

The Captain Kenneth B. Austin USN and Mrs. Virginia Frank Keller Austin Scholarship for Nursing Students was established to assist a full-time student with junior status who has been accepted into the School of Nursing. The recipient will be selected based on merit and demonstrated leadership experience.

***The Bon Secours Hampton Roads Health System School of Nursing Endowed Scholarship** was established to assist a full-time senior undergraduate enrolled in the Old Dominion University Nursing program. The recipient must demonstrate financial need (as determined by the Office of Student Financial Aid). The recipient must agree to a Role Transition experience with a minimum of 120 clinical hours (140 for honors students) at Bon Secours Hampton Roads Health System facility or its successor (School of Nursing will supervise). The student(s) will agree to placement in a specialty area including but not limited to: Emergency Room, Operating Room, Intensive Care Unit or Critical Nursing. (FAFSA)

***The Chesapeake Regional Medical Center Nursing Endowed Scholarship** was established to assist a full-time undergraduate or graduate student enrolled in Old Dominion University's nursing program. The student must demonstrate financial need and must agree to accept 120 clinical hours at Chesapeake Regional Medical Center, or its successor. (FAFSA)

***The Joseph Fleischmann Scholarship Endowment** was established to assist a full-time undergraduate sophomore, junior, senior or graduate student enrolled in pre-med or nursing major. Preference is given to a student pursuing medical research. The recipient must maintain a minimum GPA of 3.0 and must demonstrate financial need. (FAFSA)

***The Jordan and Carol Levitin Endowed Scholarship in Nursing** was established to assist a full-time pre-licensure undergraduate student(s) enrolled in the Old Dominion University School of Nursing. The recipient must demonstrate financial need. (FAFSA)

The Barbie Morgan Endowed Scholarship for Nurse Anesthesia Students was established to assist full-time senior nurse anesthesia student(s). Students interested in the scholarship must submit an application to the Graduate Nursing Awards Committee. The application packet should describe his/her volunteer activities, include a letter of support from the volunteer organization(s), and provide evidence of demonstrated clinical excellence as reported by preceptor feedback and evaluations.

***The Cinda L. Morgan Memorial Scholarship** was established to assist a registered nurse with an associate degree or graduate of an accredited diploma program who wants to go back and get his or her post licensure BSN. Recipient must be a declared nursing major and must demonstrate financial need. (FAFSA)

The Samuel B. Murphey Scholarship in Nursing was established by the family and friends of Samuel B. Murphey to assist a rising sophomore, junior, or senior student in nursing with a minimum grade point average of 2.5.

The Norris-Keeley Scholarship for Registered Nurse Students in Hampton Roads was established to assist a student enrolled in a minimum of six semester credits of BSN curriculum courses per semester and a current licensure as a registered nurse in Virginia. The recipient must have completed the most general requirements at the time of admission into the RN-BSN program and demonstrate academic excellence during the first semester of enrollment in the RN-BSN program (maintaining a cumulative grade point average of 3.5 or above)

School of Nursing General Scholarship Fund was established to assist a full-time student(s) in the School of Nursing.

The George and Susan Petro and Michael and Anna Yura Endowed Scholarship was established by Dr. Helen Yura Petro and Joseph Petro in memory of their parents, George and Susan Petro and Michael and Anna Yura. The scholarship is to be awarded to a full-time senior or junior majoring in nursing, with a minimum GPA of 3.0.

*** The Joseph Petro and Helen Yura Petro Endowed Nursing Scholarship** was established to assist a full-time junior or senior admitted into the Old Dominion University undergraduate nursing program. The student must demonstrate financial need. (FAFSA)

***The Marilyn Frakes Quinn Endowed Undergraduate Nursing Scholarship** was established by Dr. John Nunnery to assist a full-time junior or senior student enrolled in Old Dominion University's nursing program. The student must demonstrate financial need. (FAFSA)

***The Rev. Dr. Russel J.-Dr. George E. Emig-Carole Ann Schrott Memorial Endowed Scholarship** was established by an anonymous donor to assist junior and senior undergraduate students with a declared major in dental hygiene, who upon graduation, intend to enter the workforce or a master's program. The scholarship recipient must have a minimum grade point average of 3.0, demonstrate financial need, and be a Hampton Roads resident. Secondary consideration may be given to a junior or senior declared nursing major who, upon graduation, intends to enter the workforce or a master's program. (FAFSA)

***The Sara C. Seay Endowed Scholarship for Nursing Students** was established to assist a full-time undergraduate student(s) enrolled in the Old Dominion University School of Nursing. The recipient must have a minimum cumulative grade point average above a 3.5 and must demonstrate financial need. (FAFSA)

The Molly Seymour Endowed Scholarship for Nurse Anesthesia Students was established to assist a student who must have completed one year of clinical preparation and be entering their third academic year in the Nurse Anesthesia program. The scholarship recipient must have and maintain a grade point average of at least 3.5.

***The TOWN Foundation Scholarship Awards** were established to encourage students with academic ability who lack sufficient financial means to attend the Old Dominion University School of Nursing. Each recipient must meet the normal admission standards of the Old Dominion University School of Nursing and demonstrate substantial financial need. (FAFSA)

***The Robert B. and Rosemarie Williams Endowed Scholarship for Undergraduate Nursing** was established to assist a pre-licensure, full-time senior level undergraduate student pursuing a degree in Nursing. Recipient must be in good academic standing with a grade point average of 3.0 or higher and must demonstrate financial need. (FAFSA)

***The Eugene Michael Yura and Eli Petrun Memorial Endowed Scholarship in Nursing** was established by Dr. Helen Yura Petro and Joseph Petro to assist a full-time junior or senior majoring in nursing. The student must demonstrate financial need. (FAFSA)

The College of Sciences

The Clifford L. and Lillian R. Adams Scholarship is made possible by an endowment established by Mr. and Mrs. Adams. Mr. Adams, the former director of the Research Foundation and department chair, taught in the Department of Physics at Old Dominion University for many years. The scholarship is awarded to a full-time undergraduate with a declared or intended major in physics.

The Beatrice Rice Adreon Endowed Scholarship for Pre-Pharmacy Studies was established to assist full-time undergraduate student(s) entering his/her senior year and enrolled in a major that includes pharmacy school prerequisites, intends to enter a Virginia pharmacy school, and has taken his/her Pharmacy College Admission Test (PCAT) before the award is given. The recipient will submit a personal statement describing why they have chosen a pharmacy career and the impact pharmacy will have on

their patients and their community. The scholarship will be awarded to the student(s) having the strongest recommendation from his/her instructors. The recipient must maintain a grade point average (GPA) of 3.0

***The Sarah E. Armstrong Science Scholarship Endowment** was established in 2002 in memory of Sarah E. Armstrong. The recipient must be a full-time student who has been accepted into the College of Sciences. The recipient must have a minimum 3.2 grade point average and demonstrate financial need. (FAFSA)

The Robert Bock Memorial Endowed Scholarship Fund was established by the Bock family to assist a resident of Chincoteague, Virginia. Second preference will be given to residents of Accomack or Northampton County in Virginia. The recipient must be a junior or a senior majoring in the biological sciences with a cumulative grade point average of 3.00. Priority is given to residents of Chincoteague.

The John Evan Cash Scholarship in Psychology was established to assist an undergraduate student in good academic standing. The student must be a declared psychology major.

The Richard T. and Nancy P. Cheng Award in Computer Science was established to assist one graduate student and one or more undergraduate student(s) enrolled in the Department of Computer Science in the College of Sciences. The graduate scholar must be in good academic standing and making good progress on his/her degree. The undergraduate scholar(s) may be awarded up to the extent funds are available and must have a minimum grade point average of 3.5.

The Dr. Allen K. Clark Endowed Scholarship in Chemistry was established to assist a full-time undergraduate or graduate student majoring in chemistry or organic chemistry. Preference will be given to a student who is an affiliate of the American Chemical Society. The recipient must maintain a grade point average of at least 3.0.

The College of Sciences General Scholarship was established to assist a student enrolled in the College of Sciences. Scholarship selection is determined by the Dean of the College of Sciences.

***The Delk-Shufflebarger Scholarship** was established to assist one or more students from the College of Sciences. The recipient must maintain a grade point average (GPA) of 3.0 and must demonstrate financial need as determined by the Office of Student Financial Aid. (FAFSA)

***The Joseph Fleischmann Scholarship Endowment** was established to assist a full-time undergraduate sophomore, junior, senior or graduate student enrolled in pre-med or nursing major. Preference is given to a student pursuing medical research. The recipient must maintain a minimum GPA of 3.0 and must demonstrate financial need. (FAFSA)

The Nancy Ferguson Frye Award was established in 1990 by her family and friends. The recipient of the award must be a senior majoring in the geological sciences with a minimum grade point average of 3.25.

***The Wayne A. Helm Endowed Scholarship** was established to assist full-time undergraduate student(s) in the College of Sciences majoring in mathematics, physics, chemistry, biochemistry, or computer science. Preference will be given to a student(s) majoring in math. Preference will be given to a U.S. citizen. The recipient must be a sophomore, junior or senior. The recipient must have at least a 3.2 grade point average and must demonstrate financial need. (FAFSA)

***The Jarvis Family Endowed Scholarship** was established to assist a full-time undergraduate student pursuing a degree in the Department of Psychology. The recipient must have at least a 3.0 grade point average. Preference is given to a student with financial need. (FAFSA)

The Toykea S. Jones Endowed Scholarship in Chemistry was established to assist a full-time undergraduate student. The recipient must be a sophomore or above majoring in chemistry and must have a minimum grade point average of 3.0.

***The Dr. James M. Kiernan Memorial Endowment** is made possible by an endowment given by Margaret and Charles Wildermann. The scholarship recipient will be chosen based on financial need. The student must be a

declared physics, math, or computer science major and have earned at least a 2.5 grade point average. The recipient must be a citizen of the United States. Preference will be given to a junior or senior or a student who transferred to Old Dominion from a community college. (FAFSA)

The Sree Taposh Kumar and Sreemati Bulu Rani Chowdhury Memorial Scholarship was established by Dr. Tapan Chaudhuri, Dr. Tuhin Chaudhuri, Dr. Tandra Chaudhuri, Dr. Tarun Chaudhuri, Dr. Triptesh Chaudhuri, Mr. Tanmay Chowdhury, and Mrs. Tripti Bhaduri. The scholarship will assist a full-time student enrolled in the College of Sciences who is completing the prerequisites for medical school with the intention of working in the field of medicine. The scholarship will be awarded to the student with the highest GPA of the pool of potential recipients.

***The Old Dominion University Biology Scholarship Endowment** was established to assist full-time undergraduate student(s) in biology. The recipient must be a graduate of a Hampton Roads area high school and must demonstrate financial need. (FAFSA)

The Travis Priest Family Endowment was established to assist an undergraduate or graduate student in good academic standing. The recipient must work with the Systems Group within the Department of Computer Science in the College of Sciences.

The Nick Savage Scholarship was established by Anne Raymond Savage to assist a full-time undergraduate or graduate student majoring in an area of science that involves field work and the study of plant life. Preference will be given to a student who is entering or returning to the field of teaching science. Students must maintain a grade point average of 3.0.

The Carl A. Schulz Jr. Endowed Scholarship was established to assist full-time undergraduate students majoring in mathematics.

The Science Museum of Eastern Virginia Prize was established by the Science Museum Association of Eastern Virginia in 1998. The award is given to one or more junior students majoring in biology, chemistry, computer science, geology, math, oceanography, physics or psychology. The recipient(s) must have at least a 3.25 grade point average.

***The A. Kenneth Scribner Science Scholarships** are made possible by the family of the late Mr. Scribner, former president of Virginia Chemicals, Inc. and a former member of the Old Dominion University Board of Visitors. Established in 1978, the scholarships assist students majoring in science or a science-related field who have demonstrated financial need and show capability and industry in scientific studies. Preference is given to graduates of Hampton Roads public schools. (FAFSA)

***The Marc and Deanna Steiner Endowed Scholarship in Ocean & Earth Sciences** was established to assist an incoming freshman intending to major in the Department of Ocean & Earth Sciences in the College of Sciences. Recipient must maintain a grade point average equivalent to that of the current merit scholarship standards (cumulative 3.0 GPA) First preference will go to a recipient with demonstrated financial need. (FAFSA)

The C. S. Sherwood III Scholarship is made possible by an endowment from the family and friends of the late Calder S. Sherwood, III, a former professor emeritus at Old Dominion University. This scholarship is to assist one rising senior majoring in either geology or chemistry (on an alternating basis).

The Elzie Glenn Whitlock Endowed Scholarship in Math is funded by an endowment established by Elzie Glenn Whitlock to assist a student who will be enrolled full time with a declared major in math. The recipient must have a GPA of 3.0 or higher.

The Patricia and Douglas Perry Honors College

The Honors College Scholarships are awarded to a select group of entering freshman who, on the basis of their academic achievement, are chosen to participate in the program. The scholarship may be renewed for three years (six semesters) provided students continue to meet program participation standards. Recipients are selected by the Dean of the Honors

College (Separate Application Required: <http://www.odu.edu/honors> (<http://www.odu.edu/honors>)) (PARTICIPATION) (757) 683-4865

The Brock Foundation Endowed Honors Scholarship was established by The Brock Foundation to assist students enrolled in the Perry Honors College. The recipients must be juniors or rising seniors in good standing in the Honors College and willing to volunteer with ACCESS.

The John and Kate Broderick Opportunity Scholarship Endowment was established to assist students accepted into the Perry Honors College. This scholarship is merit based, and will assist students with tuition, room, and board expenses. In addition, this scholarship is also available to fund study abroad, undergraduate research and/or entrepreneurial opportunities.

***The Robert T. Cahill and Amanda J. Cahill Scholarship Fund** was established to assist a student accepted into or currently enrolled in the Perry Honors College. The recipient must demonstrate financial need. (FAFSA)

The Cranmer-Skinner Scholarships are funded through an endowment established by Mr. and Mrs. Jay G. Cranmer in recognition of the contributions to the University by Dr. Richard Skinner, first director of the Honors College. They are awarded to Perry Honors College participants whose academic performance, extracurricular activities and potential for leadership exemplify ideals of scholarship, personal integrity and citizenship. The endowment also provides financial support to bring prominent persons to campus to interact with the honors students. (PARTICIPATION)

The Jennifer Fitzgibbon Honors College Endowed Scholarship was established to assist an incoming freshman admitted in the Perry Honors College who has a strong career interest in engineering or finance. The recipient must be enrolled full time and submit a 500 word essay pertaining to career goals.

***The Matin Family Honors College Endowed Scholarship** was established to assist a full-time undergraduate student(s) studying in the Perry Honors College. Preference will be given to a student(s) pursuing a degree in the sciences or humanities. The recipient must have a minimum grade point average of 3.5 and must demonstrate financial need. (FAFSA)

***The Perry Honors College General Scholarship** was established to assist a full-time student in the Perry Honors College. The scholarship recipient will be determined by the Perry Honors College based on merit or need. (FAFSA)

Military Awards

Army Reserve Officer Training Corps (AROTC) participants may qualify for scholarships. More information on application procedures and program requirements is available from the faculty of the Department of Military Science and Leadership. (PARTICIPATION) (757) 683-3663

Naval Reserve Officer Training Corps (NROTC) participants may qualify for full or partial scholarships. More information on application procedures and program requirements is available from the faculty of the Department of Naval Science. (PARTICIPATION) (757) 683-4744

The Danhof VanDyke Military Scholarship was established to assist full-time or part-time students who maybe an active-duty military member, or to a veteran. The scholar must maintain a grade point average of 2.5 and may be taking classes on campus or online.

The Vice Admiral Samuel L. Gravely Scholarship has been established by the University to honor a member of the naval community. Two recipients will be selected by the Hampton Roads Naval ROTC unit from among the College Program Candidates who have met the July 15 application deadline. The recipients must be full-time students with 3.00 minimum high school grade point averages and 1000/22 SAT/ACT test scores.

***The Kyle Middleton Memorial Scholarship** was established to assist a current Army ROTC student(s). The recipient must demonstrate financial need, be in good academic standing and must be enrolled in courses at Old Dominion University. (FAFSA)

***The Theodore N. Turley Memorial Scholarship** assists an Army ROTC participant with financial need who has achieved junior status and has

obtained a minimum 3.00 cumulative grade point average at the end of the first semester of the junior year. (PARTICIPATION, FAFSA)

The Matthew Wallace Patriot Scholarship was established to assist incoming freshman students who may be a relative of a United States serviceman or woman (Army, Air Force, Navy, Marines) wounded or deceased (KIA) or related to a service member who participated in Operation Iraqi and Enduring Freedom or any future operation thereafter. The scholarship is renewable. The recipient must be in good academic standing, enrolled at least half time and maintain at least a 2.5 GPA. A 500 word essay, based on a specific topic determined by the scholarship selection committee, is required. (Essay) (757) 683- 6856

***The Scherberger-Barrett Memorial Scholarship for Disabled Veterans** was established in memory of Colonel (USA, Ret) Richard J. and Virginia Barrett Scherberger to assist a student who has a service-connected disability. The student veteran must provide documentation from Veterans Affairs as proof of service-connected disability status, have a minimum cumulative grade point average of 2.5, and demonstrate financial need. (FAFSA)

Other Awards (General)

***The Addenbrook Scholarship Fund** was established to assist full or part-time student(s) who is taking classes on campus or by way of distance learning and demonstrates financial need. (FAFSA)

***The Alumni of Nu Theta Chapter of Alpha Phi Alpha Fraternity Endowed Scholarships** was established to assist a full-time student who is a first-generation college student in good academic standing. Recipient must demonstrate financial need, be eligible to receive the Federal Pell Grant, and has demonstrated active participation in either community service activities, on-campus service organizations like fraternities or sororities, or professional or departmental organizations. (FAFSA)

The Bannon Foundation Quasi-Endowed Scholarship was established to assist four students of the Eastern Shore of Virginia with their commuter expenses.

***The BayPort Credit Union Endowed Scholarship** was established as a general scholarship award to assist a full-time student(s) who demonstrates financial need. Preference will be given to freshman or sophomore students. (FAFSA)

The BBL ODU Endowed Scholarship was established by SpringHill Suites by Marriot to assist a student from the Lambert's Point neighborhood of Norfolk. The recipient must be a full-time sophomore, junior or senior student who successfully participated in the University's Lambert's Point Summer Program authorized by the Director of the Lambert's Point Program.

Birshtein Family Scholarship Endowment was established by Ms. Frances Levy Birshtein. Two scholarships per year will be awarded, The Mayer Isaac 'Easy' Birshtein Scholarship and The Oscar Brandeis Birshtein and Frances Levy Birshtein Scholarship. Recipients must be undergraduate students who have graduated from a high school in Norfolk, Portsmouth or Virginia Beach, have a cumulative grade point average between 3.00 and 3.50 and demonstrate financial need. (FAFSA)

***The Opie and Peggy Bittle Memorial Endowment** was established by Charles and Margaret Bittle Wildermann to assist a student who demonstrates financial need. (FAFSA)

***The "Bob" Scholarship Endowment** was established by Erle Marie Latimer '80 to honor and celebrate the life of her late husband Robert M. Latimer '56. This endowment will assist a student(s) who has graduated from the Norfolk Public School system. Preference will be given to incoming freshmen that are Pell Grant eligible. The student must maintain a grade point average of 2.5 or higher. The recipient must demonstrate financial need. (FAFSA)

The Ruth S. Bouknight Memorial Scholarship was established to assist a full- time or part-time student who has lost their biological mother during birth. Second preference will be to assist a student who has lost their biological mother as a minor. Third preference will assist a student who has

lost a parent in active military service. Fourth preference will assist a student with an intended major in the Batten College of Engineering and Technology or seeking a degree in Human Services in the Darden College of Education and Professional Studies.

***The John R. Burton Jr. Scholarship** is made possible by an endowment to assist students who demonstrate financial need. Preference is shown to high school graduates who have been reared in the Hope Haven Children's Home. (FAFSA)

The John and Kate Broderick STEM-H Scholarship Endowment was established to assist recipients with a declared major in STEM-H.

***The Robert Claytor Memorial Scholarship** is funded by an endowment from the friends of Robert Claytor for a student who demonstrates financial need, according to federal needs analysis. (FAFSA)

The Coalition of Black Faculty and Administrators' Endowed Scholarship is funded by an endowment established by the Coalition of Black Faculty and Administrators to assist a student who is a graduate of one of the following high schools in Hampton Roads, VA; I. C. Norcom, Hampton, Bethel, Maury, Indian River, Norview, Booker T. Washington, Oscar Smith, Kecoughtan, Granby, Deep Creek, Menchville, Salem, Denbigh, Tallwood, Lake Taylor, Bayside, Phoebus, Western Branch, Churchland, Ocean Lakes, Kempsville, Great Bridge, Princess Anne, and Green Run. The recipient must be a full-time undergraduate or graduate student and must have an overall GPA of at least 2.5. An essay submission of 500 words is required. The essay topic is the student's commitment and/or involvement in the black community on or off campus.

The Ellis Family Endowed Scholarship was established by Janet A. and John C. Ellis to assist a high school graduate of a Hampton Roads high school. The recipient must be an undergraduate student of good character with financial need. Preference will be given to individuals who participated in the Tidewater ACCESS or Learning Bridge programs.

The Holland Dunston Ellis Jr. Memorial Scholarship has been established through an endowment gift from Mrs. Lavonne P. Ellis in memory of her husband. The award is to assist a continuing student who has completed at least 24 credit hours, maintains a cumulative GPA of 3.0, and must demonstrate evidence of community service activities and/or achievement.

The Charles H. Eure Memorial Scholarship is awarded to a marine science or engineering student who has a 3.00 grade point average and is of sound moral character. Preference will be given to a STASR (South Tidewater Association of Ship Repairers) company family member.

***The Suffridge-Fallon Endowed Scholarship** was established by Patrick J. Fallon and Sandra S. Fallon to assist a full-time student with a minimum GPA of 3.0. The recipient must demonstrate financial need. (FAFSA)

The Anita Clair Fellman Endowed Service Learning Scholarship is funded by an endowment established by Dr. Carolyn H. Rhodes to assist one or more full-time graduate or undergraduate students who participate in a service-learning project through the Department of Women's Studies. The recipient will be selected by the chair of the Women's Studies Department and another faculty member in the department.

***The Alan M. and Beverly G. Frieden Endowed Scholarship in STEM** was established to assist student(s) with a declared major in a STEM program and demonstrates financial need. (FAFSA)

The Giandoni-Onuschak Endowed Scholarship was established to assist a full-time undergraduate student in need of financial assistance.

***The Hansen Family Foundation Endowed Scholarship** was established to assist a student(s) that demonstrate financial need, must have a minimum grade point average of 3.0 or higher. First preference will be given to a student(s) with parents or guardians that are active-duty military personnel or first-responders.

***The Elizabeth Hatton Sodini and Frank J. Hatton Endowed Scholarship** was established as a general scholarship award to assist a

student who demonstrates financial need. Preference is given to student(s) currently residing in the Hampton Roads. (FAFSA)

***The Hackworth-Hobbs Endowed Scholarship** was established by Dorothy and Charles Hackworth and Charles Hackworth II to assist an undergraduate student with a minimum 3.2 grade point average who demonstrates need and has participated in student activities and non-paid volunteer community activities. (FAFSA)

***The Haislip-Rorrer Scholarship** was established in 2001 by Wallace G. and Linda Haislip. The undergraduate scholarship recipient must demonstrate financial need and leadership experiences, be a resident of the Southside of Hampton Roads and have a minimum 3.00 grade point average. (FAFSA)

***The David F. Harnage Endowed Scholarship** was established by friends and colleagues of David F. Harnage. The recipient must be a “first generation” college student and must demonstrate financial need. (FAFSA)

***The Paul J. Homsher, Ph.D. and Judith Wharton Homsher '72 Cancer Survivor Scholarship** was established to assist a student who is either battling a life-threatening form of cancer or is a survivor of a life-threatening cancer. The recipient must demonstrate financial need, maintain a grade point average (GPA) of 2.5, and will be chosen by the Dean of Students Office in conjunction with the Office of Educational Accessibility. (FAFSA)

***The Wil & Michaelene James Endowed Scholarship** was established to assist student(s) pursuing a degree in the STEM-H field, must be a native to the Hampton Roads area in Virginia, demonstrate financial need and must have a minimum grade point average of 2.5. (FAFSA)

The Lisa B. Smith and Maurice A. Jones Study Abroad Scholarship was established to provide an award to an undergraduate Pell grant eligible student. Second priority is to provide an award to an undergraduate Pell grant eligible student from the City of Norfolk or Hampton Roads Community. The recipient will be selected by the Office of Study Abroad.

***The Robert J. Kasdon Endowed Scholarship** was established to assist two full-time students who are residents of the City of New York or the State of New Jersey. The recipient must demonstrate financial need. (FAFSA)

***The Pamela C. Kirk '88 and A. Russell Kirk Study Abroad Quasi-Endowment** was established to assist full-time undergraduate and graduate students enrolled in Old Dominion University to participate in faculty-led study abroad experiences or an ODU-affiliated study abroad program approved by a committee if an ODU faculty-led program is not offered. Preference will be given to full-time undergraduate or graduate students demonstrating good academic standing, no violations of the University's Honor Code, and demonstrating financial need. (FAFSA)

***The Martin Luther King Jr. Endowed Scholarship** was established in 1987 by an anonymous donor to be given to a graduate of one of the following high schools: Lake Taylor, I.C. Norcom, Norview, Booker T. Washington, Maury or Granby. The recipient must have completed 60 academic credit hours with a major in the Batten College of Engineering and Technology or the Department of Accounting and demonstrate financial need. (FAFSA)

***The Kiwanis Club of Suburban Norfolk Endowed Scholarship** was established by the Kiwanis Club of Suburban Norfolk to assist a full-time student demonstrating good citizenship and financial need. The recipient must be a citizen of the United States or eligible non-citizen. Preference will be given to a student who was a member of Key Club in high school, active in community service in high school, or active in community service as a student at Old Dominion University. (FAFSA)

***The Landmark Foundation Southeastern Virginia Opportunity Scholarship** was established to assist in-state undergraduate students who demonstrate financial need. (FAFSA)

***The Landmark Foundation Southeastern Virginia Opportunity Scholarship** was established to assist in-state undergraduate students who demonstrate financial need. Recipients must have graduated from a public or private high school or have completed homeschooling while living in one of the following Virginia localities: Norfolk, Virginia

Beach, Portsmouth, Chesapeake, Suffolk, Franklin, Hampton, Newport News, Poquoson, Williamsburg, Isle of Wight County, Surry County, Sussex County, Southampton County, Accomack County, Northampton County, York County, James City County, Gloucester County, or Mathews County. (FAFSA)

***The R.K.T. “Kit” Larson Scholarship** is made possible by an endowment established in memory of Mr. Larson by his friends and colleagues of The Virginian-Pilot newspaper. The scholarship is awarded to a junior or senior with financial need who is enrolled full-time and works on a school, community or University publication. Recipient must be a resident of a Virginia or North Carolina city, or county served by The Virginian-Pilot. (FAFSA)

***The Aubrey and Lucille Machen Scholarship** is made possible by an endowment established in 1992 by Robert F. and Nancy M. Wildermann. The award assists a student who meets Old Dominion University's minimum academic requirements and has financial need. (FAFSA)

The Memorial and Recognition Scholarship Fund is an endowed scholarship that will be awarded to a student with a minimum grade point average of 3.00 and is able to demonstrate involvement in community service.

***The Jeffrey Moore Scholarship Endowment** was established by C. Jeffrey Moore to assist a full-time undergraduate student with a cumulative grade point average of 3.0 or better. The recipient must demonstrate financial need. (FAFSA)

The Wendy M. Moore, D.D.S. STEM Scholarship was established to award two full-time students who are American citizens. The recipients may be a junior or senior in a major considered part of the Science, Technology, Engineering and Math (STEM) areas. Recipients should be legal residents of, or graduate of a high school in the following counties in order of: (1) King George; (2) Westmoreland; (3) Caroline. Secondary preference for selection may be to assist students in the immediate surrounding counties of Lancaster, Richmond, Northumberland, and Essex. Third preference for selection may be to assist students from Stafford, Spotsylvania, or Fredericksburg. The recipients must maintain a grade point average (GPA) of 2.5.

***The Norfolk Southern Scholars Program** was implemented by the Norfolk Southern Foundation for students from the Lambert's Point neighborhood of Norfolk. It is renewable for a maximum of three additional years. (FAFSA)

The Office of Administration and Finance Staff Scholarship was established to assist a current full-time employee of Old Dominion University's Office of Administration and Finance who has completed one year of full-time service or a dependent of such employee at the University at the start of the semester for which the award is available.

The Old Dominion University Alumni Association Merit Scholarship was established in 2002 to assist full-time undergraduate students. The recipient(s) must maintain a grade point average equivalent to that of the current merit scholarship standards. The recipient must be willing to participate as the student representative to the Old Dominion University Alumni Association Board of Directors if so requested. ODU Alumni Legacy is a benefit in evaluation but not an essential requirement.

The Old Dominion University General Scholarship Endowment was established to assist students with educational cost. Recipients will be chosen based on university priorities in effect at the time of the award and will not be limited by need, merit, or program.

The ODU Student Concordia Scholarship Endowment was established to assist a current full-time student at Old Dominion University, who maintains a grade point average (GPA) minimum of 2.8 and must be an active participant on the ODU campus and give back through the act of service as demonstrated by two recommendation letters from individuals in supervisory positions of the recipient.

The Faculty Emeriti Association Klinefelter/Phillips Scholarship was established to provide financial assistance to the children of Old Dominion University faculty. The Faculty Emeriti Association Scholarship Committee

annually determines the best qualified students among candidates who meet the criteria stated in the Memorandum of Understanding with the Old Dominion University Educational Foundation.

The Parents' Association of Old Dominion University Continuing Student Scholarship is provided by the association to assist a continuing student who demonstrates academic merit.

***The James Harrison Parker Memorial Endowed Scholarship** was established for the purpose of providing student educational assistance. The recipient must be a junior or senior degree candidate in environmental engineering, coastal engineering, oceanography or biological sciences. The student must demonstrate financial need and have a minimum grade point average of 3.00. Preference may be given to a student who has been active in the local Boys and Girls Club. (FAFSA)

***The Propeller Club of Norfolk** was established by the Propeller Club of the United States, Port of Norfolk. First preference for this scholarship will be given to students who are a current or former Merchant Mariner or the son or daughter of a current or former Merchant Mariner. The recipient must be a full-time student in any field of study leading to a degree, have at least a 3.0 grade point average, and demonstrate financial need. The recipient must provide reasonable documentation to verify Merchant Mariner relationship or qualification. (FAFSA & submit reasonable documentation to the Office of Student Financial Aid)

***The Wayne and Lottie Rogers Endowed Scholarship** was established to assist full or part-time student(s) who is taking classes on campus and demonstrates financial need. (FAFSA)

***The Alfred B. Rollins Jr. Scholarship** was established in 1985 by the Old Dominion University Alumni Association to honor this former president of the University. The award assists a student who demonstrates financial need and is in his/her senior year of study. (FAFSA)

The Kenneth A. Samet Endowed Scholarship for Academics was established as a general scholarship award to a student in good standing.

***The Sherwood/Portsmouth Scholarships** are funded annually by a trust established by the late Calder Sherwood III, a professor emeritus in the departments of Chemical Sciences and Physics/Geophysical Sciences. Professor Sherwood served on the Old Dominion University faculty for 38 years. The scholarships are awarded to graduates of public high schools in Portsmouth, Virginia who demonstrate financial need. (FAFSA)

The John and Grace Staley Memorial Scholarships are made possible by an endowment from the estate of Grace Staley to assist one male and one female student who successfully complete the University Ladders program. The recipients must have an advisor's recommendation.

The Student Scholarship Fund was established by the Vice President for Advancement to assist undergraduate students.

***The Tang Family Scholarship Endowment** was established to assist a full-time student who demonstrates financial need. The recipient must maintain a cumulative grade point average of 3.0 or better. (FAFSA)

The Tidewater Friends of Foster Care Scholarship was established to assist students that come from the foster care system and who are in good academic standing.

The Town-N-Gown Scholarship has been established by Town-N-Gown, an association dedicated to promoting cooperation between the Hampton Roads community and the University in order to promote better understanding in fulfilling the aims and ideals of each. The scholarship recipient rotates annually from the following: (1) resident of the greater Hampton Roads area, (2) a member of or dependent of active duty military personnel and (3) a dependent of an Old Dominion University faculty or staff member.

***The Cecelia Tucker Endowed Scholarship** was established assist a student that demonstrates financial need. (FAFSA)

***The Cecelia Tucker Quasi-Endowed Scholarship** was established assist a student that demonstrates financial need. (FAFSA)

The Hugh L. Vaughan Scholarship has been established by an endowment to assist handicapped students. Preference is given to blind students. Recipients must be native born citizens and residents of the Commonwealth of Virginia.

***The Verlander Foundation Endowed Scholarship** was established by the George W. Verlander and Cornelia M. Verlander Memorial Foundation to assist students who reside or are a dependent of a resident of Lancaster County, Virginia. Students must be full-time undergraduates who maintain a minimum GPA of 2.5 and must demonstrate financial need. (FAFSA)

The Lewis and Lisa Warren Scholarship Endowment was established by Lewis and Lisa Warren to assist a full-time undergraduate student with sophomore or greater standing. The recipient must have a minimum 3.2 grade point average. Preference is given to a student who has demonstrated participation in community service activities.

The Lewis and Virginia Webb Jr. Scholarship was established in 1975 by the Old Dominion University Alumni Association to honor this former president of the University and his wife. It is awarded to the rising junior with the highest grade point average at the end of his/her sophomore year of study.

***The Jane L. and Robert H. Weiner International Affairs Scholarship** is made possible through an endowment established by Mr. and Mrs. Weiner to assist a student who will be studying abroad through the International Student Exchange Program (ISEP). Preference will be given to students who will study in a third world or developing country for the purpose of fostering international understanding and peace and who demonstrate academic achievement and financial need. (FAFSA)

***The Wells Fargo Endowed Scholarship** assists an undergraduate student who is a Virginia resident and demonstrates financial need. First preference is given to a student from Lambert's Point neighborhood, second preference is given to a student from the neighborhoods surrounding the Old Dominion University campus, and the third preference to a student from the Hampton Roads area. (FAFSA)

***The Calvert S. Whitehurst Scholarship** is funded by an endowment established by Mr. Robert B. Kendall and augmented by the Whitehurst Scholars Scholarship Foundation. The endowment recognizes the contribution of both Mr. Calvert S. Whitehurst and his son, Professor G. William Whitehurst, former member of the U.S. Congress. The scholarship is awarded to a student with financial need who demonstrates academic potential. (FAFSA)

***The Friends of Dr. G. William Whitehurst Scholarship** is to be awarded to an undergraduate student with a minimum grade point average of 3.0 who is eligible for the Federal Pell Grant. (FAFSA)

***The Fritz and Marcy Wildermann Scholarship** was established in 1980 by Mr. and Mrs. Robert F. Wildermann to assist a student who meets Old Dominion University's minimum academic requirements and has financial need. (FAFSA)

***The Robert F. and Nancy M. Wildermann Endowed Scholarship** was established by an endowment in 2001 by Nancy M. Wildermann. The scholarship will be awarded to a full-time student who demonstrates eligibility to receive the Federal Pell Grant. The recipient must have a grade point average between 2.5 and 2.75 (FAFSA)

Other Financial Aid Resources

The David Allan Derbyshire Leadership Scholarship was established to assist entering freshmen and/or undergraduate students who have established a history of leadership and service at the high school or collegiate level and are interested in continuing in that role. This is a merit-based scholarship.

The recipient(s) must maintain a cumulative grade point average of 3.0, enroll as a full-time student, and must submit an essay about their growth and development as a leader. Students must apply each year by submitting their essay to the Dean of Students for scholarship selection consideration. Preference may be given to a Circle K member.

***The GATS, Inc. Endowed Scholarship** has been established by the GATS Charity Fund to assist a full-time freshman student majoring in the sciences,

engineering, math, or computer science. The recipient must have a high school GPA of 3.0 or higher and demonstrate financial need. (FAFSA)

The Parker Lesley Endowed Fund has been established for students who demonstrate need for special circumstances. Special circumstances are defined as emergency travel, supplies, equipment, etc. (ESSAY) (757) 683-6856

***The Emily and Christine Maria Grant Endowment** was established by Helen Clark, executor of the Christine Maria estate, on behalf of the late Christine A. Maria and her sister Emily to assist full-time undergraduate students who participate in student leadership activities as defined by the Office of Leadership and Learning. Students must demonstrate financial need and preference is given to students majoring in music or science. (FAFSA)

***The Vicki and Abe Kalfus Endowed Scholarship** was established to assist students intending to major in accounting, political science, or the medical field. The recipient must be enrolled as a full-time student, be a Virginia resident and citizen of the U.S and demonstrate financial need. (FAFSA)

***The Adam Shelby White Study Abroad Scholarship Endowment** was established to assist an undergraduate Pell Grant-eligible student. A committee chaired by the Senior International Officer will select the recipient. Student must be in good academic standing and cannot have any violations of the University's honor code. (FAFSA)

The George Wilcox Kirby, Jr. Scholarship was established by George Wilcox Kirby, Jr. to assist full-time undergraduate students.

The Monarch Athletic Bands Endowed Scholarship was established by the Old Dominion University Educational Foundation. The recipient(s) must be a full-time undergraduate or graduate student, successfully complete an audition, and maintain a minimum GPA of 2.5 for an undergraduate student or minimum GPA of 3.0 for a graduate student.

The Old Dominion Model U.N. Society Alumni Jean Gazarian Memorial Scholarship was established to assist a full-time Sophomore, Junior or Senior student who is a member of the ODU Model UN. Student must be active in more than one club or organization on campus. Recipients must have a grade point average of at least 2.75.

The C. Donald Porter Endowed Scholarship in Music was established by Retail Alliance in honor of its former President C. Donald Porter. The scholarship recipient must be enrolled as a full-time undergraduate student majoring in music with a concentration in piano. The student must also maintain a cumulative GPA of 3.0 or better.

***The Pybus Family Scholarship Fund** was established to assist a full-time undergraduate or graduate student who demonstrates financial need. (FAFSA)

The James Stamos Scholarships in Voice and Piano are made possible by a bequest from Mr. Stamos to assist several students who are majoring in either voice or piano. Information concerning audition requirements is available from the F. Ludwig Diehn School of Music. Contact the chair of the school. (AUDITION) (757) 683-4061

***The Charles Redford "Red" Stone Scholarship** was established to assist a full-time student in good academic standing. The student must demonstrate financial need. (FAFSA)

The Student Activities Scholarships in music are awarded to students who participate in one or more School of Music activities including concert choir, band, orchestra, Madrigal Singers, and brass choir. Information concerning audition requirements is available from the School of Music. Contact the chair of the school. (AUDITION, PARTICIPATION) (757) 683-4061

The Viburnum Acting Endowed Scholarship Fund was established by the Viburnum Foundation to provide monetary awards to acting students. (AUDITION)

Veterans and Dependents Benefits

Virginia Military Survivors and Dependents Education Program (VMSDEP)

The Virginia Military Survivors and Dependents Education Program (VMSDEP) is a Commonwealth of Virginia program that provides education benefits to spouses and children of qualifying veterans who have been rated by the U.S. Department of Veteran Affairs (USDVA) (<https://www.va.gov/education/survivor-dependent-benefits/>) as totally and permanently disabled or at least 90 percent permanently disabled as a result of military service or qualifying military service members killed, missing in action, taken prisoner, or who have been rated by the USDVA as totally and permanently disabled or at least 90 percent permanently disabled as a direct result of involvement in covered military combat. Military service includes the United States Armed Forces, United States Armed Forces Reserves, or the Virginia National Guard. VMSDEP assists survivors and dependents of qualified veterans or service members in attaining their educational goals.

The Virginia Department of Veterans Services (VDVS) (<https://www.dvs.virginia.gov/home/showpublisheddocument/148/638538872385700000/>) is responsible for certifying eligibility for benefits under the Virginia Military Survivors and Dependents Education Program.

The State Council of Higher Education for Virginia (SCHEV) (<https://www.virginia.gov/agencies/state-council-of-higher-education-for-virginia/>) and Virginia's public colleges and universities are responsible for applying the financial aid benefits (tuition/fee waiver, stipend) available under VMSDEP.

Benefits are available for up to eight semesters, the equivalent of four academic years.

Students who are certified by VMSDEP are eligible for educational benefits (a waiver of tuition and mandatory fees). **Housing and meals are not included.**

In addition, as funds are available, eligible students may receive a stipend to offset other educational expenses incurred by the student, such as room, board, books, and supplies. Please note that the stipend will **not be available** for the advance purchase of books.

Only students appearing on the verification rosters released by SCHEV to the institutions will be funded for the terms specified as authorized, regardless of certification/verification from any other source.

Stipends Priority Funding System for Fall and Spring

Because there may not be sufficient funding to make full VMSDEP stipends to all eligible students, a priority funding system will be used to determine the order and number of stipends. Students in a higher Priority category must receive their full projected annual stipend, as determined by SCHEV based on student enrollment level before subsequent categories are considered for funding. Only students appearing on the verification rosters released by SCHEV to the institutions will be funded for the terms specified as authorized, regardless of certification/verification from any other source.

To apply for VMSDEP, students must submit the application on the Virginia Military Survivors web site <https://www.dvs.virginia.gov/>.

Once approved, students are required to report enrollment plans via the VMSDEP portal for each term they wish to use benefits within the established open and close dates. Once the request is approved by VMSDEP, the student's name will be placed on the roster in the VMSDEP portal. The student's financial aid account will be noted with the enrollment and expected tuition amount. Please note VMSDEP only covers the tuition costs. Housing and meals are not included. Tuition payment may be adjusted for enrollment changes or tuition charge revisions.

The student's name must match the name listed in the ODU system to be processed. For example, if the name listed with VMSDEP is Bobby Smalls, the ODU name listed must also be Bobby Smalls. It cannot be Bob Smalls or Robert Smalls. VMSDEP funds cannot be processed if the student names do not match in both systems. It is strongly encouraged to have the student

social security number on file to prevent processing delays. The student's domicile/residency must also be determined. Submit the request for instate tuition form or contact the Office of the Registrar for assistance. Students with a pending domicile status cannot be processed.

VMSDEP can only pay the authorized term tuition charge. Late fees may be assessed if the student is not listed in the portal timely and will be the responsibility of the student.

Approval for late submission of VMSDEP request for awarding of benefits will be at the discretion of the ODU Office of Financial Aid.

The student must report enrollment plans in the VMSDEP portal during the open and close established deadlines for tuition to be applied to the term requested. If you do not complete your enrollment update by the listed *Close (Due by)* date and time, you must request retroactive approval from your attending Virginia public college or university; and **if approved**, the respective institution will notify the VMSDEP Office of such approval; upon which, the Office will authorize the qualifying semester. The financial aid office decision on retro request is final.

Note: Once the academic year is closed for processing (August 1), ODU can no longer approve VMSDEP tuition retro request.

Students should follow the VMSDEP application deadline guidelines to ensure they are approved for the semester they want to start the benefit.

VMSDEP Award Information

As a state veterans' benefit, the VMSDEP will be included as a financial resource in the financial aid package and may reduce state grants*, University grants or scholarships, federal loans, federal work-study, and private loans. Each financial aid offer type is different, so the benefit may affect each person's offer differently.

***A student cannot receive both VMSDEP and state grants (Commonwealth and VGAP). The state grant award will be cancelled once the student is authorized for VMSDEP.**

Tuition benefits (Tier 1 and Tier 2)

Eligible students, as confirmed by DVS, are guaranteed a waiver of all tuition and mandatory fees for eight semesters at a Virginia public college or university and Eastern Virginia Medical School. Please note tuition and mandatory fees are waived.

Housing, dining, books, and supplies are considered educational expenses; however, they are not considered mandatory fees and are not waived under this program.

Stipend benefits (Tier 2 only)

Eligible students may receive a stipend to offset educational expenses such as housing, dining, books, and supplies. The State Council of Higher Education for Virginia (SCHEV) works with DVS and the public colleges and universities in disbursing funds. The amount of the stipend is determined annually by SCHEV and is dependent on the student's enrollment status, the number of participating students, and available funding. Stipends are awarded later in the semester when funds are received from SCHEV.

Funds will be applied to the student's account 2-3 business days AFTER the last day to withdraw and receive 50% tuition refund or credit deadline of each term.

Students eligible for the stipend will receive those funds later in the semester once approved by SCHEV.

Students should not allow technical issues to prevent them from requesting their benefits. Contact VMSDEP directly for help with technical issues. Representatives are available to assist Monday-Friday, 8 a.m. - 4:30 p.m. Their contact information is as follows:

VMSDEP Contact Information

Phone - (804) 225-2083

Email: vmsdep@dvs.virginia.gov

Delays in submitting your VMSDEP request can lead to holds and late penalties. To avoid delays and possible late penalties, submit your request in a timely manner and by following up with VMSDEP should have questions or concerns.

VMSDEP is handled by the Office of Financial Aid Office. All other Veterans programs are handled by VASERVICES in the Military Connections Center.

Information about the administration of education assistance under the Veterans Administration may be obtained from the VA website: www.vba.va.gov (<http://www.vba.va.gov/>). Students wishing to use their VA benefits at Old Dominion University may find further information on the Military Connections Center <https://www.odu.edu/military-connection>. ([http://www.odu.edu/military/students/veterans-services %20/](http://www.odu.edu/military/students/veterans-services%20/))

This institution is approved to offer GI Bill® educational benefits by the Virginia State Approving Agency. GI Bill® is a registered trademark of the U.S Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website at <http://www.benefits.va.gov/gibill> (<http://www.benefits.va.gov/gibill/>).

Contact the Military Connection Center for further assistance:

1106 Monarch Hall

Phone: 757 683-7153

Email: vaservices@odu.edu

Termination of Aid

Failure to remain in good academic standing will result in automatic withdrawal of financial aid by the University. Failure to comply with the conditions of a financial award will cause its termination and the return of any unexpended funds as well as repayment, in some cases, of funds already utilized. Undergraduate-specific endowed scholarships will be withdrawn immediately for the term in which an undergraduate student advances to an admitted graduate student status.

Financial Aid for Graduate Students

For information on financial aid for graduate students and graduate assistantship guidelines, refer to the Graduate Catalog (<http://catalog.odu.edu/graduate/>).

Policies

- Academic Policies (p. 49)
- University Policies (p. 61)

Academic Policies

Academic Credit For Extracurricular Activities

Extracurricular activities may be approved for credit for undergraduate students by academic departments, based on objectives, criteria, and evaluative procedures formally determined by the department and the student before the semester in which the activity is to take place. Such credit is subject to the review of the provost and vice president for academic affairs.

Guidelines

The following guidelines regarding the administration of the policy on granting credit for extracurricular activities will provide university-wide standards on this matter. Within these standards individual departments may establish credit activities appropriate to their particular discipline.

1. A department may grant credit for extracurricular activities that fall within the academic interests of the department.
2. The extracurricular activity for which credit is to be granted must have demonstrable academic value.
3. A student desiring academic credit for extracurricular activity shall, prior to the semester the credit is to be granted, formally petition the chair of the department, describing the proposed project in detail and justifying its academic value.
4. If the department chair considers that a petition has merit, the chair will refer the student to a faculty member with expertise in that area. The student and the proposed faculty supervisor will refine the student's project. The faculty member will then make a recommendation to the chair concerning the validity of the project, the amount of credit to be awarded, and the grading system to be employed (pass/fail or letter grade). The recommended plan will include a description of the nature of the supervision and methods of evaluation to be used.
5. A recommended project approved by the chair will then be sent to the dean for approval.
6. If the project is approved, the student will then register for the appropriate course number and credit hours. Each department interested in granting credit for such activity will establish courses numbered "377, 378" for one to six credits each semester and titled "Extracurricular Studies."
7. After completion of an approved project, the student will submit a report to the faculty supervisor. This report will be retained by the faculty supervisor for examination by the department chair and/or other interested persons.
8. The faculty supervisor will review the results of the project and submit the appropriate grade to the Registrar.
9. The burden of justifying a project and documenting the results rests on the student. It is also to be emphasized that credit will not be given retroactively.

Academic Testing and Placement

The University administers a variety of tests for both internal and external populations. University Testing on the fourth floor of the Perry Library provides testing services for the College of Sciences, make-up exams, and ODUGlobal, as well as math placement tests. The Credentialing Center on the first floor of the Student Success Center provides the ODU foreign language placement test, as well as external testing services, which can be taken by Old Dominion University students and the general public. Examples of Credentialing Center exams include CLEP, Praxis, HESI, Kryterion, Measure Learning, and tests offered through PearsonVUE. For

information about testing services at Old Dominion University, please visit www.odu.edu/testing-center (<http://www.odu.edu/testing-center/>).

Writing Placement. All undergraduate students who have not earned credit for ENGL 110C through dual enrollment, Advanced Placement (AP), the College Level Examination Program (CLEP) or transfer from another institution are **required** to complete the Writing Success Placement Tool (WSPT) in order to enroll in first-year writing courses. Students with a score of 3 on the WSPT are required to register for ENGL 110C or ENGL 126C without the corequisite course, ENGL 101 Composition Studio. Students with a score of 1 on the WSPT will need to enroll in ENGL 101 and ENGL 110C in the same semester. ENGL 101 is a 3-credit elective corequisite course designed to complement and extend the ENGL 110C curriculum. Students who feel as though their placement is inaccurate can appeal the decision by contacting the Director of Writing Placement and Support (<https://www.odu.edu/englishdept/general-education/writing-placement/>) who will put them in contact with an advisor from the Writing Program.

Undergraduate students with transfer credit for ENGL 110C or ENGL 211C/ENGL 231C are not required to complete the Writing Success Placement Tool (WSPT). However, they are expected to be competent writers and must possess writing skills equivalent to those described in the outcome statements for equivalent ODU courses (i.e., ENGL 110C, ENGL 211C/ENGL 231C). Although students with transfer credit for ENGL 110C, or ENGL 211C/ENGL 231C are not required to take the WSPT, those wishing to complete the WSPT for diagnostic purposes may do so by contacting the Director of Writing Placement and Support.

ODUGlobal students are considered part of the aforementioned cohorts (students with or without transfer credit for ENGL 110C) and must meet the assessment requirements of the undergraduate writing program. Students should contact their advisor with questions or concerns.

Waiver Option for ENGL 110C and ENGL 211C/ENGL 231C

Waivers for ENGL 110C and ENGL 211C/ENGL 231C may be available to students who meet certain criteria. Please see the Writing Program Requirements area under the Academic Policies (p. 49) section of this catalog for additional information.

Math Placement. All incoming freshman students and transfer students are eligible to enroll in MATH 101M. Placement into MATH 103M will be based on a student's high school GPA. Students who require MATH 103M and do not have a qualifying GPA should complete the ALEKS PPL placement program by obtaining a sufficient score on the ALEKS proctored placement test prior to registering for classes and no later than two weeks before the start of the semester. For those who do not use the ALEKS PPL placement program to place into MATH 103M (and have not been granted equivalent transfer math credit), a one-credit 8-week course, MATH 100, is available to gain entry into the course. Successful completion of MATH 100 will delay students' progress toward their math requirements by at least one full semester. Placement into STAT 130M, MATH 102M, MATH 162M and above will be based on a student's ALEKS placement score or their SAT or ACT score.

Students can challenge their math placement by making an appointment to take a math placement test at the University Testing Center. Students challenging their placement may take the math placement test up to the start date of the semester; however, test scheduling availability and course registration options may be severely limited two weeks prior to the semester start.

Foreign Language. All students who have studied a foreign language in high school for three or more years must take a placement exam before continuing in that same language. Students with less than three years of foreign language study in high school may take the placement test if they wish to begin higher than 101F or 111F; otherwise, they must begin with the 101F course or 111F course. This policy does not apply to students who have advanced placement credit. Foreign language courses below the 300 level are not open to native speakers. Heritage speakers may be eligible to take foreign language courses below the 300 level depending on their language skills. Both native and heritage speakers should consult a foreign

language faculty member for advising before enrolling in language classes at any level.

Students whose native language is not English and who have satisfied English language proficiency requirements (see the section of this catalog on English Proficiency Requirements for Non-Native Speakers of English) are exempt from the foreign language requirements for General Education, including exemption from foreign language placement testing. Students pursuing degrees that require proficiency beyond the 100 level must be certified by the World Languages and Cultures Department to obtain a waiver of the 200-400 level courses. Foreign language courses below the 300 level are not open to native speakers; native speakers are not eligible to earn credit for foreign language courses below the 300 level through coursework or external testing services such as CLEP. Heritage speakers may be eligible to take language courses below the 300 level. Both native and heritage speakers wishing to take language classes at any level should consult a foreign language faculty member for advising.

Exemptions

Written Communication. Students may satisfy the requirement for the first semester of General Education written communication based on their performance on one of two national examinations. Three hours of credit for ENGL 110C will be earned if the student receives either:

1. a score of 3, 4, or 5 on the Advanced Placement Examination in English Language and Composition; or
2. a score of 50 or higher on the College-Level Examination Program (CLEP) English Composition with Essay Examination

Mathematics. Students desiring credit by examination for mathematics and statistics courses should apply to take either the DANTES or CLEP test(s) at the Credentialing Center.

Foreign Language. Students may be exempt from the General Education Foreign Language requirement (without credit) in one of the following ways:

1. presentation of three high school credits in one foreign language or American Sign Language (ASL);
2. presentation of two high school credits in each of two foreign languages or one foreign language and American Sign Language (ASL); or
3. presentation of an appropriate passing score on the CEEB Foreign Language Achievement Test, internal ODU placement test, or its equivalent. Appropriate passing scores can be found on the Office of Admissions website.

Credit is granted for scores of 3, 4 and 5 on Advanced Placement (AP) language exams in Chinese, French, German, Italian, Japanese, and Spanish and literature exams in French, Latin and Spanish. No more than nine credits will be awarded if both AP language and literature exams are submitted. Credit is also granted for scores of 4, 5, 6 and 7 on the A2 and B exams in French, German, Latin and Spanish of the International Baccalaureate (IB). Contact the Department of World Languages and Cultures for additional information. Students receiving B.A. degrees must demonstrate foreign language proficiency through the 202 or 212 level regardless of high school credits completed.

All placement tests described above are administered by the University Testing Center except the foreign language placement test. Contact information can be found on the web at www.odu.edu/testing-center (<http://www.odu.edu/testing-center/>).

Activity Credits

The University sets a limit of 12 credit hours earned in activity courses that may be applied to any undergraduate degree. The individual college will determine the maximum number of such credits that students may apply in fulfillment of their particular degree requirements. In unusual circumstances, activity credit beyond the established college maximum will require the approval of the appropriate dean. In any case, the total number authorized by the college shall not exceed the limit set by the University. (Students may be counseled but not required either to take or avoid specific activity courses outside their own fields of study. They are further advised to limit

the number of activity credits taken until they have ascertained the limitation on such credits set by the colleges in which they propose to major.)

Activity courses are generally defined as those that are not predominantly academically oriented and that are service, skill, recreational, or craft in nature, such as performing ensembles and organizations in music, one-credit health and physical education service courses, theatre arts activity courses, and certain military and naval science courses. All activity courses shall be identified specifically in the catalog and the class schedule and can be recognized by the “+” symbol following the course number.

Activity credits required by a student’s major department will not be counted against the credit limitation, nor will the credits earned in courses numbered 377-378 that involve extracurricular studies.

Adjusted Resident Credit

Any undergraduate student who leaves Old Dominion University for at least one calendar year will be given the option of requesting a grade-point-average status equivalent to that of a student admitted as a transfer according to the following conditions and regulations.

1. Prior to the one year’s absence, the student must have a cumulative grade point average less than 2.00.
2. The student must have separated from the institution for at least one calendar year. A term in which the student received W grades cannot be counted as part of the calendar year separation.
3. Upon returning to the University, the student must earn a minimum of 30 credits at Old Dominion University to be eligible for a degree. This must include twelve hours of upper-level courses in the declared major program.
4. Upon return, a full-time student must have attained a 2.00 grade point average for all work attempted since his or her return and must have completed a minimum of 12 semester hours. There may be no incomplete grades in the record. Courses that do not compute in the grade point average will not count toward the minimum of 12 semester hours.
5. Upon satisfying the above requirements, the student must submit the application for Adjusted Resident Credit to the Office of the University Registrar.
6. This option will be available only once during the student’s career at Old Dominion University. In all cases, the Adjusted Resident Credit option must be elected and the student’s record adjusted prior to graduation. Waivers of the requirement that students have less than a 2.00 grade point average can be made only in those programs that require greater than a 2.00 for admission.
7. Consultation and approval by the appropriate department and approval of the dean(s) of the college(s) in which the student’s major program resides will be required. Once an application for Adjusted Resident Credit is approved and applied to the student’s record, this action is final.
8. Students may elect to use both grade forgiveness and the Adjusted Resident Credit Policy. However, students cannot use grade forgiveness for individual courses for which adjusted resident credit already has been applied. In addition, the application of adjusted resident credit will not change the number of times a student can elect to use grade forgiveness.
9. Under this option: (1) eligible students will receive degree credit only for those courses in which grades of C (2.00) or better were earned prior to readmission; (2) likewise, hours attempted for courses in which grades of C-, D+, D, D- or F were received prior to readmission will not be considered in computing the student’s new cumulative grade point average; and (3) grade points earned for any course completed prior to readmission will not count in determining the student’s new cumulative grade point average.
10. All grades received at the University will be part of the individual’s official transcript and will be used to determine honor awards. However, computation of a new grade point average for graduation and continuance will be based on work performed subsequent to reinstatement.

11. In cases of dual jurisdiction, University continuance regulations will prevail.

Before making the request for the Adjusted Resident Credit process, all students should consult their academic advisor. In addition, any student who is a financial aid recipient should consult his or her financial aid counselor in the Office of Financial Aid. Application of the Adjusted Resident Credit Policy may adversely impact the student's Satisfactory Academic Progress and subsequent eligibility for federally funded financial aid.

Students wishing to avail themselves of this policy may receive procedural information from the Office of the University Registrar.

Assessment Requirement

In response to demands by the University's accrediting agencies, including the Southern Association of Colleges and Schools – Commission on Colleges and the State Council on Higher Education for Virginia, Old Dominion University has developed an institution-wide plan to assess the quality of its academic programs and services. The plan calls for the assessment of student learning at the beginning, during, and at the end of the college experience.

Upon enrollment in the University and again prior to the completion of degree requirements, all undergraduate students must take one or more measures related to the University's assessment plan. Students will be notified about the requirement to complete the measures through their University email address. The email invitations will contain a link to the University's web-based assessment tool where the measures can be completed at the student's convenience. Assessment results are used for program improvements and thus are not a part of the student's transcript.

Sanctions for Noncompliance with Assessment Testing Requirement

All undergraduate students are required to participate in the assessment program. Failure to take assessments when required to do so may preclude the student's right to register for the ensuing semester, or in the case of seniors, receive the baccalaureate degree.

The University will make all reasonable efforts to assure that students have ample opportunities to complete the required assessments. However, certain precautions will be taken to ensure that students submit to the assessment measures and that they take the measures seriously. Further information regarding sanctions procedures is available in offices of college deans and the Office of Institutional Effectiveness and Assessment.

Assignment Submissions

Coursework is to be delivered to the instructor using the method specified. Electronic and postal delivery may be required.

Attendance Policy

Regular classroom attendance is expected of all students and individual faculty may require class attendance. Course grades reflect not only performance on written assignments and exams, but also participation during class periods. As discussions cannot be reproduced, many times absences cannot truly be made up. Excessive absences therefore have a negative effect on the student's learning and performance. Students are responsible for all class work, and a student who misses a class is expected to have the initiative necessary to cover properly the material missed. Students must meet all course deadlines and be present for all quizzes, tests, and examinations.

Syllabus information will include a statement of the attendance policy for each course and the effect of nonattendance on grades. Reasonable provisions should be made by the instructor for documented representation at University-sponsored athletic or academic functions, mandatory military training and documented illness. The granting of provisions for other documented absences is left to the discretion of the faculty member.

Due to the nature of asynchronous courses, students are expected to participate in class, but in formats that may not require attendance at regular intervals.

Extended illness. The student should notify the Office of Student Enrollment, Engagement & Services when the student is going to be absent from classes for more than one week because of an illness. Student Enrollment, Engagement & Services will notify the student's course instructors of the absence on his or her behalf.

Baccalaureate Degree Requirements

A candidate for a baccalaureate degree must present a minimum of 120 semester hours (except where otherwise noted in degree program descriptions). A minimum overall cumulative grade point average of C (grade point average of 2.00) must be made in all courses taken, and an overall cumulative grade point average of at least 2.00 must be attained in the major except in those programs requiring a grade point average above 2.00. Grades in all courses taken, including failing grades (except courses in which grade forgiveness was applied), are counted when calculating a student's cumulative grade point average. Grades in all courses taken in the major, including failing grades, are counted when calculating a student's grade point average in the major. Students completing a minor must have a minimum overall cumulative grade point average of 2.00 in all courses taken toward the minor.

Class Attendance by Guests

Statement: The propriety for non-student presence in the classroom will vary dependent upon the nature of curricular offerings, dangers inherent to certain classrooms and labs, the optimum classroom environment for each class, and the preferences of each instructor. Guidelines specifying whether non-student guests will be permitted in the classroom, which are consistent with departmental policy, will be established for each class by the instructor.

Dean's List

The Dean's List is announced at the end of each term. Any undergraduate student taking 12 or more hours of degree credit for grade point credit who attains a grade point average of 3.40 or higher with no grade below C (2.00) is placed on the Dean's list. The student must also receive a passing grade on any nondegree credit courses in which he or she is enrolled. Students who receive grades of I are not placed on the Dean's List.

Duplicate Courses

An undergraduate student who has taken two courses that are designated by the department as duplicate may apply only one toward a degree. Courses considered to be duplicate are so designated in the course descriptions found elsewhere in this catalog. For example, a student receiving credit for BIOL 121N and BIOL 122N cannot receive credit for BIOL 110N and BIOL 111N.

Final Examinations

The University firmly believes that a comprehensive evaluation of a student's achievement in a course is a vital part of the educational process. Final examinations for campus-based and higher education center courses, if given, are to be given at the time provided on the Registrar's Office website at www.odu.edu/registrar (<http://www.odu.edu/registrar/>). Upon request of the instructor, exceptions to this regulation may be made only by the dean. Final examinations are normally scheduled in the classroom where the course has met throughout the semester.

In the event that a final examination is changed to other than that of the scheduled time, provisions will be made by the instructor for any student who cannot comply with the schedule change.

Any student who has three examinations scheduled in one calendar day and is unable to resolve the problem informally with the instructor or instructors may petition the dean for relief.

All examinations are to be retained for one year by the faculty members. Students have the privilege of requesting conferences with the instructors in regard to their final grades.

All online final exams shall be available for students to complete in a minimum 24-hour window as defined by the professor, including one business day, during the final examination period as defined for that course.

Students in online classes who need a proctor should follow this guidance: <https://online.odu.edu/academics/academic-resources/exams-and-proctors> (<https://online.odu.edu/academics/academic-resources/exams-and-proctors/>). (<http://dl.odu.edu/how-it-works/exams-proctors/>)

Grading

Grade	Grade Points	Undergraduate	Graduate
A	4.00	Superior	Excellent
A-	3.70	Superior	Excellent
B+	3.30	Good	Good
B	3.00	Good	Good
B-	2.70	Good	Fair
C+	2.30	Satisfactory	Poor
C	2.00	Satisfactory	Poor
C-	1.70	Passing	Poor
D+	1.30	Passing	Not Used
D	1.00	Passing	Not Used
D-	0.70	Passing	Not Used
F	0.00	Failing	Unsatisfactory
WF	0.00	Unofficial Withdrawal	Unofficial Withdrawal
P	None	Pass	Pass
F (P/F)	None	Fail	Fail
O	None	Audit	Audit
I	None	Incomplete	Incomplete
II	None	Not Used	Incomplete not Subject to Time Limit
W	None	Official Withdrawal	Official Withdrawal
Q	None	Progress but not Proficiency	Not used
Z	None	No Grade Reported	No Grade Reported

The use of plus and minus grades is at the discretion of the instructor.

The grade point average is calculated by dividing the accumulated number of grade points earned by the accumulated number of credit hours attempted. Grades of F and WF and repeats are included, but official withdrawals, audits, and grades on noncredit courses and pass/fail degree courses are not included. All undergraduate-level courses, including courses taken as a non-degree seeking student and courses taken after graduation, will be included in calculating the undergraduate cumulative grade point average. All graduate-level courses, including courses taken as a non-degree seeking student and courses taken after graduation, will be included in calculating the graduate cumulative grade point average.

For completion of an undergraduate degree or certificate, a student must have a minimum cumulative grade point average of C (grade point average of 2.00) in all courses taken and a grade point average of at least 2.00 in the major except for those degree programs or certificate programs requiring grade point averages above a 2.00.

A minimum cumulative grade point average of 3.00 is required for the award of a graduate degree or certificate.

Grades in courses accepted for transfer credit are not counted in the computation of grade point averages.

Grades are available to students through the secure website. Grades are mailed to students only if a written request is submitted to the Office of the University Registrar.

WF and W Grades. The grades of WF and W indicate withdrawal from a course only under those conditions described in the sections entitled Class Schedule Change Procedure and Grading Policy for Withdrawal From Classes.

Incomplete Grades. A grade of I indicates assigned work yet to be completed in a given course or absence from the final examination and is assigned only upon instructor approval of a student request. The I grade may be awarded only in exceptional circumstances beyond the student's control, such as illness, and only after 80% of the time allocated for the course has elapsed and substantial progress has been made toward completion of course requirements with the exception of courses that do not fit within the traditional semester calendar.

In cases of exceptional circumstances beyond the student's control, it is the responsibility of the student to approach the instructor to request an I grade and to provide documentation, including a written statement of when the work will be completed, to support the request. The authority to award an I grade rests with the instructor whose decision is final. Students whose requests for I grades are approved must not re-register for the class until the I grade has been resolved. The I grade becomes an F if not removed when grades are due the following term according to the following schedule: I grades from the fall semester become F's if not removed by the day grades are due for the spring semester; I grades from the spring semester and the summer session become F's if not removed by the day grades are due for the fall semester.

When there is an existing incomplete grade and the instructor who assigned the incomplete has left the university or is no longer available, the chair of the department or the program director will be responsible for making sure that the completed work is graded, and a final grade is submitted.

An I grade may be changed to a W only in very unusual circumstances and when the student's situation has changed since the I grade was awarded. In these cases, the request for a change to a W must be in writing, documented, and approved by the instructor, department chair and dean. Students will not be allowed to graduate until all grades of I have been resolved.

In the case of courses that do not fit within the traditional semester calendar, the faculty member assigns the I grade. The time periods for the removal of I grades before they become grades of F are the same as those stated in the previous paragraph.

Extension of the I time limitation normally will not be approved except for reasons beyond the student's control and only if the supervising faculty member is available and willing to supervise the work beyond the normal time limit. Students should submit the request to the instructor, who should submit approval, via the chair, to the University Registrar in order to retain the I. The approval from the instructor should designate the expiration date of the extension.

A grade of II indicates incomplete work not subject to the time limits described above for I grades. The II grade can be used only in those courses directly related to the research for and preparation of the graduate thesis/dissertation.

Z Grades. A grade of Z indicates that no grade has been reported by the instructor and will convert to a grade of F if not removed through the last day of classes of the following term (excluding the exam period) according to the following schedule: Z grades from the fall semester become F's if not removed by the last day of classes of the spring semester; Z grades from the spring semester and the summer session become F's if not removed by the last day of classes of the fall semester. Students will not be allowed to graduate until all grades of Z have been resolved.

Interim Academic Evaluation

Faculty teaching 100- and 200-level undergraduate courses will provide specific feedback regarding progress in the course in the fifth week of the semester in the fall and spring semesters. Providing timely information to

students on graded work makes students aware of their performance so they can determine whether to seek additional help from the faculty member, tutoring services when available, their academic advisor, and/or withdraw from the course prior to the established deadline for withdrawal.

Mid-Semester Feedback

The University believes that regular assessment of students and feedback to them is essential to effective teaching and learning. Therefore, faculty members will provide all students with evaluation of their progress in a course prior to midsemester (or equivalent in a nonsemester course) so that students have information about their progress before the withdrawal deadline, which is the end of the tenth week of classes.

Grade Forgiveness

Under the Grade Forgiveness Policy, undergraduate students seeking a baccalaureate degree may improve their grade point average (GPA) by repeating up to five courses taken previously. Each repeated course must be the same course as taken previously and must be completed through Old Dominion University. The registrar automatically applies the Grade Forgiveness Policy to all eligible course repeats at the end of each semester. The Grade Forgiveness Policy became effective for the Fall 1997 semester. Courses repeated prior to the Fall 1997 semester are not eligible for grade forgiveness. Grade forgiveness will not be processed after a student graduates.

Grade Forgiveness Policy

Undergraduate students are subject to the following conditions and requirements.

1. Students who receive a grade of C– or lower (grades of C–, D+, D, D–, F, and WF) may repeat up to five courses to improve the overall grade point average. Only the first five repeated courses will be forgiven. Students are not given an option to select which course might be forgiven. A course may be repeated once with grade forgiveness applied. Grade forgiveness is automatically applied only to the first repeat of a course with an original grade of C– or less, regardless of how many times the student may elect to repeat the course for other reasons. The Grade Forgiveness Policy will not be applied to courses for which a grade of C or higher was ever earned. Additional courses that are not eligible for grade forgiveness include courses taken under the pass/fail option, courses taken under the audit option, courses for which a grade of W was the only grade awarded, courses that currently are incomplete (I grade), or courses for which a grade of F was awarded as a result of an act of academic dishonesty.
2. The Grade Forgiveness Policy applies only to the repeat of the same course (same number, same title, same credit value, and, for topics courses, same subtitle and same credit value). Exceptions will be made where the course number or title is the only change and the change is documented in the Catalog and approved for grade forgiveness by the assistant vice president for undergraduate studies.
3. The Grade Forgiveness Policy will not be extended to courses originally taken elsewhere, including Norfolk State University and institutions with which Old Dominion University has consortia arrangements. In addition, courses repeated at other institutions will not be used to forgive Old Dominion University courses.
4. Students may not be able to repeat a course in the following cases: enrollment is restricted, the student no longer qualifies for admission to a course, the prerequisites are enforced, major or sequence requirements have been changed, or the curriculum has been revised. In such cases the decision of the assistant vice president for undergraduate studies in consultation with the appropriate academic department will prevail. Exceptions are granted only in rare instances. In any course or program where enrollment demand exceeds the resources to offer sufficient openings or sections to meet that demand, the academic unit may give registration priority to students taking the course for the first time.
5. Students may elect to use both grade forgiveness and the Adjusted Resident Credit (ARC) policy. However, students cannot use grade forgiveness for individual courses for which adjusted resident credit already has been applied.
6. Students who have graduated may not use the provisions of this policy to repeat for forgiveness a course taken prior to the date of graduation. Once a bachelor's degree has been awarded, a student may not raise the undergraduate grade point average by repeating a course taken as an undergraduate.
7. Under this policy, only the second grade earned, whether higher or lower than the original grade, will be calculated in the grade point average for the purposes of continuance, graduation, etc. Any repeats of a course after grade forgiveness has been applied will be averaged with other course work. All grades will remain on the student's permanent record, but the record of a previous grade in the course will be marked to indicate that the course has been repeated. Academic suspensions will not be removed from student transcripts and Dean's List status will not be added after grade forgiveness is applied to the student record in cases where the grade point average is improved sufficiently to change the student's status for the semester in question.
8. An enhanced grade point average using the Grade Forgiveness Policy does not determine eligibility for graduation with honors. To determine eligibility for graduation with honors, the student's complete record, including grades (grade points and hours) for courses that have been forgiven, will be evaluated to calculate the final grade point average. If the student's overall average is sufficient, graduation with honors will be posted to the student's record.
9. In cases where the student repeats a course in which a grade of C or better was awarded, all grades received, including the original grade, and all hours earned will be used for calculation of grade point averages. The course will count only one time toward graduation certification and degree completion.
10. Students receiving financial aid should consult with their Financial Aid representative to determine how use of this policy may affect financial aid status.
11. Other schools, including professional and graduate schools, may not honor this policy on repetition of courses with forgiveness.
12. Veterans should consult the Office of the University Registrar to determine the impact of course repetition on their eligibility for benefits.

Grade Appeals: Policy and Procedures

- I. Policy and Purpose
 - A. The purpose of the grade appeal procedure is to serve the needs of graduate and undergraduate students who believe that they were unjustly awarded a final course grade by a faculty member through prejudice or caprice. This policy applies to the final grade for the award of academic credit and does not apply to graduate and undergraduate examinations that are administered as part of the degree progression and certification processes (such as comprehensive examinations and candidacy examinations at the graduate level).
 - B. The basis for a grade appeal is the student's charge that the final grade was awarded through prejudice or caprice. The burden of proof rests with the student.
 - C. Students must initiate the first review of the appeal within 45 days of the official end of the semester in which the grade was awarded. For grades awarded and appealed from fall and summer semesters, the entire appeal process must be completed before the official end of the next semester; the entire appeal process for grades awarded and appealed from the spring semester must be completed before the official end of the next fall semester.
- II. Procedure

Prior to initiating a formal appeal, the student must attempt to consult with the instructor to request an explanation of the method of evaluation and to determine whether an error has been made. This consultation may be face to face, via e-mail, phone, or video conference if both agree, and efforts to consult with the instructor must be documented by the student. If at any point in the appeals process the student and instructor, or the student and a subsequent appeals body, agree that a grade of P is acceptable, that grade shall be assigned for the course and the appeals process will conclude. At all stages of the grade appeal

processes outlined below, the instructor and student shall be notified of any actions recommended or taken by the chair, Grade Appeal Review Committee, Dean (or designated Associate Dean) or Provost and Vice President for Academic Affairs (or designated Vice Provost).

A. First Review of Appeal

1. If the student is not satisfied with the results of the consultation with the instructor, or the instructor is not available as described in section IV. B, then the student may file a grade appeal. The chair of the department in which the instructor is teaching will conduct the first review of the student's appeal, unless the instructor is the department chair. The student's case must be presented on the Grade Appeal Form with supporting documents/explanations to the instructor's department chair within 14 days of the consultation with the instructor.
2. The student's Grade Appeal Form should (1) state specific reasons and give examples of faculty prejudice or caprice, (2) show that prejudice or caprice affected the awarding of the final course grade, and (3) be presented as a complete package and include all other supporting documentation.
3. The chair shall notify the instructor of the appeal and provide the instructor with copies of the form and other documents that were submitted. The chair or Dean (or designated Associate Dean) shall also request a response from the instructor that should include at a minimum the course syllabus, grade distribution for the course, attendance policy, the grading plan for the course, and other grading rubrics.
4. The chair shall review all documents and may hold a hearing where both the instructor and student are present. (See section V. for guidelines for hearings.) No other persons will attend the hearing and the hearing must be recorded.
5. If the chair concludes that there is no cause for complaint, the student and the instructor will be notified in writing of the decision within seven days of receipt of the request for an appeal and the supporting documents. The student may request a second review of the appeal (see section II.B. for details).
6. If the chair concludes that there is valid cause for the complaint, the chair should consult with the instructor and student and attempt to mediate the dispute by working with both parties to agree on an appropriate course grade. Among the alternatives available for resolution of the case will be the assignment of the grade of P if the chair, the instructor, and the student express their agreement in writing. If the instructor and student agree to a grade change or to award a grade of P, the instructor will make the official grade change.
7. If mediation fails, the chair will notify the college Grade Appeal Review Committee of the need for a review and submit all documents to the committee. The instructor and the student will be notified of this action.
8. The chair will ask the college Grade Appeal Review Committee to appoint the reviewers within five working days. (See Section III for the composition of the committee.)
 - a. The faculty and the student who form the Grade Appeal Review Committee will notify the instructor and student involved in the appeal when the review will take place and request needed documents.
 - b. The Grade Appeal Review Committee will review the documents, consult with relevant parties as needed and determine if there is sufficient evidence in the documents to support the student's appeal, or if more information is needed in which case a hearing with the student and instructor may be held. (See Section V for details about the hearing.) The review and hearing must be scheduled within 15 days of the receipt of the materials by the committee.
 - c. If the Grade Appeal Review Committee finds that there is sufficient evidence that the grade was awarded with prejudice or caprice, they may consult with the instructor to suggest a grade change and provide a rationale for that decision. The decision and rationale must be provided

in writing to the instructor. The final outcome of the committee's review will be documented and communicated to the instructor, the student, the department chair, and Dean.

- d. If the committee finds on behalf of the student and recommends a change of grade and the instructor refuses to change the grade but is willing to assign a grade of P, then the committee will consult with the student about the advisability of accepting a P grade. Should the student agree to accept a grade of P, the instructor will make the official grade change.
 - e. If the committee finds on behalf of the student and recommends a change of grade and the student is unwilling to accept a grade of P, the Dean will review and make a recommendation to the Provost and Vice President for Academic Affairs. The Provost and Vice President for Academic Affairs or a designated Vice Provost will submit the recommended grade change to the Registrar. Only the Provost and Vice President for Academic Affairs or designated Vice Provost is authorized to change an instructor's grade. The instructor, chair, student, and Dean will be notified. The Provost and Vice President for Academic Affairs' decision will be final.
 - f. If the committee finds on behalf of the instructor, the original grade will stand and the instructor and the student will be notified.
9. If the instructor is the department chair, the student will submit the Grade Appeal Form and documents to the Dean (or designated Associate Dean) and the Dean (or designated Associate Dean) will conduct the first review following the procedures described in II.A.1-8.
 10. If the instructor is a Dean or Vice President, the student will submit the Grade Appeal Form and documents to the chair of the department in which the Dean or Vice President is teaching the course.

B. Second Review of Appeal

1. The student may request a second review of the appeal if the conclusion of the first review is that there is no cause for complaint. The request for a second review must be submitted within seven days of the denial of the first review. The student should request in writing that the person responsible for conducting the first review forward the grade appeal package to the person responsible for conducting the second review. The instructor is notified of this action.
2. When the instructor is a faculty member, the Dean (or designated Associate Dean) is responsible for conducting the second review. If the instructor is the chair and the Dean (or designated Associate Dean) conducted the first review, the Provost and Vice President for Academic Affairs or designated Vice Provost is responsible for conducting the second review. If the instructor is a Dean or Vice President and the chair of the department in which the Dean or Vice President is teaching conducted the first review, the Provost and Vice President for Academic Affairs or designated Vice Provost is responsible for conducting the second review.
3. The second review shall follow the same procedures as the first review, as described in section II.A.1—4.
4. If the person to whom the second review is submitted concludes that there is no cause for complaint, the student and the instructor will be notified in writing that the grade appeal process is complete. No further appeal will be allowed.
5. If the person to whom the second review is submitted concludes that there may be valid cause for the complaint, the procedures as described in section II.A.6-8 will apply.

III. Grade Appeal Review Committee

A. Committee Composition and Duties

1. Each college will create a Grade Appeal Review Committee that has one representative from each department in the college

and a list of potential student members. If an appeal is heard, the Grade Appeal Review Committee will select two faculty members and one student from these lists.

2. Representatives must be full-time tenured or tenure-track faculty in an academic department elected by the department faculty. At least two committee members shall be tenured. No administrator, such as a Chief Departmental Advisor or Graduate Program Director, shall be eligible to serve on the committee.
3. Terms of service will be for two years. Members may be re-elected for an additional two-year term.
4. At the beginning of each academic year, each department in the college will submit a list of full-time students who are eligible and willing to serve on the committee. This list will be formulated each year. When needed, one student will serve on a review committee.
5. The committee will select its own chair and develop guidelines for the review process and procedures.
6. Two faculty members and one student selected from the names submitted by each department will review the appeal including documents from the student filing the appeal and the instructor of record. Neither the faculty members nor the student member shall be from the instructor's or student's department.
7. Both the instructor and the student will have the right to challenge, for valid cause, any or all of the members of the committee, and in that event replacements will be appointed and no further challenge will be permitted.

IV. Instructors' Responsibilities and Rights

A. The following are guides for the instructor's responsibilities and rights.

1. Instructors have a responsibility to meet with students to explain the course grading procedure and the process for determining the final grade.
2. When requested, instructors must provide the documents requested for a review at all levels. These documents will include at a minimum the course syllabus, grade distribution for the course, attendance policy, and grading procedures for course tasks with rubrics. Other documents may be included or requested.
3. The instructor must assist in making arrangements for a hearing when one is needed.
4. Instructors have the responsibility to participate in a grade appeal.
5. No instructor shall be forced or coerced into making a grade change.

B. Unavailable Instructors

1. In the event a student makes documented efforts to consult with an instructor and is unable to find the instructor, or does not receive a response, the student shall seek assistance from the chair.
2. When the chair has made reasonable efforts to contact an instructor whose final grade is being appealed and is unsuccessful, the Grade Appeal Review Committee and chair will independently review available materials and reach a consensual decision. In the event that these two reviews reach different decisions that are not reconciled, the Provost and Vice President for Academic Affairs or designated Vice Provost will make a final decision. No other appeal can be made.
 - a. If the decision is in favor of the student, and the student is not willing to accept a grade of P, the Provost and Vice President for Academic Affairs or designated Vice Provost will submit the recommended grade change to the Registrar. Only the Provost and Vice President for Academic Affairs or designated Vice Provost is authorized to change an instructor's grade upon the recommendation of the college Grade Appeal Review committee.

- b. If the decision is not in favor of the student, the instructor's original grade will remain.

3. In the event of an instructor's unavailability due to death, serious illness, or any other cause that would prevent the instructor from participating in the process in time for the process to be completed during the designated semester, the procedure in II.A.1. and IV.B.2 will be followed.

V. Procedures for Hearings

A hearing involving the faculty member and the student may be held at any level of appeal.

- A. After the Grade Appeal Review Committee reviews the appeal form and supporting documents and the instructor's documents, a hearing may be held to clarify issues and/or to receive further evidence. Both the student and the instructor may submit additional materials at the hearing.
- B. Hearings may be held at any level only when both the instructor and the student can participate. No other persons may attend this hearing.
- C. The conclusions, decision(s), and a rationale for these must be disseminated in writing to the instructor and to the student.
- D. If either the instructor or the student believes that the established procedures for the appeal of grades have not been followed, an appeal for an additional hearing may be made to the Dean (or designated Associate Dean), or when the chair or Dean is the instructor, to the Provost and Vice President for Academic Affairs or designated Vice Provost. The only basis for an appeal will be the failure to have been provided due process as prescribed by the policy.

VI. Records

- A. If the grade appeal concludes after the first review, the original Grade Appeal Form and all decision letters for each level of review will be kept in a secure location in the department chair's office for a minimum of one year.
- B. If the grade appeal advances to the second level, the original Grade Appeal Form and all decision letters for each level of review will be kept in a secure location in the Dean's office for a minimum of one year.
- C. Recordings of hearings will be kept in the department chair's office or the Dean's office for a minimum of one year.

VII. Assignment of P Grade

A P grade established under this policy at any stage of the grade appeal process will be given irrespective of the University policy on hours permitted for P grades or restrictions on when a P grade is permissible and will not prevent progression in the degree program or courses for which this course is a prerequisite.

Guidelines and Procedures for Grade Adjustments for Nonacademic Reasons

1. Students are responsible for notifying the faculty member of errors in the assignment of grades (e.g., a C received instead of an A) immediately upon receipt of the grade. If confirmed, the instructor will submit a grade change using the "Report a Change of Grade" link in the Faculty & Advisors menu in Leo Online. If the grade is older than two semesters or has previously been changed, the instructor should complete the electronic Grade Change Form available via the MyODU portal. Once submitted, the grade change request is forwarded to the chair or program director for consideration. If the chair or program director approves, the form will be signed electronically and forwarded to the Office of the University Registrar for processing. If the chair or program director does not approve, they should notify the instructor of the reasons for denial.

When a grade change is needed and the instructor who assigned the grade has left the university or is no longer available, the student should contact the chair of the department or program director who will be responsible for verifying the change and submitting the electronic Grade Change Form to the Office of the University Registrar.

- Students are responsible for notifying the Office of the University Registrar of administrative errors immediately upon receipt of the grade.
2. Students are notified via email when a change of grade is processed by the Office of the University Registrar.

Minors

In addition to the completion of courses in the area of the major field, a candidate for a baccalaureate degree may complete a minor. The completion of a minor is optional. The minor may be chosen to support the major, to offer greater job opportunities to the student on graduation, or to provide recognition of study in a second academic area. Some minors may not be available for certain majors. Restrictions are determined by Academic Affairs. Completion of a University-approved minor will meet the upper-division General Education Requirements.

Students who complete the course requirements for the minor, but who do not attain a 2.00 grade point average in the minor, may request that the course work be approved to meet the upper-division general education requirement. The request may be initiated through the student's advisor and the associate dean of their college and submitted to the University Registrar. Students whose requests are approved will meet the upper-division requirement, but they will not receive credit for the minor.

For completion of a minor, an undergraduate student must have the following:

1. A minimum of 12 credit hours in a specified minor, normally at the 300 and 400 upper-level.
2. An overall grade point average of 2.0 or above in all courses specified as a requirement in the minor exclusive of prerequisite courses. All 300-, 400-, and approved 200-level courses designated for the minor and taken by the student will be calculated in the student's grade point average for the minor. For example, if the minor requires four courses at the 300- and 400-level and the student completes five courses, all five courses will be included in the calculation of the grade point average for the minor.
3. Six credit hours in the minor from Old Dominion University. No course that is introductory or foundational, or that meets a lower-level General Education requirement, may be included, although such courses may be prerequisites for courses in the minor.

Minors may be proposed by departments and programs and must be approved by the appropriate college committee and dean, by Faculty Senate Committee A and by the provost and vice president for academic affairs. Students may be able to count up to six credit hours toward fulfilling requirements for both a major and a minor, excluding prerequisites, with the approval of the department chair or designee of the major program.

Interdisciplinary minors must be reviewed by all colleges and departments involved prior to submission to Committee A of the Faculty Senate. Three credit hours in the interdisciplinary minor may be in the major, if a major course is listed as an option for the interdisciplinary minor. As such, it will be credited toward both the major and the interdisciplinary minor. Interdisciplinary minors require 12 credit hours of 300/400-level courses selected from at least two different disciplines with a maximum of six credits from any one discipline.

A maximum of six credits for disciplinary minors (or three credits, for interdisciplinary minors) may share with other areas of the student's program. Approval of the department chair, chief departmental advisor, or designee may be required. Special attention should be paid to major/minor combinations where multiple courses overlap to ensure that the student is taking enough unique hours for the minor. Minor coordinators may allow substitutions for courses as needed. Excluding prerequisites, all courses designated as options for the minor and taken by the student will be calculated into the minor GPA.

Specific minor requirements may be found in the section on Colleges, Schools and Departments of Instruction in this catalog.

Procedures

Students who wish to pursue a minor must declare the minor with and be advised by the department offering the minor or their Student Success Director (for online students). Students completing a minor should present the minor for certification when submitting applications for graduation.

Approved academic minors can be found on the programs search link: /programs (<http://catalog.odu.edu/programs/>).

Prior Learning Assessment Credit Options at the Undergraduate Level

Old Dominion University offers a program for assessing college-level knowledge gained through professional work and training experiences prior to attempting a specific ODU course. Students may initiate assessment of prior learning through a variety of assessment tools, including departmental examinations, portfolios, external examinations, or documented training programs, as determined by academic departments. A student may earn a maximum of 60 semester hours at the undergraduate level through Prior Learning Assessment credit. However, in unusual situations when a student can demonstrate a more extensive knowledge base that would be applicable to a degree program, the student can apply to the Prior Learning Assessment representative in Continuing Education for an exception to the maximum of 60 credit hours. Requests will be forwarded to the appropriate department for review. Prior Learning Assessment credit may be granted through the following mechanisms:

1. **External Examinations.** Satisfactory scores on the College-Level Examination Program (CLEP), Defense Activity for Non-Traditional Education Support (DSST), International Baccalaureate (IB), Advanced Placement (AP), Cambridge Advanced (A/AS Level) programs, and professional certification examinations evaluated by the American Council on Education (ACE) for college-level credit. If a CLEP or DSST exam exists and Old Dominion University accepts a qualifying score for credit, the student may not request to take a departmental exam. CLEP and DSST exams are administered through Old Dominion University's Credentialing Center. Qualifying scores through the Advanced Placement Examinations Program, Cambridge Advanced (A/AS Level) programs, or Admissions Testing Program of the Educational Testing Service (ETS) are approved by departments. CLEP, DSST, AP, IB, and Cambridge scores should be reported to the Office of Admissions.
2. **Departmental Examinations.** Upon approval of the chair or dean (designee) of the college in which the course is offered, a student may take a comprehensive examination in an academic course in which he or she can demonstrate proficiency and upon passing the examination receive credit for that course. A request for testing should be made through the Prior Learning Assessment representative in Continuing Education, who forwards the request to the appropriate faculty. A course may be tested through departmental examination one time only.
3. **Credit for Training.** Military and professional training may be evaluated and recommended for college credit by the American Council on Education (ACE). The relevant academic department will recommend specific academic credit for posting to the student's record.
4. **Portfolio Development.** Upon approval of the chair or dean (designee) of the college in which the course is offered, a student may develop a portfolio for a course or courses offered by Old Dominion University to gain college-level credit. Portfolios are submitted to the Prior Learning Assessment representative in Continuing Education.

The following regulations for Prior Learning Assessment credit will apply:

1. All approved Prior Learning Assessment options will be granted with credit.
2. Prior Learning Assessment credit will be granted upon the written recommendation of the chair of the department or designated faculty assessor having jurisdiction over the courses involved with the chair's approval.

3. The applicability of Prior Learning Assessment credit toward specific degree program requirements is subject to departmental approval.
4. A student may not fail a course at Old Dominion University and later receive credit for the same course through a Prior Learning Assessment option.
5. A student may not enroll in a course for credit or audit at Old Dominion University and subsequently seek credit through a Prior Learning Assessment option.
6. No letter grades will be entered on the student's transcript for Prior Learning Assessment credit. This credit will be treated in the same way as transfer credit; a "XP" (Pass) will be assigned and it will not count in the student's grade point average.
7. A student must request Prior Learning Assessment credit as early as possible upon admission to degree status.
8. Prior Learning Assessment credit does not count toward the University's residency requirement. A student earning prior learning credit must meet the minimum residency requirements of 25 percent of the total number of credits required for the degree at Old Dominion University, which shall include 12 residency hours of upper-level courses in the declared major program. The student should be aware that some program residency requirements exceed the University minimum residency requirements.
9. A student in a certificate or endorsement area may earn a maximum of six credit hours through prior learning credit to apply to a certificate, endorsement or teacher licensure program. Prior Learning Assessment hours gained in these programs would be applicable to approved degree programs at Old Dominion University. In an approved undergraduate degree program, a student who has previously earned six credit hours of Prior Learning Assessment credit for a certificate area may be eligible to attempt additional Prior Learning Assessment credit toward a degree program.
10. Prior Learning Assessment credit earned at another institution will be re-evaluated by Old Dominion University faculty to determine whether credit may be awarded at Old Dominion.

The privilege of seeking Prior Learning Assessment credit is available to both full-time and part-time degree status students only. A student should consult with the degree program advisor, Student Success Director (for online students), advisor, or the Office of Prior Learning Assessment at the beginning of his or her academic career at Old Dominion University to determine how Prior Learning Assessment may be applicable to the degree. For further information, visit the Prior Learning Assessment web site at [odu.edu/prior-learning-assessment](https://www.odu.edu/prior-learning-assessment) (<https://www.odu.edu/prior-learning-assessment/>).

For information about Prior Learning Assessment options for graduate students, please see the section of the Graduate Catalog on Prior Learning Assessment Credit Options at the Graduate Level.

Procedures for Prior Learning Assessment

Students wishing to receive academic credit for departmental examinations, training or portfolio development through Prior Learning Assessment should do the following:

1. Contact the Prior Learning Assessment representative in Continuing Education to discuss possible challenges. The Prior Learning Assessment representative and student will discuss guidelines on requesting approval to challenge a course(s) through the available Prior Learning Assessment options.
2. Submit an extended resume and other documentation demonstrating learning outcomes based upon prior learning to the representative in the Continuing Education.
3. The Prior Learning Assessment representative will submit the documentation to the department chair, or a designated faculty assessor, who will examine the request and determine eligibility to challenge the course(s). The department's decision will be forwarded to the Prior Learning Assessment representative who will then notify the student.
4. Once determination is made that the student is eligible to challenge the course(s) through Prior Learning Assessment, the student will complete

and return to the Prior Learning Assessment office the appropriate intake request form. At this time, the student's account will be billed, and the appropriate Prior Learning Assessment fee should be paid. It is important to note that a student pursuing a challenge should not register for the course they seek to challenge.

If the conclusion for the portfolio assessment process results in a negative decision of the award of credit, a student may appeal the decision to the college having the responsibility for the course(s) for which credit is sought. The basis for a portfolio assessment appeal is the student's charge that the assessment decision was awarded through prejudice or caprice. The burden of proof rests with the student.

Students must initiate appeals in writing within three weeks of receiving the completed portfolio evaluation form. The appeal must be written to the Prior Learning Assessment representative in the Continuing Education.

The Prior Learning Assessment representative will forward the appeal letter to the appropriate department chair. The chair will review the student's appeal. The chair will get input from the student and from the faculty assessor and may form an independent committee to review the appeal. The chair makes the decision on the validity of the appeal. If the chair concludes there is no cause for complaint, the student has the right to appeal to the dean of the college.

If the faculty assessor is the chair, the student may go directly to the dean. The dean will follow the procedures as outlined above. The decision of the dean of the college is final.

External Examinations. External examinations, including CLEP and DSST, are administered through the Credentialing Center. Students wishing to receive academic credit for external examinations should contact the Credentialing Center at (757) 683-6089. Information about CLEP/DSST scores is available from the website at <https://www.odu.edu/academics/academic-records/score-analysis/clep-dantes> (<https://www.odu.edu/academics/academic-records/score-analysis/clep-dantes/>).

Prior Learning Assessment Fees*

Students participating in the Prior Learning Assessment program are responsible for assessment fees as follows:

1. External Examination

Students are responsible for the fees associated with external examinations such as CLEP and DSST, including voucher purchase and test administration fees. There is no additional Prior Learning Assessment fee for the granting of academic credit for external examinations.

2. Departmental Examination

The Prior Learning Assessment fee is equal to 30% of the current approved in-state on-campus rate for undergraduate and graduate courses.

3. Training Evaluation

The assessment fee for training not previously evaluated by Old Dominion University is equal to 20% of the current approved in-state on-campus rate for undergraduate and graduate courses.

4. Portfolio

Portfolio assessment fee equal to 50% of the current approved in-state on-campus rate for undergraduate and graduate courses.

Fees are based on the credit hours attempted and are not refundable if the student does not receive credit as a result of the evaluation. There is no appeal of the fee charge. The fees must be paid at the time the student is approved to submit a portfolio, departmental examination or training documentation for evaluation.

For more information call (757) 683-5650, visit the web site at [odu.edu/prior-learning-assessment](https://www.odu.edu/prior-learning-assessment) (<https://www.odu.edu/prior-learning-assessment/>) or email priorlearning@odu.edu.

* All fees are tentative and subject to final approval by the Board of Visitors and/or the president. Current Prior Learning Assessment fees are available

on the website at [odu.edu/prior-learning-assessment](https://www.odu.edu/prior-learning-assessment) (<https://www.odu.edu/prior-learning-assessment/>).

Repeating Courses

As a general rule, undergraduate students may not repeat courses in which they have previously earned a C or better or in which they have received transfer credit. Exceptions to this should be made by the department chair, and should be allowed only under the following conditions:

1. A student has a long delay (usually more than five years) between an introductory course (or the first half of a two-course sequence) and subsequent study, so that repeating the course is advisable for future success in the field.
2. A department requires that grades higher than C be earned in particular courses or requires a cumulative grade point average greater than 2.00 and stipulates that students who earn less than the desired grades or grade point average retake the courses.

Except in programs with more stringent policies on repeating courses, students may repeat a class in which they earned a C- or below twice without further appeal, for a total of three attempts. A grade of "W" counts as an attempt in this policy. Any subsequent attempt must be approved by the student's advisor and department chair and communicated by them to the Registrar. If approval is not granted for subsequent attempts, no further appeal is available to the student. This policy retroactively applies to all courses students have taken including those taken prior to the publication of this catalog. Exceptions to this policy for classes where students regularly need to register more than three times may be made by departments and communicated to the Registrar.

None of the credit hours earned in courses that have been repeated for credit under these conditions will be applicable toward the total hours required for the degree. Grades earned in both the original course (including C or above) and the repeated course will, however, be used in the calculation of the cumulative grade point average unless the Grade Forgiveness Policy has been applied (for grades below C).

The Grade Forgiveness Policy does not apply when courses are repeated in which a grade of C or higher was earned originally nor does the Grade Forgiveness Policy apply to transfer courses. Please refer to the Grade Forgiveness Policy in this Catalog for information about repeating courses in which grades below C were earned.

Regulations for Continuance: Undergraduate Students

Notification of Academic Status

It is the responsibility of every student to determine his or her academic status on-line at www.leonline.odu.edu (<http://www.leonline.odu.edu>). The University makes every reasonable effort to notify undergraduate students who are not in good standing of their academic status. An email will be sent to each undergraduate student (degree and non-degree seeking) placed on academic warning, academic probation and suspension. The e-mail will be sent to the student's Old Dominion University e-mail address in accordance with the Electronic Messaging Policy for Official University Communication. Non-receipt of an e-mail by a suspended student will not be considered grounds for claiming eligibility to enroll for a subsequent semester. All academic status notices appear on the student's transcript and will not be removed.

Undergraduate Continuance Regulations

At the end of each semester—fall, spring, and summer—the coordinator of academic continuance reviews the records of all students who do not maintain a 2.00 grade point average (GPA) and acts according to the following policies, which are summarized in the table below.

1. **ACADEMIC WARNING.** A student will be placed on academic warning **for one semester** when the student's cumulative GPA falls below 2.0 at the end of a semester, including summer sessions. A student on academic warning may not enroll in more than 15 credits per semester of attendance (no more than six credits in the summer sessions,

and no more than one course in any single summer session) except under extenuating circumstances and with the permission of the dean or designee of the college in which the student is enrolled. A student on academic warning must achieve a cumulative GPA of at least 2.0 at the end of the next semester of attendance to be in good standing.

Old Dominion University is committed to assisting students in achieving their academic goals. Therefore, freshman students on academic warning are required to participate in a success program sponsored by the Student Success Center in their next semester of attendance.

Students on academic warning are eligible to participate in all extracurricular activities as governed by the rules of the specific activity.

2. **ACADEMIC PROBATION.** A student is placed on academic probation when the student's cumulative GPA falls below 2.0 for **two consecutive semesters of attendance**, including summer sessions. Students on academic probation are expected to improve their cumulative GPA by achieving a **semester GPA of 2.0 or better** during each semester of attendance. A student who achieves a **cumulative GPA of at least 2.0** is removed from academic probation and placed in good academic standing.

Students on academic probation are required to meet regularly with their advisor during their next semester of attendance. Students on academic probation are required to participate in a Student Success program sponsored by the Student Success Center in their next semester of attendance. A student on academic probation may not enroll in more than 15 credits per semester of attendance (no more than six credits in the summer sessions, and no more than one course in any single summer session).

Students on academic probation are eligible to participate in all extracurricular activities as governed by the rules of the specific activity.

Failure to achieve a 2.0 semester GPA at the end of a fall or spring semester while on probation results in academic suspension. Students who receive a 0.0 GPA for two consecutive semesters (fall, spring) will be suspended immediately if the cumulative GPA is below 2.0.

3. **ACADEMIC SUSPENSION.** Following a semester of academic probation, an undergraduate student will be suspended at the end of the fall or spring semester if the cumulative grade point average remains below a 2.0 AND the semester grade point average falls below 2.0. Old Dominion University does not suspend students at the end of the summer sessions. Students suspended at the end of the fall term must separate from the institution for spring term; students suspended at the end of the spring term must separate from the institution for summer and fall terms.

Students on academic suspension are not eligible to participate in extracurricular activities.

A student may apply for readmission to ODU for the semester following completion of the suspension period. A student readmitted after suspension enrolls under the academic probation status and is subject to the provisions of that status. If a student readmitted after suspension fails to obtain a semester GPA of 2.0 in any semester before achieving a cumulative GPA of at least 2.0, the student is placed on a one calendar year suspension (two semesters and a summer term). The student may be considered for readmission after a minimum one-year separation from ODU.

Although a student may be approved for readmission to ODU, the student is not automatically eligible to receive federal or state financial aid. See the "Financial Aid" section of this catalog for information about Satisfactory Academic Progress (SAP) standards and suspension of aid eligibility. Detailed information about the SAP appeals process can be found on the ODU Office of Financial Aid web site at <http://www.odu.edu/content/dam/odu/offices/student-financial-aid/docs/odu-sap-appeal-final-revised.pdf>.

Academic Status	Grade Point Average	Requirements
Good Standing	2.00+ cumulative GPA	
Academic Warning (1st occurrence)	1.99 or less cumulative GPA	Initial term of academic difficulty; student eligible to continue
Academic Probation (1st occurrence)	1.99 or less cumulative GPA	Second consecutive term of academic difficulty; student eligible to continue
Academic Probation (2nd and subsequent occurrences)	Term GPA = 2.0 or above AND cumulative GPA = 1.99 or less	Second consecutive and subsequent term(s) on academic probation; student eligible to continue with a minimum 2.0 term GPA
First Suspension (see below)	Term GPA AND cumulative GPA = 1.99 or less	After two consecutive semesters, one on academic warning and one on academic probation, first term of academic difficulty in which cumulative and term GPA are below 2.0; student NOT eligible to continue
If suspension occurs during the: Fall term OR Spring term		Student must separate from ODU for the: Spring term OR Summer and Fall terms
Second suspension	Term GPA AND cumulative GPA = 1.99 or less	After academic warning, academic probation and first suspension occur, second term of academic difficulty in which cumulative and term GPA are below 2.0; student is placed on a mandatory one-year suspension

All academic status notices appear on the student's transcript and will not be removed.

Guidelines for filing a suspension appeal for continuous enrollment:

2025 – 26 Suspension Appeal Deadlines:

Suspension Posted	Appeal Application Deadline	Appeal Decision Posted
December 2025	January 5, 2026	January 7, 2026 (after 5:00 p.m.)
May 2026	May 26, 2026	May 28, 2026 (after 5:00 p.m.)

1. All students have the right to appeal their suspension if extenuating circumstances warrant such action. All appeals must be submitted in writing with the Suspension Appeal Form or on-line at www.odu.edu/advising by the deadline posted above. Suspension Appeal Forms must be delivered to the coordinator of academic continuance. Late appeals will not be reviewed.
2. Appeals must be based on circumstances pertinent to the semesters in which academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the suspended student. Appeal letters must provide sufficient detail and explanation regarding the points listed below because there is no face-

to-face meeting with appeal committee members. The decision of the appeals committee is final.

In order to be reviewed, an appeal letter must:

- Document the extenuating circumstances such as work, poor study environment, finances, illness, or personal relationships that have adversely affected performance: i.e. statement or letter from physician, employer, family members, faculty, academic advisor, Counseling Center, Educational Accessibility.
 - Explain how the extenuating circumstances caused each semester of grades below the 2.0 minimum grade point average.
 - State reasons why official withdrawal was not requested.
 - Present a plan of action for subsequent enrollment, should the appeal be granted.
3. Students who do not file a suspension appeal may not re-enroll until the suspension period has been served and readmission has been granted.
 4. Students suspended for a second time who do not file an appeal for continuous enrollment may submit an appeal by the published deadline for subsequent enrollment. Students suspended for a second time whose appeals are denied are no longer eligible to attend Old Dominion University or any of its satellite campuses until readmission after the mandatory one-year separation has occurred.
 5. A student suspended a third time will no longer be eligible to attend Old Dominion University or any satellite campuses. A student will not be eligible to appeal the suspension.
 6. If the student has pre-registered for a subsequent semester, all registration will be administratively dropped if the suspension appeal is denied. The Office of Finance will audit the accounts of students whose appeals are denied, and a tuition refund, if appropriate, will be issued. Students who choose not to appeal the academic suspension will be dropped from all courses before the tuition deadline.

Returning from Academic Suspension

1. All students returning from suspension must submit an application for readmission from suspension at www.odu.edu/continuance (<http://www.odu.edu/continuance/>) in order to re-enroll and must submit all necessary documentation. The deadlines to reapply for admission are as follows:

Fall semester - third Friday in August
Spring semester - third Friday in December
Summer semester - third Friday in April

Readmission requests received after the deadline will not be considered. Students must resubmit the application by the next deadline.

2. Each student returning from suspension must earn at least a 2.00 GPA for each semester. If the 2.0 semester GPA is not met, the returning student will be suspended again. Students returning from suspension should acquaint themselves with the options available under the Adjusted Resident Credit (ARC) policy and should note that use of the ARC policy requires a separation from Old Dominion University for at least one calendar year.
3. All students readmitted after serving a suspension must complete an online workshop conducted by the Office of Continuance prior to the start of classes to complete the readmission process. Students who register for the workshop but fail to complete it by the add/drop period and students who fail to register for the workshop will be dropped from all classes by the Office of Continuance and their readmission will be revoked for the semester. Students in this situation will be eligible to reapply for the next semester, but must begin the readmission process again.
4. Students who are suspended while under non-degree admission status, and who reapply and are readmitted, should be aware that they are readmitted to the non-degree status. Non-degree students are not eligible for financial aid.
5. Students readmitted to the University from suspension or due to a successful suspension appeal do not automatically qualify for financial aid. Please refer to the Financial Aid section of the catalog for the Financial Aid Continuance policy. All students who are suspended

should contact their financial aid counseling team immediately to discuss their options.

Credits Earned While Under Suspension

Credits earned at another accredited institution at a grade level of C (2.00) or better while an undergraduate student was under suspension from Old Dominion University will be accepted upon receipt of official transcripts following readmission.

Residency Requirements for Baccalaureate Degrees

A student who seeks a bachelor's degree from Old Dominion University must, in addition to meeting other requirements of the University, earn a minimum of 25 percent of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) through on- or off-campus instruction. This must include a minimum of 12 credit hours of upper-level courses in the declared major program. Some program residency requirements exceed the University minimum. Courses taken at Old Dominion University (as the host institution) through the Virginia Tidewater Consortium do not count toward resident credit. The responsibility for meeting the requirements for a degree rests with the student.

Second Baccalaureate Degree

The University will permit a student to acquire a second baccalaureate degree, provided that he or she:

1. Pursues a different course of study.
2. Meets all University, college, school, and departmental requirements (credits earned for the first degree may be applied, if suitable, toward the second degree).
3. Completes a minimum of 30 semester hours at Old Dominion University that are beyond the requirements for the first degree.

A minimum of 150 credit hours is required for students earning two baccalaureate degrees from Old Dominion University. If the degrees are to be awarded simultaneously, an application for graduation and degree certification must be submitted through the respective advisors for each degree program.

Prior to undertaking the second degree, the Office of Admissions will conduct an evaluation of all prior university-level coursework the student has completed. Those who meet the admissions standards of the University will be admitted; however, this does not guarantee admission into specific degree programs where separate applications are required. The University, as a general rule, will not permit a student to pursue more than two baccalaureate degrees.

Second degree students are not required to take the Writing Success Placement Tool (WSPT) and are considered to have fulfilled the lower-division writing requirement and University General Education Requirements with the exception of the writing intensive (W) course in the major. Second degree students must complete the writing intensive course in the major at Old Dominion University and must earn a grade of C (2.0) or better. Students receiving two degrees from Old Dominion University must complete the writing intensive course in both majors and earn a grade of C or better in both courses.

All second degree students must meet the college/departmental requirements for both degrees even if some of these requirements are also general education courses.

Students who received their first degree from Old Dominion University should be aware that grades in all undergraduate courses (for both the first and the second degree) will be included in the cumulative grade point average.

Students wishing to earn a second major rather than a second degree should see the "Second Major" section of the catalog for information.

Second Major

The University permits an undergraduate student to pursue a second major. A student pursuing two majors in different programs must meet all the degree requirements of one major and at least the departmental requirements of the other. (Most professional degree majors require completion of both the departmental/school and the college requirements.) For two majors within the same degree program, at least 60% of the credit hours must be unique and not shared. This calculation is based on major requirements only and does not include general education or elective credits. Requirements for both majors must be completed prior to receiving the baccalaureate degree. The student will receive one baccalaureate degree. Both majors will appear on the transcript. The degree awarded will be determined by the major to which University and college requirements are applied. Prior to undertaking the second major, the student must have the program approved by the appropriate chief departmental advisor or chair.

Completion of a second major will meet the upper-division General Education Requirements.

Students wishing to earn a second degree rather than a second major should see the "Second Baccalaureate Degree" section of the catalog.

Student Accountability & Academic Integrity

The Office of Student Accountability & Academic Integrity (OSAAI) oversees the administration of the student conduct system as outlined in Board of Visitors Policy 1530: Code of Student Conduct. The mission of OSAAI is to assist students with bringing their actions into congruence with their values. Through interactions with students, staff provide a transformational individualized experience that equips students with the decision-making skills and critical thinking tools needed to be successful after college. In support of this mission, the office provides education to the University community and serves as a resource for anyone with inquiries related to student accountability.

The Code of Student Conduct applies to all students. Students include all persons enrolled or registered at the University who have not completed a program of study for which they were enrolled; student status continues whether or not the University's programs are in session. Examples of violations heard under the Code include, but are not limited to, academic integrity, alcohol, drugs, threats of harm, assault, and sexual violence (Title IX).

Title IX of the Education Amendments of 1972 prohibits discrimination based on sex in educational programs and activities. Sexual harassment and sexual violence have been recognized as a form of discrimination in violation of Title IX. For information, counseling, or to file a complaint of discrimination or harassment on the basis of sex, individuals may contact Kate Couch, Title IX Coordinator, located at Innovation Research Park I, 4111 Monarch Way, Suite 103; (757) 683-3141 or titleixcoordinator@odu.edu.

Student Technology Skills

It is assumed that students entering Old Dominion University have basic productivity software proficiency, possess e-mail skills, and know how to navigate the Web. Some courses, particularly online courses, will require technology proficiency at levels higher than this. It is the student's responsibility to insure that he or she possesses the technology skills and proficiency required for each enrolled course or program of study.

Submission of Written Work To More Than One Class

In general, it is not acceptable for a piece of work such as a term paper to be submitted to more than one class for credit. In cases where submission of the same paper is appropriate, prior approval must always be obtained.

An example of a situation in which the same paper might appropriately be submitted would be one in which a student was enrolled in two classes, in both of which a given research topic was not only of interest to the student

but was completely appropriate to both classes. In such circumstances, the student would approach the instructors of the two classes and obtain approval to submit the same term paper to both classes, based on prior agreement concerning the depth of the study, amount of material covered, and the length of the paper to be submitted (which should be longer than a paper submitted to one class).

Writing Program Requirements

Undergraduate Students without credit for freshman composition (ENGL 110C) through dual enrollment, Advanced Placement (AP), the College Level Examination Program (CLEP) or transfer from another institution, including ODU Online students, are required to complete the Writing Success Placement Tool (WSPT) in order to enroll in first-year writing courses.

A score of 3 on the WSPT is required to register for ENGL 110C or ENGL 126C (Honors) without the corequisite course, ENGL 101 Composition Studio. Students who earn a score of 1 on the WSPT will need to enroll in ENGL 101 (<http://catalog.odu.edu/courses/engl/>) and ENGL 110C in the same semester.

ENGL 101 is a 3-credit elective corequisite course designed to complement and extend the ENGL 110C curriculum. Students who feel as though their placement is inaccurate can appeal the decision by contacting the Director of Writing Placement and Support (<https://www.odu.edu/englishdept/general-education/writing-placement/>) who will put them in contact with an advisor from the Writing Program.

Undergraduate Students with transfer credit for ENGL 110C or ENGL 211C/ENGL 231C are not required to complete the Writing Success Placement Tool (WSPT). However, they are expected to be competent writers and must possess writing skills equivalent to those described in the outcome statements for equivalent ODU courses (i.e., ENGL 110C, ENGL 211C/ENGL 231C). Although students with transfer credit for ENGL 110C are not required to take the WSPT, those wishing to complete the WSPT for diagnostic purposes may do so by contacting the Director of Writing Placement and Support (<https://www.odu.edu/englishdept/general-education/writing-placement/>).

ODU Online Students are considered part of the aforementioned cohorts (students with or without transfer credit for ENGL 110C) and must meet the assessment requirements of the undergraduate writing program. Students should contact their advisor with questions or concerns.

Assessment of Writing Proficiency

- Students enrolled in ENGL 101 must earn a D or higher to pass the course. However, the co-enrollment course, ENGL 110C, must be passed with a C or higher in order to move on to the required 200-level composition course. Students who do not earn a passing grade in ENGL 101 but pass ENGL 110C with a C or better are not required to retake ENGL 101 but can opt to retake the course the same semester they are taking a writing intensive course for the support and to improve their GPA.
- All students enrolled in undergraduate degree programs must pass ENGL 110C or ENGL 126C (Honors) or their transfer equivalency with a grade of C (2.0) or better in order to register for ENGL 211C/ ENGL 226C (Honors) or ENGL 231C/ ENGL 228C (Honors).
- Students must also pass ENGL 211C/ ENGL 226C (Honors) or ENGL 231C/ ENGL 228C (Honors) or their transfer equivalency with a grade of C (2.0) or better in order to register for a writing intensive (W) course.
- Students must complete their W course in the major at Old Dominion University with a grade of C (2.0) or better.

NOTE: This policy also applies to transfer students holding associate degrees; holding an associate degree does not fulfill the requirements of the Undergraduate Writing Program if students received a grade below C (2.0) in any 100- or 200-level Composition (C) course. These students must also take a writing intensive (W) course in their major at ODU and must pass

that W course at ODU with a grade of C (2.0) or better in order to earn a baccalaureate degree.

Dropping and Withdrawal from ENGL 101: Because ENGL 101 and ENGL 110C are co-enrollment courses, once enrolled, students cannot drop or withdraw from one course without also dropping or withdrawing from the other. Should a student need to drop or withdraw from these courses, they should speak with their advisor right away to discuss how this might impact their scholarships, financial aid, or full-time status.

Waiver Option for ENGL 110C and ENGL 211C/ENGL 231C

ENGL 110C Waiver. Students who have transferred in credit for ENGL 211C/ENGL 231C or equivalent but not ENGL 110C should contact the Director of Writing Placement and Support to discuss the process for applying for a waiver. If a waiver is granted, there is no cost and no award of credit.

ENGL 211C/ENGL 231C Waiver. In extenuating circumstances, such as a student with a degree from another institution where there is no comparable 200-level class, the English Department may approve a waiver of the ENGL 2**C requirement. This is rare and determined by the Director of Writing Placement and Support on a case-by-case basis. If approved, the student will be exempt from the ENGL 2**C requirement. There is no cost and no award of credit.

Online Students: Students may contact their advisor in ODUGlobal for information on the WSPT and Evaluation of Writing Proficiency. For those students not associated with an ODU site, please contact the Testing Center (<http://www.odu.edu/testing-center>) or ODUGlobal (<https://online.odu.edu/about-us/contact-us/>) at 1-800-482-3957.

Additional information regarding policies and courses can be found on the English Department webpage at <https://www.odu.edu/englishdept> (<https://www.odu.edu/englishdept/>).

University Policies

Accommodations for Students with Disabilities

<https://www.odu.edu/about/policiesandprocedures/university/4000/4500>
(<https://www.odu.edu/about/policiesandprocedures/university/4000/4500/>)

Code of Student Conduct

<https://www.odu.edu/about/policiesandprocedures/bov/board-visitors-policy-1530> (<https://www.odu.edu/about/policiesandprocedures/bov/board-visitors-policy-1530/>)

Discrimination Policy

<https://www.odu.edu/about/policiesandprocedures/university/1000/1005>
(<https://www.odu.edu/about/policiesandprocedures/university/1000/1005/>)

Electronic Messaging Policy for Official University Communication

<https://www.odu.edu/about/policiesandprocedures/university/3000/3506>
(<https://www.odu.edu/about/policiesandprocedures/university/3000/3506/>)

Gun & Weapon Regulation

<https://www.odu.edu/bov/gun-and-weapon-regulation> (<https://www.odu.edu/bov/gun-and-weapon-regulation/>)

Closure of the University Due to Inclement Weather and Emergencies

<https://www.odu.edu/about/policiesandprocedures/university/1000/1020>
(<https://www.odu.edu/about/policiesandprocedures/university/1000/1020/>)

Policy on Title IX and Sexual Misconduct

<https://www.odu.edu/about/policiesandprocedures/university/1000/1008>
(<https://www.odu.edu/about/policiesandprocedures/university/1000/1008/>)

Posthumous Degree or Certificate of Recognition or Achievement for Terminally Ill and Deceased Students

<https://www.odu.edu/about/policiesandprocedures/bov/board-of-visitors-policy-1408> (<https://www.odu.edu/about/policiesandprocedures/bov/board-of-visitors-policy-1408/>)

Policy on the Use of Tobacco and Smoking-Related Products, and Electronic Cigarettes and Vaporizers

<https://www.odu.edu/about/policiesandprocedures/university/3000/3220>
(<https://www.odu.edu/about/policiesandprocedures/university/3000/3220/>)

Student Complaint Procedure

The University subscribes to the following 2009 statement on professional ethics of the American Association of University Professors, according to which “As teachers, professors encourage the free pursuit of learning in their students. They hold before them the best scholarly and ethical standards of their discipline. Professors demonstrate respect for students as individuals and adhere to their proper roles as intellectual guides and counselors.” The University recognizes that the instructor has the authority to maintain appropriate classroom behavior and respects the academic freedom of the faculty (see Board of Visitors Policy 1403: Academic Freedom). The University will not normally interfere with content or style of teaching activities. The University recognizes the responsibility to establish procedures for addressing student complaints about faculty conduct that is not protected by academic freedom and not addressed in other procedures (see Board of Visitors Policy 1502: Student Rights and Freedoms).

This procedure describes how students may formally complain about inappropriate faculty behavior in formal academic, professional, or research settings. Student-initiated complaints in other areas, including grade appeals, sexual harassment, disability accommodations, and discrimination, are covered under separate policies and are not included in this procedure.

I. General Provisions Procedures

1. **Determination of Appropriate Procedure.** The student is responsible for filing the complaint under the proper procedure. Complaints should only be filed using this procedure if there is no other provision available. *Failure to follow the appropriate procedures may result in the complaint not being heard.*
2. **Student Complaints and Concurrent Procedures**
The act of filing a complaint under this procedure will not normally delay any pending process or procedure involving the student and/or faculty member. Normally, any concurrent process or procedure will move forward independently of the student complaint, though it may be delayed for good cause as determined by the appropriate University official(s).
3. **Retaliation**
No student who files a complaint under this procedure shall be subject to any form of retaliation by any person, department, program or college.

II. Procedures

1. **STEP 1 - Informal Resolution.** Students must first attempt to resolve complaints informally. Given the nature of complaints covered by this procedure, it is expected that in all but the most unusual circumstances, students will first raise the issue with the faculty member. In the event this is not feasible, the student will contact the Department Chair. In instances where there is no Department Chair, the student should contact the Program Director.

2. **STEP 2 - Formal Complaint.** If the issue is not resolved informally, the student may contact the Department Chair or Program Director if there is no Chair. In instances where the Chair is the subject of the complaint, the student should contact the Dean of the College to which the chair is assigned. The student must contact the Chair (or Program Director if there is no Chair or Dean if the Chair is the subject of the complaint) within 30 business days of the action from which the complaint rises or the complaint will be barred. The Chair or Dean has the discretion to accept a complaint filed after this deadline for good cause.

The complaint must be submitted in writing on the Student Complaint Procedure Formal Complaint Form (<https://www.odu.edu/dean-students/submit-a-student-complaint/>) and contain:

- a. The student's name and University Identification Number
- b. The faculty member's name and the course subject area prefix and number
- c. A detailed description of the nature of the complaint
- d. A detailed description of attempts at informal resolution with the faculty member and Chair
- e. A detailed description of the relief sought

C. STEP 3 - Investigation

The Chair may designate a faculty member to investigate the complaint. If the Chair is the subject of the complaint, the student shall contact the academic Dean who will designate a faculty member to investigate the complaint. The person investigating the complaint will meet, either independently or collectively, with the student and the person who is the subject of the complaint within 10 business days from the filing of the complaint. The decision should be issued in writing to the student and the faculty member within 20 business days of the date the complaint is filed.

The complaint process is not intended to be an adversarial hearing and both the interviews of the student and the faculty member will usually be conducted without the other present.

- D. **STEP 4 - Appeal Procedure.** If the student is not satisfied with the resolution in Step 3, the student may file a formal appeal with the appropriate academic Dean. The appeal must be filed within five business days after the decision in Step 3 has been sent. The Dean has the discretion to accept a complaint filed after this deadline for good cause.

The appeal must be submitted in writing on the Student Complaint Procedure Formal Appeal Form (<https://www.odu.edu/dean-students/submit-a-student-complaint/>) and contain:

1. The student's name and University Identification Number
2. The faculty member's name and the course subject area prefix and number
3. A detailed description of the nature of the complaint
4. A detailed description of attempts at resolution with the faculty member and Chair or Program Director
5. A detailed description of the relief sought
6. A copy of the Chair's (or Program Director's) finding and supporting documents. (No new information is permitted.)

1. The Dean shall provide the faculty member and Chair or Program Director a copy of the appeal.
2. The Dean may consider the appeal or appoint a faculty member to consider the appeal. The person appointed shall not have been involved as a decision maker in Steps 1-3 above.
3. The person considering the appeal shall review the materials and issue the finding within 30 business days from the date the appeal is filed. The review of materials will generally occur outside the presence of the complainant and respondent, and it will be limited to a review of the record. The person considering the appeal may

interview any person, such as the original decision-maker, as needed.

4. The person making the decision shall first determine whether the conduct in question is protected by academic freedom and whether the student's complaint is best addressed by this process.
5. At the end of the review, a written decision will be issued. A copy of the decision will be sent to the complaining student, the faculty member, and the Chair or Program Director.
6. The decision by the designee or the Dean is final.

III. Records

A. If the complaint concludes after Step 3 above, the Student Complaint Procedure Formal Complaint Form and all related documents will be kept in a secure location in the department chair's or program director's office for a minimum of three years after the last action.

B. If there is an appeal, the Student Complaint Procedure Formal Complaint Form, the Student Complaint Procedure Formal Appeal Form, and all related documents for each level of review will be kept in a secure location in the Dean's office for a minimum of three years after the last action.

-Approved by the president

May 13, 2011

Revised May 16, 2022

Veterans Grievance Policy

The Virginia State Approving Agency (SAA), is the approving authority of education and training programs for Virginia. Our office investigates complaints of GI Bill beneficiaries. While most complaints should initially follow the school grievance policy, if the situation cannot be resolved at the school, the beneficiary should contact our office via email saa@dvs.virginia.gov.

GI Bill® is a registered trademark of the U.S Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Webs site at <http://www.benefits.va.gov/gibill> (<http://www.benefits.va.gov/gibill/>).

Student Record Policy

<https://www.odu.edu/about/policiesandprocedures/university/4000/4100>
(<https://www.odu.edu/about/policiesandprocedures/university/4000/4100/>)

Technical Standards

To successfully complete a program at Old Dominion University, students must meet all academic and technical standards required by the program. Technical standards are all nonacademic criteria or standards for admission to or participation in the program in question. A technical standard is a description of the physical and mental abilities required of students to perform successfully in an academic program. Students are responsible for knowing the technical standards of their intended major program. Technical standards are documents that can and should be used in the advising process, both when students are exploring different majors and when they want specific information on what is required in a particular program.

Copies of all technical standards are located in the following offices: Educational Accessibility, Institutional Equity and Diversity, and University Counsel. In addition, each department chair has a copy. For students requiring accommodations, please contact the Office of Educational Accessibility for assistance. webpage: <http://www.odu.edu/educationalaccessibility> (<http://www.odu.edu/educationalaccessibility/>).

Use of Bicycles, Skateboards and Personal Transport Devices on University Property

<https://www.odu.edu/about/policiesandprocedures/university/3000/3231>
(<https://www.odu.edu/about/policiesandprocedures/university/3000/3231/>)

Registration Requirements and Procedures

Office of the University Registrar

The Office of the University Registrar provides a wide variety of student services, including registration, verification of enrollment, maintenance of student records and academic history, transcripts, degree certification and diplomas. A calendar of important dates, the examination schedule, and information about various policies and procedures is available at <http://www.odu.edu/registrar> (<http://www.odu.edu/registrar/>).

The Office of the University Registrar also is responsible for determining in-state tuition status, athletic eligibility, and registration of students enrolling through the Virginia Tidewater Consortium and the Interinstitutional Study Program with Norfolk State University.

Self-service is available for most processes online at <https://my.odu.edu/>. On the Norfolk main campus, walk-up services are available at the office in 1009 Rollins Hall; on the Macon & Joan Brock Virginia Health Sciences at Old Dominion University campus, walk-up services are available at the office in Lewis Hall Building. Additionally, many services are available at the higher education centers. The offices are open Monday-Friday from 8 a.m. - 5 p.m. and can be reached at 757-683-4425 for the main campus, and at 757-446-5806 for VHS campus.

Academic Calendar and Course Scheduling

The academic calendar includes the fall and spring semesters, as well as a summer term. The fall semester begins one or two weeks prior to Labor Day Weekend and ends 16 weeks later. Classes will be held on Saturday and Sunday of Labor Day weekend, but classes are canceled for the Labor Day holiday. A Fall Break is scheduled for mid-October (Columbus Day Weekend) and runs from Saturday through Tuesday of that weekend. Thanksgiving break begins after classes on Tuesday prior to the holiday, and classes resume on the following Monday. Commencement is scheduled on the Saturday after exams have been administered.

Spring semester includes a Winter session that begins after fall commencement and ends before the rest of the spring semester classes begin.

Spring semester begins on Tuesday following the holiday weekend of Martin Luther King (MLK). Spring Break is scheduled eight weeks after the start of classes, from Monday through Saturday. Classes resume on the following Sunday and continue until Monday of week 15 into the semester. A reading day is held the Tuesday after classes end, with exams beginning on Wednesday and continuing to the following Wednesday. Commencement is scheduled on the Friday and Saturday after exams have been administered; Saturday is the degree conferral date.

Summer term includes a three-week Maymester, along with one 12-week and two six-week sessions.

Note: Asynchronous courses may or may not follow these terms. The University will determine the duration of each course, and students may opt for self-paced study when enrolling in this online format.

Summer Term and Winter Session

Old Dominion University offers a summer program that includes a three-week Maymester, along with one 12-week and two six-week sessions. More than 1,200 graduate and undergraduate courses are offered on campus, off campus and online during the summer months.

The University also offers select classes during winter session, which is between the December graduation date and the start of spring semester classes.

The exact dates for the summer and winter sessions are listed on the Registrar's Office website at www.odu.edu/registrar (<http://www.odu.edu/registrar/>).

Course Numbering

Courses numbered 100 are primarily for freshmen, 200 for sophomores, 300 for juniors, and 400 for seniors. All 300- and 400-level courses require a prerequisite of a specific course(s), junior/senior standing, and/or permission of the instructor.

Courses at the 500, 600, 700, and 800 levels are generally for graduate credit.

Courses at the 500 level are cross-listed to undergraduate 400-level courses, with additional work and higher-level outcomes required for 500-level courses. Except in cases where topical content changes by each semester, cross-listed courses taken previously at the 400 level may not be retaken at the 500 level. A limited number of 500-level courses may be used to satisfy the requirements for a master's degree, education specialist degree, or a doctoral degree.

Courses at the 600 level form the core of master's programs, including those taken in connection with a thesis, and they are not cross-listed with numbers at other levels. A limited number of 600-level courses may be used to satisfy the requirements for a doctoral degree.

700- and 800-level courses are generally, but not always, cross-listed. 700-level courses are generally reserved for master's students and 800-level courses for doctoral students. When 700- and 800-level courses are cross-listed, additional work and higher-level outcomes are required for 800-level courses. Except in cases where topical content changes, cross-listed courses taken previously at the 700 level may not be retaken at the 800 level. A limited number of 700-level courses may be used to satisfy the requirements for a doctoral degree.

Education specialist students may take courses at the 600, 700, or 800 levels depending on their program's curricula.

General Education undergraduate courses are designated by the fourth digit in the course number. At the lower division, the following designations are used: for skills courses, C=Composition, F=Language and Culture, G=Information Literacy and Research, M=Mathematics and R=Oral Communication; for Ways of Knowing courses, A=Human Creativity, H=Interpreting the Past, L=Literature, P and E=Philosophy and Ethics, N=the Nature of Science, S=Human Behavior and T=Impact of Technology. Writing intensive courses are designated by a W in the fourth digit.

Course numbers ending in "29" at all levels are reserved for courses taken through the Virginia Tidewater Consortium Exchange Program.

Topics course numbers include 195, 196, 295, 296, 395, 396, 495, 496, 595, 596, 695, 696, 795, 796, 895, and 896. These numbers are generally to be used to designate topics courses taught as a class. The particular topic for that semester should be listed in the semester schedule. Where a particular topic is offered more than two or three times, it should be approved as a regular course offering and given its own course number.

Individual and Tutorial course numbers include 397, 398, 497, 498, 597, 697, 797, and 897. These numbers are generally to be used to designate courses involving individual or tutorial study within a discipline. These individually arranged courses will require prior approval by the department chair and/or instructor.

Cooperative Education course numbers are 367, 667, and 867.

Internship course numbers are generally 368, 668, and 868.

Practicum course numbers are generally 369, 669, and 869.

Extracurricular Activities course numbers are 377 and 378. These numbers are reserved for departments interested in granting credit for extracurricular activities at the undergraduate level.

Honors course numbers include 126, 127, 128, 226, 227, 228, 387, 388, 487, and 488. These numbers are reserved for departments interested in offering honors courses at the undergraduate level.

Seminar, Colloquium, and Capstone course numbers include 690, 691, 692, 693, 890, 891, 892 and 893.

Research/Project course numbers are generally 698 for the master's level and 898 for the doctoral level.

The Thesis course number is 699 and is reserved for the master's thesis.

The Dissertation course number is 899 and is reserved for doctoral dissertation courses.

The Continuous Enrollment course number 999 is available for the purpose of maintaining active status at the doctoral level. All students are required to be enrolled the semester in which they graduate, and all doctoral students who have advanced to candidacy are required to be registered for at least one graduate credit hour each term (fall, spring, and summer) until the degree is completed.

Once a course number has been deactivated it may not be reused for a different course for a period of six academic years.

Normal Course Load for Undergraduate Students

The University considers the carrying of 12 or more credit hours during the fall and spring semesters to be full time for undergraduate students; 15 hours is considered a normal course load. Students seeking to enroll in more than 18 credit hours must have a 3.00 or better overall grade point average. In addition, they must obtain the recommendation of their advisor and written permission from the dean or designee of the college in which their major or intended major program resides. A student on academic warning or probation may not enroll in more than 15 credits per semester (fall or spring) of attendance, except under extenuating circumstances and with the permission of the dean or designee of the college in which the student is enrolled. Otherwise, the actual course load is entirely the prerogative of the student.

During the summer term, an undergraduate student is considered to be full time if he or she is enrolled in nine hours. A student may not enroll in more than nine hours in a six-week session without the recommendation of the advisor and written permission of the dean or designee of the college in which the major or intended major program resides. Students seeking to enroll in more than nine hours in a six-week session or more than 15 hours in the summer term must have a 3.00 or better overall grade point average. A student on academic warning or academic probation may not enroll in more than six credits in the summer term and no more than one course in any single summer session. No student may enroll in more than 15 hours during the summer term without the recommendation of the advisor and written permission from the dean or designee of the college in which the major or intended major program resides.

Exceptions to the 3.00 grade point average requirement may be made by the dean or designee of the college in which the student's major or intended major program resides.

Spring semester includes a winter session that begins after fall commencement and ends before spring semester classes begin. Summer term includes a three-week Maymester, along with one 12-week and two six-week sessions. A student may not enroll in more than four hours during winter session or Maymester. Credits earned during winter session and/or Maymester will not count against the semester's credit caps.

Non-degree students must obtain written permission from the Assistant Vice President for Academic Student Success to enroll in more than 18 credit hours.

Classification of Undergraduate Students

A sophomore must have completed 30 semester hours. A junior must have completed 60 semester hours. A senior must have completed 90 semester hours.

Transfer students will be classified based upon credit hours accepted by Old Dominion University.

Classification of students will be determined at the end of each semester.

Pre-registration and Time Ticketing

Electronic Time Ticketing - Old Dominion University ([odu.edu](https://ww1.odu.edu/academics/courses-registration/registration/time-ticketing/)) (<https://ww1.odu.edu/academics/courses-registration/registration/time-ticketing/>)

Priority Preregistration for Active Duty, Veterans, Reservists and Virginia National Guard Service Members

Code of Virginia § 23.1-904 (C) states that:

The governing board of each public institution of higher education shall, in accordance with guidelines developed by the State Council of Higher Education for Virginia, implement policies that recognize the scheduling difficulties and obligations encountered by active-duty members of the United States armed forces.

The State Council of Higher Education for Virginia in consultation with the Military Education Advisory Committee (MEAC) has issued guidelines that require state colleges and universities to establish course registration policies that provide reasonable accommodation to students who are active-duty military members, veterans, reservists and Virginia National Guard members. The policy can be found at the following link: <https://www.odu.edu/about/policiesandprocedures/bov/board-of-visitors-policy-1418> (<https://www.odu.edu/about/policiesandprocedures/bov/board-of-visitors-policy-1418/>).

Staff in the Office of the University Registrar, Military Connections Center, and the Office of Admissions will be trained to communicate the policy to students who may be qualified for this benefit.

Class Schedule Changes and Drop/Add Procedures

During the fall and spring semesters, students may add and drop classes within the first 11 calendar days after the first day of classes for the semester (for full semester classes). Please refer to www.odu.edu/registrar (<http://www.odu.edu/registrar/>) and click on the link to "Academic Calendar" for the dates to drop classes in courses not spanning the full semester.

Once registered, a student must drop or add classes via the secure website at <https://portal.odu.edu>, click LEO online or submit a completed drop/add form to the Office of the University Registrar. The date the form is received in the Office of the University Registrar or processed via LEO determines tuition adjustments, if applicable. If needed, drop/add forms can be downloaded from the Registrar's Office website: <http://odu.edu/registrar/forms> (<http://odu.edu/registrar/forms/>) and submitted electronically to register@odu.edu.

First-year students are strongly encouraged to seek advising before dropping or adding any class. Students enrolled in degree programs in which sequencing is critical are urged to consult their academic advisors before scheduling changes. In such programs, dropping of courses without prior consultation with academic advisors may necessitate additional time to complete University and/or departmental degree requirements.

See the academic calendar in this Catalog or at <https://www.odu.edu/academics/calendar> (<https://www.odu.edu/academics/calendar/>) and click on the link to "calendars" for the dates for adding or dropping classes. For information regarding the refund schedule, see the chapter on Tuition, Fees and Financial Information or go to the Office of Finance's web page at www.odu.edu/finance (<http://www.odu.edu/af/finance/>). There may also be financial aid implications to dropping or withdrawing from a course. For more information about how financial aid could be impacted, seek advice from a financial aid advisor or visit the Office of Financial Aid website at www.odu.edu/financialaidoffice/manage/dropping-a-class (<https://www.odu.edu/financialaidoffice/manage/dropping-a-class/>).

ODU does not automatically drop or withdraw students from classes for failure to attend or failure to pay tuition. The student must initiate the process to withdraw from classes.

Withdrawal From Classes or From the University

Policy for Dropping and Withdrawing From Classes

Dropping Classes

Prior to the start of and during the first 11 calendar days of the semester, a student may drop a course; during this period no grade will be assigned and no record of the course will be entered on the student's permanent academic record. Please refer to www.odu.edu/registrar (<http://www.odu.edu/registrar/>) and click on the link to "Academic Calendar" for the dates to drop classes in courses not spanning the full semester.

Withdrawal from Classes

After the first 11 calendar days of the semester, a student may withdraw from any course through the end of the twelfth week of classes of a regular semester not including the exam period. For all other non-standard semester courses (i.e., Summer Sessions, Maymester, Winter Session, or eight-week sessions), a student may withdraw after the drop/add period through the day prior to the last day of classes for that session. A grade of W will be assigned during this period. However, some degree programs have withdrawal, continuance and progression policies that supersede this policy because of the nature of the professional standards and practices underlying the specific curriculum. Students should consult with their advisor or student success coach (for online students) to determine if there are more stringent requirements for withdrawing from courses in specific majors.

Withdrawal from a course after the twelfth week of a regular session (or its equivalent in a non-semester course) is usually not permitted. However, in the event of an illness or other severe hardship beyond the student's control, the student should submit, no later than the last day of classes, a written petition for permission to withdraw to the instructor. If permission is granted, a grade of W will be recorded. If permission is not granted, the student will not be allowed to withdraw from the course. Any appeal of decisions should be brought to the department chair.

Please refer to www.odu.edu/registrar (<http://www.odu.edu/registrar/>) and click on the link to "Academic Calendar" for the dates to withdraw from classes in courses not spanning the full semester. Information on tuition refunds can be found on the Office of Finance website at <https://www.odu.edu/tuition/refunds> (<https://www.odu.edu/tuition/refunds/>).

Students are encouraged to contact their instructor, advisor, and Student Success Director (for online students) to discuss the implications of withdrawing. Prior to withdrawing from any course, students receiving financial aid should consult their financial aid counselor. Course withdrawal may adversely impact satisfactory academic progress for financial aid purposes and limit the student's ability to continue receiving financial aid.

Withdrawal from a course after the last day of classes of a regular semester (or after the day prior to the last day of classes for non-semester courses) is not permitted.

Students who have a financial hold on their record are not able to withdraw from classes online. However, they may withdraw by the published deadline at the Registrar's Office between 8:00 a.m. and 5:00 p.m. Monday-Friday or by email to register@odu.edu (register@odu.edu). The office is located at 1009 Rollins Hall.

A student who stops attending classes without withdrawing from the course will receive a grade of WF, except if the student's performance was an F at the time the student stopped attending class, in which case a grade of F will be assigned. The grade of WF will carry no grade points, and will be computed in the grade point average as a grade of F.

ODU does not automatically drop or withdraw students from classes for failure to attend or failure to pay tuition. The student must initiate the process to withdraw from classes and file a Tuition Appeal if applicable.

Tuition Appeal forms and full details are available from the Office of Finance web site: <https://www.odu.edu/tuition/refunds/appeals> (<https://www.odu.edu/tuition/refunds/appeals/>).

Drop and Withdrawal Deadlines

Specific deadline dates for dropping and withdrawing from classes can be found on the Academic Calendar at <https://odu.edu/academics/calendar> (<https://odu.edu/academics/calendar/>).

Administrative Withdrawal From the University

During the course of any semester, there will be situations, such as severe illness, death in the immediate family, or disciplinary actions, which will require that the University initiate an administrative withdrawal from the University to assist a student or to implement a University-imposed sanction. The following procedures will be used.

1. The request for withdrawal is initiated either by the student because of an extenuating personal situation or by the University because of a disciplinary situation.
2. This action will normally be handled by the Vice President for Student Enrollment, Engagement & Services or designee. If the student initiates the withdrawal, the Office of the Vice President for Student Enrollment, Engagement & Services will determine what verification is necessary and document the situation.
3. A request will be submitted to the Office of the University Registrar to withdraw the student from all classes.
4. The student's instructors will be notified. If the student is withdrawing after the last day of classes, part of this notification will include the opportunity for the faculty member to raise objections if the student's classroom performance is such that a withdrawal (W) would not be appropriate. If a faculty member objects, the faculty member will inform the University Registrar and the original grade assigned by the faculty member will stand.
5. The request for withdrawal must be initiated by the student within one calendar year counting from the first day of classes of the term for which administrative withdrawal is sought. Requests for withdrawal that have the necessary documentation but are received after the one-year deadline may be reviewed by an appeals committee consisting of at least three members and including both faculty and administrators, to be convened by the Director of Student Outreach and Support in Student Enrollment, Engagement & Services. These requests must include clear and compelling reasons for not submitting the request within one calendar year.
6. Tuition refund appeals are handled separately and must be submitted to the Office of Finance. Students submitting requests after the one-year deadline are not eligible for a tuition appeal.
7. Students receiving financial aid should consult their financial aid counselor prior to submitting a tuition refund appeal.

Any exceptions for undergraduate students must be approved by the Vice Provost for Academic Affairs or designee. Exceptions for graduate students must be approved by the Dean of the Graduate School.

Sudden Withdrawal and Prolonged Absence Due to Military Mobilization

Guidelines are provided for students whose service in the armed forces of the United States has required their sudden withdrawal or prolonged absence from enrollment at Old Dominion University. The policy can be found at the following link:

<https://www.odu.edu/about/policiesandprocedures/bov/board-of-visitors-policy-1416> (<https://www.odu.edu/about/policiesandprocedures/bov/board-of-visitors-policy-1416/>)

Audit Status

The audit grading status is available for students who would like to enroll in a course for the knowledge gained or personal satisfaction, not for academic credit. Any course that is elected to be carried as an audit will be subject to the normal fees and regulations of the University. Regular attendance is expected, but neither tests nor examinations are required. No grade will be recorded, except that an instructor may assign a grade of "W&" to a

student who misses an appreciable portion of the classes. The student's record will be marked "audit" by the course so elected. A student may not audit a course and subsequently seek advanced placement credit for the same course. A student may audit a course and register for the same course for credit in a subsequent semester. Registration for the audit option must be selected by the end of the drop/add period in the given semester. Any course elected for audit cannot be changed to that of credit status after the end of the "add" registration period. Students receiving financial aid should be aware that registering for audit status may affect their financial aid eligibility. Selection of the audit status is accomplished through the normal registration procedures.

Student-Elected Pass/Fail Course Option For Undergraduate Students

1. The option to select courses for pass/fail credit is open to the undergraduate student who has been accepted by a department as a major.
2. Courses within the student's major or minor, or courses necessary to meet a departmental, school, or college requirement, or University General Education Requirement, may not be taken under this option.
3. A maximum of 12 hours of student-elected pass/fail credit may be applied to the student's baccalaureate degree unless in teacher education programs. Majors in teacher education programs may apply only three hours of student-elected pass/fail credit.
4. Instructors will have knowledge of which students in their courses are enrolled for pass/fail credit.
5. A student receiving a P will receive credit for the hours, but will not receive grade points, and the hours will not be counted in the computation of the grade point average. A student receiving an F will not receive credit for the course and there will be no penalty, although the failure will appear on his or her transcript.
6. A student electing the pass/fail option for a particular course cannot change his or her registration and elect to take the course for grade point credit after the end of the "add" period. Similarly, courses cannot be elected as pass/fail after the end of the "add" period.
7. All prerequisites must be met for any course taken under the pass/fail option.

Course Offerings for Credit and Noncredit

If a course is offered as both a noncredit and a credit offering, students must elect one or the other prior to the add/drop deadline. They will pay the fee/tuition for the elected offering by the tuition deadline. Students who register for a noncredit course may not elect to receive credit for it at any point after the add/drop deadline. Completed noncredit work may be reviewed as part of a Prior Learning Assessment to determine if the award of academic credit is appropriate. Noncredit courses will not meet undergraduate or graduate degree requirements.

Attendance at Other Institutions

Students who are enrolled at Old Dominion University may attend another institution and transfer credit earned there back to a degree program at Old Dominion University. While formal Old Dominion University permission is not required, students should consult the academic advisor to ensure that the credits to be taken at the other institution will transfer to the Old Dominion University program in which the student is enrolled. A complete list of transferable courses that have already been evaluated can be found on the Transfer Student Centers (<https://www.odu.edu/transfer/transfer-centers/>) website. If deemed equivalent and the student has earned at least a grade of "C," courses will appear on the Old Dominion University transcript as transfer credit and can be used for general education, major or minor requirements or elective credit. No grade points or hours are calculated into the Old Dominion University grade point average; only hours awarded count toward the total number of credits required for the degree. An official transcript from the other institution must be mailed directly to: Office of Undergraduate Admissions, 1004 Rollins Hall, Norfolk, VA 23529.

The other institution may ask the student to provide documentation of good standing or eligibility to continue at Old Dominion. These forms should be

submitted to the Office of the University Registrar. Forms that require the student to demonstrate that the course(s) will be accepted for transfer credit at Old Dominion University should be submitted directly to the academic advisor.

It is recommended that students not enroll in courses at another institution during the semester the student intends to graduate.

Virginia Tidewater Consortium Exchange Program

Old Dominion University students may take courses at any of the following Consortium institutions: Christopher Newport University (Newport News), College of William and Mary (Williamsburg - limited number of graduate courses only), Eastern Shore Community College (Melfa), Hampton University (Hampton), Joint Forces Staff College (Norfolk), Norfolk State University (Norfolk), Camp Community College (Franklin), Regent University (Virginia Beach), Virginia Peninsula Community College (Hampton), Tidewater Community College (all campuses), and Virginia Wesleyan College (Norfolk).

Cross-registration is subject to the following regulations:

1. Cross-registration is limited to degree-seeking students with an ODU cumulative grade point average of 2.00 or better.
2. Cross-registration credit is limited to 30 semester hours.
3. Cross-registration in major courses requires the permission of the department chair.
4. Cross-registration is limited to courses not available to students at the home institution during the current semester. Exceptions to this requirement must be made by the chair of the department offering the course.
5. Cross-registration courses count as resident credit at the home institution, not the host institution.

For further information, please contact the Office of the University Registrar at (757) 683-4425 or visit the office in Rollins Hall.

Declaration or Change of Major or Minor for Undergraduate Students

Upon entrance to the University, students are assigned either to an advisor in the Center for Major Exploration or to an advisor in their college or department of interest. Online students work with their assigned online Student Success Director as their main advisor, with a college advisor on campus assigned as the final authority. Acceptance of a student for advising purposes does not guarantee acceptance into the department as a major. Acceptance of a student as a major in a program cannot occur until all requirements for acceptance have been met. These requirements vary depending upon the major. Specific inquiries concerning requirements should be made to the academic college, school or department involved, or the Student Success Director. In all cases a student must successfully complete ENGL 110C before declaring a major.

A student must be accepted as a major in an academic program before the student may become a degree candidate or apply for graduation. Students cannot receive a degree in an academic program unless they have met all requirements for acceptance and have been accepted into that academic program. Students should declare their major by the time they earn between 45-60 credit hours in order to meet requirements of their intended major in a timely manner. Non-degree students may not declare majors until admitted to degree status.

Students must contact the department of the intended major or their Student Success Director to formally declare a major. Upon meeting the University, college, and departmental/school requirements for declaring the major and/or minor, the academic advisor or the Student Success Director in the interest area will officially declare the major and/or minor on the student's behalf.

Graduate Credit for Old Dominion University Undergraduates

Undergraduate Students Enrolled in Linked Undergraduate to Graduate Degree Programs

Old Dominion University hosts a number of linked undergraduate to graduate programs, including bachelor's to master's programs and bachelor's to doctoral programs, that permit undergraduate students to begin graduate study as early as the junior year. For linked bachelor's to master's programs, students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree, 30 discrete credit hours for the graduate degree). For linked bachelor's to doctoral programs, students must earn a minimum of 198 credit hours (120 discrete credit hours for the undergraduate degree, 78 discrete credit hours for the graduate degree).

Undergraduate students enrolled in linked graduate degree programs at Old Dominion University may take up to 21 hours of graduate credit that can be applied toward their undergraduate degrees. Of these 21 hours of graduate credit, up to 12 can be applied toward both the undergraduate and graduate degrees. This option is available only to those students who have satisfied all admission and continuation requirements of the specific linked programs. All graduate hours applied to the undergraduate degree will be counted in the undergraduate grade point average, will appear on the undergraduate transcript, and will be used to determine graduation with honors. Undergraduate students accepted into linked graduate degree programs will be formally admitted to the graduate program following receipt of the bachelor's degree.

Approved Bachelor's to Master's and Bachelor's to Doctoral Linked Degree Programs can be found at the link below.

https://catalog.odu.edu/undergraduate/registrationrequirementsandprocedures/linked_programs/ (p. 71)

Undergraduate Students with Senior Standing but not Enrolled in Programs with a Linked Graduate Degree Option

An Old Dominion University undergraduate degree-seeking student with senior standing and a 3.30 or better grade point average in the major field of study may be allowed to take up to 12 hours of graduate course work for graduate credit, upon approval of the instructor of the graduate course, the chair and graduate program director of the department offering the graduate course, and the chair or chief departmental advisor of the student's undergraduate major department. Up to six hours of graduate credit taken prior to completing the undergraduate degree may be applied toward the undergraduate degree. The graduate credit may be used as a substitution for required undergraduate courses only with the approval of the department chair or chief departmental advisor of the student's undergraduate program. All graduate hours applied to the undergraduate degree will be counted in the undergraduate grade point average, will appear on the undergraduate transcript, and will be used to determine graduation with honors. The combined undergraduate and graduate hours taken during any semester must not exceed 18. The proper request form, Request of Old Dominion University Undergraduate to Take Graduate Courses, is available in the Office of the University Registrar. This option is available only to degree-seeking undergraduate students at Old Dominion University.

Students who apply graduate credit to their undergraduate degree and continue in a graduate program at Old Dominion University in the same area must earn a minimum of 30 discrete credit hours for a master's degree and 78 discrete credit hours for a doctoral degree.

Completion of Requirements for Undergraduate Students (Catalog Year)

Undergraduate students may choose to graduate under the Catalog in effect at the time of their first enrollment (part-time or full-time) or any subsequent Catalog provided that the students graduate within six years (18 semesters)

from the date of the first enrollment. For example, students beginning in the fall 2023 semester may use any Catalog in effect from fall 2023 through the end of the 2029 summer term, students beginning in spring 2024 may use any Catalog in effect from spring 2024 through the end of the fall 2029 semester, and students beginning in summer 2024 may use any Catalog in effect from summer 2024 through the spring 2030 semester. If students do not graduate within this six-year period, they may choose to graduate under any Catalog in effect within the six-year period preceding the date of graduation. For example, students graduating in spring 2024 may use any Catalog in effect from summer 2018 through spring 2024, students graduating in summer 2024 may use any Catalog in effect from fall 2018 through summer 2024, and students graduating in fall 2024 may use any Catalog in effect from spring 2019 through fall 2024.

In all cases, students must have been duly admitted to the University and an academic program of study and meet all of the requirements for graduation in one catalog. Students may not "tailor make" their own degree requirements by selecting partial requirements from more than one catalog.

Degree Completion (Graduation) Application

Undergraduate students who have earned at least 102 credits and met other minimal requirements will be reminded via email to the ODU email address to begin the review process and to apply for graduation if eligible.

Qualified students should access and download a current copy of the Degree Works degree evaluation from <https://portal.odu.edu/> and consult with the academic advisor or Student Success Director (for online students) prior to submission of the application for graduation to ensure that degree requirements are being met. Students who have elected a minor must consult a representative in the minor department to ensure that minor requirements are being met. After meeting with the academic advisor and verifying eligibility for graduation, students should submit the online application for graduation. Paper applications for graduation are not accepted.

All students should apply for graduation during the semester prior to the expected completion of degree requirements. The deadline to apply for graduation and have the student's name printed in the commencement book is generally the last day of November, February and June for the following semester. Students applying after these dates may not appear in the commencement book. Complete instructions and specific deadlines are published on the Registrar's Office website, www.odu.edu/registrar (<http://www.odu.edu/registrar/>). All students should apply for graduation by using the online process at LEO Online.

Students pursuing two degrees simultaneously must submit graduation applications for each degree.

Students can view their application and degree status in LEO Online. Once the application has been processed, the student's graduation status appears as "accepted." The status changes to "awarded" once the degree is conferred. Degree conferral occurs after the official date of graduation and may take up to six weeks.

Students who do not complete degree requirements as expected will be notified via email and must reapply for the graduation date in which they will complete their degree. Students should check Degree Works for notes about missing requirements.

Graduation Clearance

All degree requirements must be completed no later than the last day of exams for the term in which graduation is anticipated. Students attending classes at other institutions should ensure that the course(s) and examination(s) taken at the other institution will be completed no later than the date of conferral for the semester published in the Academic Calendar. If all coursework is not completed by this date, awarding of the degree may be delayed until the next scheduled conferral date. In addition to departmental academic requirements specific to the major, minor, or degree program, prior to conferral of the degree, undergraduate students must complete the senior assessment (survey) and meet the University's undergraduate writing program requirement, which is completion of the following courses with a grade of C (2.0) or better: ENGL 110C, ENGL 211C or ENGL 231C,

and the writing intensive (W) course in the major. The writing intensive course must be taken at Old Dominion University and cannot be met through transfer coursework or through enrollment in the Virginia Tidewater Consortium. Students should also refer to the sections of this Catalog on Baccalaureate Degree Requirements, Residency Requirements for Baccalaureate Degrees, and specific requirements for their degree program.

Students are responsible for monitoring their own progress toward degree completion and for meeting all graduation requirements. Students are encouraged to monitor the following specific University requirements: general education, foreign language, transfer work evaluation, and upper-level requirements. Students are also reminded that academic advising in the major department is extremely important to the successful completion of the degree being sought.

Graduation with Honors

Baccalaureate Degrees

Baccalaureate degrees with honors are conferred in accordance with the following cumulative grade point averages on work attempted at Old Dominion University:

Honors	Minimum Number of Credit Hours	Minimum Number of Grade-Point Graded Hours
Cum Laude 3.4-3.65	60	54
Magna Cum Laude 3.66-3.85	60	54
Summa Cum Laude 3.86-4.00	60	54

These designations apply only to candidates who have completed 60 or more credit hours of work at Old Dominion University. At least 54 of the hours must be in grade-point graded courses. Honors designations will be posted to students' records and appear on the diploma.

Candidates who transfer to Old Dominion and thus do not qualify for honors designations because they have not completed 60 hours at Old Dominion University but who have 45 or more graded hours at Old Dominion University with a cumulative grade point average of 3.66 or higher will be recognized as graduates with distinction. This information will be posted to students' records and appear on the diploma.

To determine eligibility for graduation with honors or with distinction, the student's complete record, including grades and hours for courses that have been forgiven using grade forgiveness or adjusted through the Adjusted Resident Credit policy, will be evaluated to calculate the final grade point average. If the student's overall average is sufficient, graduation with honors or with distinction will be posted to the student's record and appear on the diploma.

Credit earned under the Prior Learning Assessment credit options (advanced placement, University exams, departmental exams, external exams such as CLEP and DANTES, portfolio review, and training) does not apply to the 60 credit hours required for graduation with honors or the 45 hours required for graduation with distinction.

For students in approved linked undergraduate to graduate degree programs, all graduate hours applied to the undergraduate degree will be counted in the undergraduate grade point average, appear on the undergraduate transcript, and be used to determine graduation with honors.

Departmental Honors

Undergraduate students may earn the designation of departmental honors on their diplomas. Minimum University standards for departmental honors are:

- Minimum cumulative GPA of 3.25.
- Minimum GPA in the major of 3.50.
- Completion of at least two 300- or 400-level courses designated by the department to be honors courses.

- Completion of at least 60 credit hours at Old Dominion University, 54 of which must be in grade-point graded courses.

Undergraduate students who meet all the criteria for departmental honors except the credit-hour requirement may earn the designation of with distinction on their diplomas with the completion of a minimum of 45 graded hours at Old Dominion University.

Candidates who have used grade forgiveness or adjusted resident credit should be aware that the enhanced grade point average determined by use of these procedures does not determine eligibility for departmental honors. To determine eligibility for departmental honors, the student's complete record, including grades and hours for courses that have been forgiven or adjusted, will be evaluated to calculate the final grade point average. If the student's overall average is sufficient, departmental honors will be posted to the student's record.

Credit earned under the Prior Learning Assessment credit options (advanced placement, University exams, departmental exams, external exams such as CLEP and DANTES, portfolio review, and training) does not apply to the 45 credit hours required for departmental honors.

For students in approved linked undergraduate to graduate degree programs, all graduate hours applied to the undergraduate degree will be counted in the undergraduate grade point average, appear on the undergraduate transcript, and be used to determine departmental honors.

Individual departments may set other eligibility standards in addition to the University standards.

Contract Honors Courses

Students with a grade point average of at least 3.25 may transform any upper-division course into an Honors course on an individual basis. With the advice and consent of the instructor, students take one or more courses that can be converted into Honors. No grade below B is accepted for Honors designation. In addition, contract honors courses may be used to meet requirements for departmental honors. Interested students should contact the Perry Honors College for additional information.

Commencement

Commencement exercises are intended for students who are eligible and reasonably expect to complete degree requirements to graduate from the University within the current or following graduation period.

Commencement ceremonies are managed through the Commencement Office. Information about requirements for participation in commencement ceremonies is available at <https://www.odu.edu/commencement> (<https://www.odu.edu/commencement/>). To be eligible to participate in ceremonies, candidates must indicate their intent when they apply for graduation; any change, including changes to graduation dates, must be communicated to the Commencement Office.

May commencement ceremonies are intended for candidates graduating in May and students who expect to complete studies in August. December commencement ceremonies are intended for candidates graduating in December and students who completed studies the preceding August.

Students who expect to attend commencement ceremonies must have applied for graduation. Tickets will not be provided by the Commencement Office to students that have not applied. Participation in commencement ceremonies does not confirm that a degree has been (or will be) conferred. Degree conferral may take four to six weeks from the date of the commencement ceremony. With the exception of doctoral degrees, diplomas are not distributed at commencement.

Diplomas

Diplomas are mailed to the student's permanent address in Banner approximately 6-8 weeks after graduation. Students should verify address information in LEO when applying for graduation.

The student's legal name (as maintained in the official student record) and the degree title (Bachelor of Arts, Bachelor of Science, etc.,) appear on the

diploma. Neither the major nor the minor appears on the diploma, but will appear on the transcript.

Transcripts

Transcripts are provided by the Office of the University Registrar and are issued only as requested through LEO Online. Official electronic transcripts (PDF) can be ordered through Parchment, the University's electronic transcript service provider. Transcripts should be requested at least five business days before the date needed to allow for processing and delivery. Students picking up transcripts must present valid identification. Students may access and print unofficial transcripts for personal use through LEO Online at no charge.

All grades, academic standing, degrees awarded, and degree honors are included on the transcript. Recent graduates that need to show proof of the degree earned should confirm that the graduation status in Leo Online shows "Awarded" prior to ordering a transcript.

An official transcript carries the University Seal and an authorized signature. Official transcripts are usually mailed directly to educational institutions, employers, etc. Any transcript mailed to or given directly to a student will be marked, "Issued to Student." Partial transcripts are not issued; each transcript must include the student's complete record at Old Dominion University. A transcript of work completed at any high school or at any college other than Old Dominion University must be obtained directly from that institution.

Linked Programs

Approved Bachelor's to Master's Linked Degree Programs

Please refer to your specific program page and consult with an advisor for additional information. The programs listed below are bachelor's to master's programs for specific subject areas.

College of Arts and Letters

- Bachelor of Arts or Bachelor of Science (various majors) to Master of Business Administration (see below for details)
- Bachelor of Arts or Bachelor of Science (various majors) to Master of Public Administration (see below for details)
- Bachelor of Arts in English to Master of Arts in Applied Linguistics (<http://catalog.odu.edu/undergraduate/arts-letters/english/english-applied-language-studies-ba/#mastersdegreeoptiontext>)
- Bachelor of Arts in Art History to Master of Arts in Humanities (p. 244)
- Bachelor of Arts or Bachelor of Science in Communication to Master of Arts in Humanities (p. 244)
- Bachelor of Arts or Bachelor of Science in Communication to Master of Arts in Lifespan and Digital Communication (p. 244)

The linked bachelor's/master's degree in communication/lifespan and digital communication is administered by the Communication and Theatre Arts Department. The purpose of this option is to allow exceptional majors in communication to count up to 12 hours of 500-level graduate coursework towards both the BA or BS in communication and, if accepted, the MA in lifespan and digital communication. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credits for the undergraduate degree and 30 discrete credits for the graduate degree). For more information, please contact Dr. Gary Beck.

- Bachelor of Arts or Bachelor of Science in Geography to Master of Arts in Humanities (p. 244)
- Bachelor of Arts in History to Master of Arts in History (p. 236)
- Bachelor of Arts or Bachelor of Science in Interdisciplinary Studies (Individualized Integrative Studies) to Master of Arts in Humanities (p. 244)
- Bachelor of Arts in International Studies to Master of Arts in International Studies (p. 313)
- Bachelor of Arts in Philosophy to Master of Arts in Humanities (p. 244)
- Bachelor of Arts in Visual Studies to Master of Arts in Humanities (p. 244)
- Bachelor of Arts in Women's Studies to Master of Arts in Humanities (p. 244)
- Bachelor of Arts in World Languages and Cultures to Master of Arts in Humanities (p. 244)
- Bachelor of Fine Arts (Art) to Master of Arts in Humanities (p. 244)

Strome College of Business

- Bachelor of Arts or Bachelor of Science (various majors in other colleges) to Master of Business Administration
- Bachelor of Arts or Bachelor of Science (various majors in other colleges) to Master of Public Administration
- Bachelor of Science in Business Administration to Master of Business Administration
- Bachelor of Science in Business Administration to Master of Public Administration
- Bachelor of Science in Business Administration to Master of Science in Accounting (p. 376)

School of Cybersecurity

- Master of Science in Cybersecurity (may be available in various BA and BS programs)

School of Data Science

- Master of Science in Data Science and Analytics (may be available in various BA and BS programs)

Darden College of Education and Professional Studies

- Bachelor of Science (various majors) to Master of Business Administration (see below for details)
- Bachelor of Science (various majors) to Master of Public Administration (see below for details)
- Bachelor of Science (various majors) to Master of Science in Education (contact program director for details).

Batten College of Engineering and Technology

- Bachelor's to Medical Doctor (in cooperation with Eastern Virginia Medical School)
- Bachelor's in Engineering or Engineering Technology to Master's programs in Engineering
These are designed to allow qualified students to secure a space in a master's program available in the Frank Batten College of Engineering and Technology while they are still pursuing their undergraduate degrees. An eligible student can choose a master's program in the same discipline as his/her bachelor's program or in a complementary discipline. Subject to the approval of the undergraduate and graduate program directors, a student enrolled in a linked program can count up to six credit hours of course work towards both the undergraduate and the graduate degrees. Full-time students may be able to complete the requirements for the bachelor's degree in four years and the master's degree in one additional year. Students in linked programs must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Students who are matriculated in an undergraduate major in the Frank Batten College of Engineering and Technology with a GPA of at least 3.00 overall and 3.00 in the major are eligible to apply for admission to a linked bachelor's/master's program. Transfer students who desire to be admitted to a linked program at the time they join an undergraduate major at Old Dominion University are eligible to apply if their overall GPA at their previous institution is 3.25 or higher. Prerequisite courses may be required for engineering technology majors to pursue a master's degree in engineering.

Continuance in a linked bachelor's/master's program requires maintenance of a GPA of 3.00 or higher overall and in the major.

College of Health Sciences

- Bachelor of Science in Dental Hygiene to Master of Science in Dental Hygiene (p. 626)

School of Nursing

- Bachelor of Science in Nursing to Master of Science in Nursing (p. 649)

Joint School of Public Health

- Bachelor of Science in Public Health to Master of Public Health (p. 663)

College of Sciences

- Bachelor of Science (various majors) to Master of Business Administration (see below for details)
- Bachelor of Science (various majors) to Master of Public Administration (see below for details)

- Bachelor of Science (various majors) to Medical Doctor (in cooperation with the Eastern Virginia Medical School)
- Bachelor of Science in Biochemistry to Master of Science in Chemistry (p. 696)
- Bachelor of Science in Chemistry to Master of Science in Chemistry (p. 703)
- Bachelor of Science in Computer Science to Master of Science in Computer Science (p. 718)
- Bachelor of Science in Computer Science to Master of Science in Data Science and Analytics (p. 718)
- Bachelor of Science in Mathematics to Master of Science in Computational and Applied Mathematics (p. 726)

General Linked Program Options

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<https://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<https://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Approved linked bachelor's to doctoral degree programs are as follows:

College of Engineering and Technology

- Bachelor's in Engineering or Engineering Technology to PhD in Engineering

For a select number of exceptionally well-qualified students, the college has established a linked doctoral program that enables students to

be admitted directly into the PhD program upon completion of the baccalaureate degree. A select number of exceptionally well-qualified students can be admitted to the Bachelor/PhD program in their junior year while they are pursuing one of the undergraduate programs at Old Dominion University. This program encourages admitted students to work closely with faculty members and pursue a research experience. Just as in the linked Bachelor/MS program, six credit hours of graduate course work may again be counted towards the undergraduate degree and doctoral course work mentioned above for the Bachelor/PhD program. For linked bachelor's to doctoral programs, students must earn a minimum of 198 credit hours (120 discrete credit hours for the undergraduate degree and 78 discrete credit hours for the graduate degree). Students in these programs must maintain a GPA of 3.50 or better throughout their bachelor's and doctoral studies.

The student may opt to obtain the master's degree along the way to the doctorate. To obtain the master's degree, the student must utilize the six graduate credits obtained as part of their undergraduate program, use 18 credits of the graduate course work that is part of the PhD, and also write a master's thesis.

University General Education Requirements

University General Education Requirements

All students receiving baccalaureate degrees from Old Dominion University shall complete the University's General Education Program. At the lower division (freshman and sophomore), the program's designed courses develop the Skills (Goals 1-2 below) needed for later study and the Ways of Knowing (Goals 3-4) needed to understand the various approaches to knowledge at work in the University. At the upper division (junior and senior), Options B, C, and D provide a multidisciplinary experience to broaden the student's ability to apply the Skills and Ways of Knowing at a more advanced level.

General Education and Prior Learning Assessment

All lower-level requirements within this program may be met by credit awarded to students who are able to demonstrate appropriate prior learning that fulfills the objectives of the particular Skills and Ways of Knowing requirements. Though not all learning and experiences are worthy of being recognized with the reward of academic credit, the principle that supports the policy is that many valid learning experiences worthy of such credit do take place outside of the traditional classroom setting. For procedures to meet General Education Requirements in this manner, please consult the section of this Catalog on Prior Learning Assessment Credit Options at the Undergraduate Level and visit the Prior Learning Assessment web site at <https://www.odu.edu/academics/academic-records/evaluation-of-credit/prior-learning> (<https://www.odu.edu/academics/academic-records/evaluation-of-credit/prior-learning/>).

General Education Philosophy

The General Education program at Old Dominion University represents the common core of the baccalaureate degree. It prepares students for pursuing a major, for broadening their views of life, and for understanding an increasingly global and diverse world. It provides students with the basic skills and intellectual perspectives to engage in the search for knowledge. The General Education program develops analytical and critical thinking skills and the ability to make reasoned judgments. Students will also discover that learning is a complex, multifaceted, and lifelong endeavor.

General Education Goals and Objectives

The Goals (1-5) and particular objectives of General Education are as follows:

1. Develop and demonstrate effective uses of language.
 - a. Develop written communication skills.
 - b. Develop oral communications skills.
 - c. Develop ability to use a foreign language and learn about another culture.
 - d. Develop written communication skills in the major at the upper-division level.
2. Develop mathematical and information literacy.
 - a. Develop basic mathematical competence.
 - b. Develop information literacy competence.
3. Develop an understanding of the natural sciences and technology and their contributions to human culture.
 - a. Understand the concepts and methods of the natural sciences.
 - b. Understand the nature of technology and its impacts on society and the environment.
4. Develop an understanding of human behavior, society and culture, with specific attention to technology, international perspectives and issues related to ethnicity, race and gender.
 - a. Develop an understanding of history and the ability to think critically about the past.

- b. Think critically about beliefs, values, and moral issues that have shaped human society.
 - c. Critically analyze the fine and performing arts and their contribution to culture.
 - d. Critically analyze literature and its contribution to culture.
 - e. Develop an understanding of behavioral, political, economic, and social systems.
5. Integrate knowledge at the advanced level.
 - Option A. Complete a minor, second major or second degree.
 - Option B. Complete an interdisciplinary minor.
 - Option C. Complete an approved certification program such as teaching licensure.
 - Option D: Complete upper-division course work from another college or component (majors in the College of Arts and Letters may select from the Arts and Humanities component or the Social Sciences component depending on the major) outside of and not required by the major.

Students may not use courses in the discipline of their declared major to fulfill University General Education Requirements in the following Ways of Knowing areas: Human Behavior, Human Creativity and the Nature of Science.

Since the Skills and Ways of Knowing are needed for major courses and Upper-Division General Education, students should meet those requirements during their freshman and sophomore years.

Transfer Policies for General Education Requirements

Students who have received any of the following associate degrees from Richard Bland College or the Virginia Community College System have met all lower-division General Education requirements, except those specified as major or college requirements and requirements for completion of the undergraduate writing program: Associate of Arts (AA), Associate of Science (AS) with any major other than general studies (see the next paragraph for additional information), and Associate of Arts and Sciences (AA and S), including the AA & S with a major in general studies.

Effective Fall 2010, the AS degrees in general studies that are offered by those institutions whose general studies degrees are recognized as transfer degrees by the State Council of Higher Education for Virginia will also be guaranteed acceptance as meeting lower-division General Education Requirements. AS degrees in general studies received from those institutions whose general studies degrees are not recognized by the State Council of Higher Education for Virginia will be examined individually to determine whether the degrees are university parallel programs and eligible for lower-division General Education requirement waivers.

Students who have earned an Associate of Applied Science (AAS) degree from the Virginia Community College System that includes the required General Education courses have met all lower-division General Education requirements except those specified as major or college requirements and the requirements for completion of the undergraduate writing program. College-parallel programs at other community colleges or systems (consistent with the requirements of degrees from the Virginia Community College System) are also accepted as meeting lower-division General Education requirements and are reviewed by the Office of Undergraduate Admissions. Transfer students should be aware that even though University lower-division General Education Requirements may have been met, college, school and/or departmental requirements must still be met. Students must earn a grade of C (2.0) or better in order to receive the credit hours associated with classes taken at other regionally accredited institutions.

Policies governing the transfer of General Education Requirements can be found in the Admissions section of this catalog. See the transfer student website for the complete listing of articulation agreements at: <https://www.odu.edu/transfer/transfer-pathways> (<https://www.odu.edu/transfer/transfer-pathways/>).

Lower-Division Requirements (freshman and sophomore years)

I. Skills

Completion of course work in the skills areas ensures that all students possess the basic tools with which to pursue their major interests.

A. Written Communication

Students are advised to consult the department of their major program and the Undergraduate Writing Program Requirements section of this catalog.

ENGL 110C	English Composition (grade of C or better required)	3
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research (grade of C or better required)	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics (grade of C or better required)	
Undergraduate students must pass ENGL 110C with a grade of C (2.0) or better in order to qualify to register for ENGL 211C or ENGL 231C.		
Students must also pass ENGL 211C or ENGL 231C with a grade of C (2.0) or better to qualify to register for a writing intensive (W) course.		
Total Credit Hours		6

A portfolio waiver option is available for ENGL 110C and ENGL 211C/ENGL 231C. Please refer to the section on Academic Testing and Placement (p. 49) in this Catalog for more information.

B. Oral Communication

Select one of the following courses		3
COMM 101R	Public Speaking	
COMM 103R	Voice and Diction	
COMM 112R	Introduction to Interpersonal Communication	
DANC/THEA 152R	Acting One	
MKTG 200R	Professional Interactions and Negotiations	
PHIL 160R	Raising Moral Issues in STEM	
Total Credit Hours		3

Students may meet this requirement by completing an oral communication course appropriate to the student's program of study or through an approved course(s) within the major. Please refer to the specific major requirements found in this catalog to determine whether this requirement may be met through major courses and consult with the major department or advisor as needed. Students who complete the required courses in their major that meet oral communication and then change to a major that does not meet the requirement through courses in the major will have met the oral communication requirement for the new major.

C. Mathematics

Select one of the following courses		3
MATH 101M	An Introduction to Mathematics for Critical Thinking	
MATH 102M	College Algebra	
MATH 103M	College Algebra with Supplemental Instruction	
MATH 162M	Precalculus I	
STAT 130M	Elementary Statistics	
Total Credit Hours		3

For the appropriate course, the major program should be consulted. Some programs require more advanced 200-level courses.

Students should strive to complete the mathematics General Education requirement within their first 30 hours at Old Dominion University and are expected to have completed the requirement before the end of their first 60 hours at the University. Students should be aware that waivers of the mathematics General Education requirement are not granted, and all students are required to complete this requirement before graduating.

D. Language and Culture*

Select 6 hours of a single language from the following courses unless the language requirement was met through high school coursework, transfer credit, or exemption.

ARAB 111F	Beginning Arabic
CHIN 111F	Beginning Chinese
FR 101F & FR 102F	Beginning French I and Beginning French II
GER 101F & GER 102F	Beginning German I and Beginning German II
HEBR 111F	Beginning Hebrew I
ITAL 101F & ITAL 102F	Beginning Italian I and Beginning Italian II
JAPN 111F	Beginning Japanese
LATN 101F & LATN 102F	Beginning Latin I and Beginning Latin II
PRTG 101F & PRTG 102F	Beginning Portuguese I and Beginning Portuguese II
RUS 101F & RUS 102F	Beginning Russian I and Beginning Russian II
SPAN 101F & SPAN 102F	Beginning Spanish I and Beginning Spanish II
SPAN 121F	Intensive Beginning Spanish

Total Credit Hours 6

111F courses are six credit hours each. Students may meet the language and culture requirement by successfully completing the third level in one foreign language or the second level in each of two foreign languages in high school or by completing a single foreign language at the 102F or 111F level or equivalent work from another institution. Students who have had some foreign language experience but are unable to be exempted from this requirement may complete just the 121F course in the case of Spanish or the 102F course in foreign languages if scores on the CEEB Foreign Language Achievement Test so indicate.

The College of Arts and Letters requires foreign language proficiency at the fourth-semester level for students pursuing Bachelor of Arts degrees.

Students whose native language is not English are exempt from taking a foreign language for General Education. Students pursuing degrees that require proficiency beyond the 100 level must be certified by the World Languages and Cultures Department to obtain a waiver of the 200-400 level courses.

American Sign Language courses taken in high school or transferred to Old Dominion University from another institution are accepted by Old Dominion University to meet General Education requirements in language and culture. American Sign Language courses transferred from another institution are accepted to meet the foreign language requirement for BA degrees in the College of Arts and Letters except for Asian Studies, foreign languages and international studies.

* Does not apply to students earning high school diplomas before December 31, 1985.

E. Information Literacy and Research

Select one of the following courses		3
CHEM 160G	Introduction to Chemistry and Biochemistry Research and Careers	
COMM 272G	Digital Literacy	

COMM 278G	Advertising & Society
CS 120G	Introduction to Information Literacy and Research
CS 121G	Introduction to Information Literacy and Research for Scientists
CS/CYSE/PHIL 202G	Information Literacy for Cybersecurity
HLTH 120G	Information Literacy for Health Professions
HNRS 250G	Media and Info Literacy in the Google Age
IT 150G	Basic Information Literacy and Research
LIBS 110G	Information Literacy for the Digital Age
OEAS 130G	Research Skills and Information Literacy for the Natural Sciences
PHIL 290G	Philosophy of Digital Culture
REL 147G	Cults and Conspiracies
REL 260G	Muslims & Media
STEM 251G	Computer Literacy: Communication and Information

Total Credit Hours 3

Students may meet this requirement in the major by completing an information literacy and research course appropriate to the student's program of study or through an approved course(s) within the major. Please refer to the specific major requirements found in this catalog to determine whether this requirement may be met through major courses and consult with the major department or advisor as needed.

Students who complete the required courses in their major that meet information literacy and research and then change to a major that does not meet the requirement through courses in the major will have met the information literacy and research requirement for the new major. Engineering and engineering and technology majors who completed ENGT 111 or its equivalent but do not complete the additional major courses to meet information literacy and research must complete CS 112 to meet the requirement or they may complete a separate course with the "G" designation. ENGN 121 will meet the information literacy and research requirement on its own.

II. Ways of Knowing

Courses in the Ways of Knowing develop the students' critical and analytical thinking abilities. They also develop understanding of the various approaches to knowledge, the contributions various academic disciplines can make to solving specific problems, and the effective use of the English language. Courses in the Ways of Knowing also develop and reinforce written communication skills and include relevant insights into technology. In addition, courses within each Way of Knowing focus on objectives unique to that way of knowing.

A. Human Behavior

The objective of this Way of Knowing is to enable students to learn about human behavior in changing contexts. The courses will address how ideological, scientific, and ethical judgments affect human behavior in Western and non-Western cultures. They will also offer perspectives on the challenges, concerns, and contributions of diverse groups such as women and minorities.

Students may not use courses in the discipline of their major to meet the Human Behavior requirement.

Courses that meet the human behavior Way of Knowing are:

Select one of the following courses		3
AAST 100S	Introduction to African American Studies	
ANTR 110S	Introduction to Anthropology	
COMM 200S	Introduction to Human Communication	
CPD/SOC 100S	Leadership and Society	
CRJS 215S	Introduction to Criminology	
CYSE 201S	Cybersecurity and the Social Sciences	

DASC/SOC 205S	Data, Technology, Society
ECON 200S	Basic Economics
ECON 201S	Principles of Macroeconomics
ECON 202S	Principles of Microeconomics
ENTR 201S	Introduction to Entrepreneurship
FOUN 101S	Learning to Learn
FIN 210S	Personal Financial Literacy
GEOG 100S	Human Geography
GEOG 101S	Environmental Geography
HMS 200S	Personal Health and Wellness
POLS 100S	Introduction to International Politics
POLS 101S	Introduction to American Politics
POLS 102S	Introduction to Comparative Government and Politics
PRTS 210S	Leisure and Human Behavior
PSYC 201S	Introduction to Psychology
PSYC 203S	Lifespan Development
SEPS 203S	Dress, Culture and Society
SOC 201S	Introduction to Sociology
SOC 203S	Diversity and Society
WGS 201S	Introduction to Women's, Gender, and Sexuality Studies

Total Credit Hours 3

B. Human Creativity

This Way of Knowing emphasizes artistic creative endeavor and appreciation and the history of the arts. The courses include field experience with the professional arts community in Hampton Roads as well as with the faculty of relevant departments. The objectives are to foster an appreciation of aesthetic experiences, develop abilities to make reasoned aesthetic judgments and develop an understanding of diverse cultures.

Students may not use courses in the discipline of their major to meet the Human Creativity requirement.

Courses that meet the human creativity Way of Knowing are:

Select one of the following courses		3
ARTH 121A	Introduction to the Visual Arts	
ARTS 122A	Visual Communication	
COMM/THEA 270A	Film Appreciation	
DANC 185A	Dance and Its Audience	
MUSC 264A	Music in History and Culture	
SEPS 223A	Visual Merchandising and Display	
THEA 241A	The Theatre Experience	

Total Credit Hours 3

C. Interpreting the Past

The objective of this Way of Knowing is to provide an understanding of historical analysis for non-history majors.

Courses that meet the interpreting the past Way of Knowing are:

Select one of the following courses		3
HIST 100H	Interpreting the World Past Since 1500	
HIST 101H	Interpreting the Asian Past	
HIST 102H	Interpreting the European Past	
HIST 103H	Interpreting the Latin America Past	
HIST 104H	Interpreting the American Past	
HIST/AAST 105H	Interpreting the African Past	
HIST 205H	Heroes & Hoplites: History of Ancient Greece	

THEA 243H	Theatre Histories	
Total Credit Hours		3

D. Literature

This Way of Knowing emphasizes the contribution of literature to culture. Through critical reading and analysis, students will develop the ability to make effective use of the English language and informed aesthetic judgments about style and content.

Courses that meet the literature Way of Knowing are:

Select one of the following courses		3
ENGL 112L	Introduction to Literature	
ENGL 114L	American Writers, American Experiences	
ENGL 215L	Deep Dive Literature	
WCS 100L	Introduction to World Literatures and Cultures	
Total Credit Hours		3

E. The Nature of Science

This Way of Knowing requires two semesters of natural science. A student may fulfill the requirement with two non-sequential natural science classes with labs unless a sequence is specifically required for the major. These courses introduce the disciplines and the methods of science and develop the abilities to make reasoned judgments based on scientific considerations.

Students may not use courses in the discipline of their major to meet the Nature of Science requirement.

Courses that meet the nature of science Way of Knowing are:

Select two of the following courses. The combination of BIOL 150 and BIOL 151 plus BIOL 240 and BIOL 241 or the combination of BIOL 150 and BIOL 151 plus BIOL 250 and BIOL 251 satisfies four credits of the nature of science requirement.		8
ASTP 103N	Introductory Astronomy of the Solar System	
ASTP 104N	Introductory Astronomy of Galaxies and Cosmology	
BIOL 105N	Biology for Nonscience Majors I	
BIOL 106N	Biology for Nonscience Majors II	
BIOL 110N & BIOL 111N	Environmental Science for Non-Majors and Environmental Science Lab for Non-Majors	
BIOL 112N & BIOL 113N	Environment and Humanity and Environment and Humanity Laboratory	
BIOL 117N & BIOL 118N	Introduction to Human Biology and Introduction to Human Biology Lab	
BIOL 121N & BIOL 122N	General Biology I and General Biology I Lab	
BIOL 123N & BIOL 124N	General Biology II and General Biology II Lab	
CHEM 105N & CHEM 106N	Introductory Chemistry and Introductory Chemistry Laboratory	
CHEM 107N & CHEM 108N	Introductory Organic and Biochemistry and Introductory Organic and Biochemistry Laboratory	
CHEM 121N & CHEM 122N	Foundations of Chemistry I Lecture and Foundations of Chemistry I Laboratory	
CHEM 123N & CHEM 124N	Foundations of Chemistry II Lecture and Foundations of Chemistry II Laboratory	
OEAS 106N	Introductory Oceanography	
OEAS 108N	Understanding Global Climate Change	
OEAS 110N	Earth Science	
or OEAS 111N	Physical Geology	
OEAS 112N	Historical Geology	
OEAS 250N	Natural Hazards and Disasters	

PHYS 101N	Conceptual Physics	
PHYS 102N	Conceptual Physics	
PHYS 111N	Introductory General Physics	
PHYS 112N	Introductory General Physics	
PHYS 231N	University Physics I	
PHYS 232N	University Physics II	
PHYS 261N & PHYS 262N	Advanced University Physics I and Advanced University Physics II	
Total Credit Hours		8

F. Philosophy and Ethics

Because of the many decisions students will be called upon to make in their personal and professional lives, they will need an appreciation and understanding of philosophical, religious, and ethical foundations to help them to make informed, intelligent choices. Further, as the pace of change and interdependency in the world accelerates, it is important that students be given an ample opportunity to critically examine philosophy and ethical values and to understand how philosophical and ethical issues affect decision-making in professional disciplines.

Courses that meet the philosophy and ethics Way of Knowing are:

Select one of the following courses		3
PHIL 110P	Introduction to Philosophy	
PHIL 120P	Logic and Philosophy	
PHIL/REL 150P	Life, Death, and Meaning	
PHIL/REL 155E	Human Nature	
PHIL 230E	Introduction to Ethics	
PHIL/REL 235E	Love, Sex, and Desire	
PHIL 250E	World Religions: Beliefs and Values	
PHIL 270P	Truth and Perception	
PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL/DASC 357E	Ethics and Data	
PHIL 442E	Studies in Applied Ethics	
Total Credit Hours		3

Students may meet this requirement by completing a philosophy and ethics course appropriate to the student's program of study or through an approved course(s) within the major. Please refer to the specific major requirements found in this catalog to determine whether this requirement may be met through major courses and consult with the major department or advisor as needed.

Students who complete the required courses in their major that meet philosophy and ethics and then change to a major that does not meet the requirement through courses in the major will have met the philosophy and ethics requirement for the new major. All majors under the College of Engineering and Technology meet this requirement if ENMA 480 is completed.

G. Impact of Technology

Thinking critically about technology requires understanding how technologies and technological systems reflect and perpetuate our values, our biases, and our ways of understanding ourselves, each other, and the world.

Courses in the Impact of Technology Way of Knowing are intended to develop students' ability to make reasoned judgments about the meaning and impact of technology by understanding that technologies and technological systems are not value-neutral but are influenced by social and cultural forces and also influence society and culture.

Courses that meet the impact of technology Way of Knowing are:

Select one of the following courses	3
BDA 200T	Elements of Data Science
BIOL 470T	Diseases that Changed our World
CHEM 171T	Influence of Polymers on Society
CHEM 173T	Nutritional Biochemistry
CHEM 175T	Neurotechnology
CHEM 320T	Survey of Forensic Science
CHEM 339T	The Chemistry of the Environment
CHEM 343T	Science and Technology in Art
COMM/THEA 280T	Entertainment Technologies
COMM 372T	Introduction to New Media Technologies
CPD/SCLM 303T	Maritime Leadership, Technology, and Society
CS 300T	Computers in Society
CYSE/IT 200T	Cybersecurity, Technology, and Society
DNTH 440T	Telehealthcare Technology
ENGL/IDS 307T	Digital Writing
GAME 201T	Introduction to Game Studies
GEOG 102T	Digital Earth: Geospatial Technology and Society
GEOG 306T	Hazards: Natural and Technological
HIST 304T	History of Medicine, Disease, and Health Technology
HIST 388T	Discovering Earth's History
HIST 389T	Technology and Civilization
HIST/HNRS 386T/SCI 302T	The Evolution of Modern Science
IT 360T	Principles of Information Technology
MUSC 335T	Music Technology Survey
OEAS 220T	Introduction to Meteorology
PHIL 383T	Philosophy of Technology
PHYS 137T	Introduction to Quantum Science and Technology
POLS 350T	Technology and War
POLS 458T	Weapons of Mass Destruction in Global Security
STEM 110T	Technology and Your World
STEM 370T	Technology and Society
THEA 280T	Entertainment Technologies
WGS 390T	Women, Gender, and Technology Worldwide

Students may meet this requirement by completing an impact of technology course appropriate to the student's program of study or through an approved course(s) within the major. Please refer to the specific major requirements found in this catalog to determine whether this requirement may be met through major courses and consult with the major department or advisor as needed.

Students who complete the required courses in their major that meet impact of technology and then change to a major that does not meet the requirement through courses in the major will have met the impact of technology requirement for the new major.

Honors Courses that Meet General Education Requirements*

Skills

Written Communication

ENGL 126C	Honors: English Composition	3
ENGL 226C	Honors: Writing, Rhetoric, and Research	3

ENGL 228C	Honors: Writing, Rhetoric, and Research: Special Topics	3

Oral Communication

COMM 126R	Honors: Public Speaking	3

Information Literacy and Research

CS 126G	Honors: Introduction to Information Literacy and Research	3

REL 226G	Honors: Muslims & Media	3

Ways of Knowing

Human Behavior

COMM 226S	Honors: Introduction to Human Communication	3

CRJS 226S	Honors: Introduction to Criminology	3

ECON 226S	Honors: Principles of Macroeconomics	3

ECON 227S	Honors: Principles of Microeconomics	3

GEOG 126S	Honors: Cultural Geography	3

POLS 126S	Honors: Introduction to American Politics	3

POLS 127S	Honors: Introduction to International Politics	3

SOC 226S	Honors: Introduction to Sociology	3

WGS 226S	Honors: Gender and Sexuality in a Changing World	3

Human Creativity

ARTS 126A	Honors: Art as Experience	3

ARTH 127A	Honors: Introduction to the Visual Arts	3

COMM 227A	Honors: Film Appreciation	3

MUSC 126A	Honors: Music in History and Culture	3

THEA 227A	Honors: Film Appreciation	3

Interpreting the Past

HIST 126H	Honors: Interpreting the American Past	3

HIST 127H	Honors: Interpreting the European Past	3

Literature

ENGL 127L	Honors: Introduction to Literature	3

WCS 120L	Honors: Introduction to World Literatures and Cultures	3

The Nature of Science

ASTP 126N	Honors: Introductory Astronomy of the Solar System	4

ASTP 127N	Honors: Introductory Astronomy of Galaxies and Cosmology	4

BIOL 136N & BIOL 137N	Honors General Biology I and Honors General Biology I Lab	4

BIOL 138N & BIOL 139N	Honors General Biology II and Honors General Biology II Lab	4

OEAS 126N	Honors: Introductory Oceanography	4

PHYS 226N	Honors: University Physics I	4

PHYS 227N	Honors: University Physics II	4

Philosophy and Ethics

PHIL 126P	Honors: Introduction to Philosophy	3

PHIL 127P	Honors: Life, Death, and Meaning	3

PHIL 226E	Honors: Love, Sex, and Desire	3

PHIL 227E	Honors: World Religions: Beliefs and Values	3

PHIL 228E	Honors: Introduction to Ethics	3

* Courses listed are open only to students in the Perry Honors College.

Upper-Division Requirements (junior and senior years)

Writing Intensive Course in the Major

All students are required to demonstrate written communication skills in the major by taking a Writing Intensive (W) course at the upper-division level. All undergraduate students must complete their W course in the major (3 credits) at Old Dominion University and earn a grade of C (2.0) or better in order to earn a baccalaureate degree.

Criteria for Writing Intensive courses include:

1. Students will demonstrate, in a series of individual (not group) assignments, their mastery of the subject in a discipline, through the writing of formal documents.
2. For each writing assignment, the instructor will provide feedback to the student, evaluating content and writing style (organization, development, logic, coherence and mechanics).
3. Types of documents for writing assignments include essays, laboratory reports, project reports, critiques of performances, research proposals, case studies, journal article reviews, book reviews, creative writing, written interviews, and other forms appropriate to a particular discipline.
4. A maximum of 10% total of identified graded writing in the form of essays for tests, quizzes, and/or a mid-term examination (not a final exam) may be included. It is to be evaluated for both content and writing style as indicated in (b) above.
5. Graded writing requirements comprise at least 51% of the overall course grade.

Upper-Division Studies Outside the Major

Students are required to complete Option A, B, C or D to meet the upper-division general education requirement. In addition to the completion of courses in the area of the major field, a candidate for a baccalaureate degree may select Option A, any University-approved minor, second degree or second major. The minor may be chosen to support the major, to offer greater job opportunities to the student on graduation, or to provide academic recognition of study in a second disciplinary area. A baccalaureate degree candidate may also choose an integrative disciplinary experience through the selection of Option B, an Interdisciplinary Minor; Option C, an approved Certification Program such as Teaching Licensure; or Option D, six hours of elective upper-division course work from outside of and not required by the student's major and college. In the College of Arts and Letters, courses are divided into two components for option D: (1) Arts and Humanities and (2) Social Sciences.

Option A: Any University-approved minor (minimum of 12 hours determined by the department), second degree, or second major

Students who complete the course requirements for the minor, but who do not attain a 2.00 grade point average in the minor, may request that the course work be approved to meet the upper-division general education requirement. The request may be initiated through the student's advisor and the associate dean of their college and submitted to the assistant vice president for undergraduate studies in the Office of Academic Affairs. Students whose requests are approved will meet the upper-division requirement, but they will not receive credit for the minor. Additional information can be found in the section of this Catalog on Minors.

Approved minors can be found at the programs search link: /p (<http://catalog.odu.edu/programs/>)

Option B: Any University-approved interdisciplinary minor (specifically 12 hours, three of which may be in the major)

Three credit hours in the interdisciplinary minor may be in the major if a major course is listed as an option for the interdisciplinary minor. As such, it will be credited toward both the major and the interdisciplinary minor. Interdisciplinary minors require 12 credit hours of 300/400-level courses

selected from at least two different disciplines with a maximum of six credits from any one discipline. Course substitutions may be approved by the interdisciplinary minor coordinator. Additional information can be found in the section of this Catalog on Minors.

Approved interdisciplinary minors can be found at the programs search link: /programs/ (<http://catalog.odu.edu/programs/>)

Option C: Approved Certification Program such as Teaching Licensure

Option C can be met through an approved certification program such as teaching licensure. The professional education requirements specified for teaching licensure programs meet this option.

Option D: Upper-Division Course Work from Another College Outside of and not Required by the Major

Option D can be met by six credit hours of elective upper-division course work from outside of and not required by the student's major and college. Transfer courses may be used to meet this requirement but must be from outside of and not required by the student's major and college. Study abroad courses, Military Science and Leadership courses (MSL) and Naval Science courses (NAVS) may be used to meet the Option D requirement for all students, regardless of the student's major and college. Upper-division courses elected to meet the Philosophy and Ethics and Impact of Technology Ways of Knowing areas may also meet the requirement but they must be outside the college and not required by the major.

In the College of Arts & Letters, courses are divided into two components: (1) Arts & Humanities and (2) Social Sciences.

Arts and Letters majors will be permitted to take upper-division courses in their non-major component for this requirement or courses from another college.

By definition the Arts and Humanities component will include: Art, Dance, English, Graphic Design, History, Humanities, Music, Music Education, Philosophy, Theatre, and World Languages and Cultures. The Social Sciences component will include: African-American Studies, American Studies, Asian Studies, Anthropology, Communication, Criminal Justice, Filipino-American Studies, Gaming, Geography, International Studies, Jewish Studies, Middle Eastern Studies, Political Science, Queer Studies, Sociology, and Women's and Gender Studies.

Students must satisfy all prerequisites before enrolling in any upper-division course.

Student Resources and Services

Academic Success Initiatives

Housed inside the Student Success Center, Academic Success Initiatives (ASI) empowers all to thrive academically, personally, and professionally. Academic Success Initiatives provides an inclusive environment dedicated to building authentic relationships and community, fostering meaningful learning experiences, and collaborating with all as they pursue their passion and purpose. In partnership with the Provost, Vice Provost and other University leaders, this area is responsible for the coordination of academic success programs across the University.

ASI includes five offices:

- Office of Advising Administration
- Office of Academic Innovation & Learning Support
- Monarch Internship & Co-op Office
- Office of Study Abroad
- TRiO Programs: TRiO Upward Bound, TRiO Student Support Services, and TRiO McNair Scholars

In collaboration with the academic colleges and other partners across campus, these units provide a diverse array of services and programs for undergraduate students. Staff work to ensure students learn about academic programs and majors; connect to campus peers, groups, and others with similar interests; make academic plans, monitor progress, and reach short- and long-term goals; engage in active learning and work-based learning programs; find and use academic support services; and showcase skills, talents, and abilities.

Center for Career & Leadership Development

The Center for Career and Leadership Development (CCLD) empowers undergraduate and graduate students and alumni in their career and leadership development from their first day as a Monarch through graduation and their career. Through strategic collaboration with campus and community partners, CCLD offers several programs and services, including career coaching and workshops, leadership development, resume reviews and job search preparation, career fairs and employer connections, a job search database called Handshake, student employment coordination and training, volunteer and service-learning programs, career treks, professional mentorship programs, living-learning and theme communities, and the Monarch Pantry.

The Student Employment Program is designed to assist students in locating on- or off-campus, part-time, seasonal, or Federal Work-Study (FWS) positions for those who qualify.

The Center for Career and Leadership Development collaborates with on- and off-campus organizations to post open jobs of all types, including permanent full-time positions, as well as on-campus roles, through ODU Handshake. This powerful interactive web-based system is available for free to students and alumni of Old Dominion University. The ODU Handshake database contains employer information, career information, a career events calendar and interview schedules, and the means to electronically apply for positions posted. Handshake is the primary tool used by CCLD to communicate with students about various career opportunities and events to help students succeed at Old Dominion University and into their careers.

Individual career coaching and electronic assessment tools, as well as workshops on career exploration, development, and the job search, are available to assist in major and career path selection. Students may sign up for an appointment with a career coach via Handshake or by visiting the office during drop-in coaching hours. CCLD also provides students with experiential learning opportunities through leadership seminars, service-learning course partnerships, career treks, job shadow, and mentorship opportunities. Students can also volunteer in and receive support from the Monarch Pantry and Monarch Clothing Closet. More information on career coaching, workshops, and experiential learning opportunities are located on

CCLD's website at [odu.edu/career-leadership](https://www.odu.edu/career-leadership) (<https://www.odu.edu/career-leadership/>).

Career and internship fairs are held twice a year and are supplemented by specialized fairs for specific populations. Employers are also present on campus through information and tabling sessions, as well as employer and alumni career information panels and etiquette meals. Additional opportunities to connect with internships and co-operative opportunities are coordinated by ODU's Monarch Internship and Co-Op Office ([odu.edu/internship](https://www.odu.edu/internship)) (<https://www.odu.edu/internship/>).

More information is available by calling the CCLD main office at 757-683-4388 during normal office hours, via email at ccld@odu.edu, or via the website at <http://www.odu.edu/career-leadership> (<http://www.odu.edu/career-leadership/>). Staff members are also available in 2202 Webb Student Center.

Division of Student Enrollment, Engagement and Services

Student Enrollment, Engagement and Services employees are dedicated to student success and enrich the campus-based experience so all may belong and thrive. We strengthen our community through a culture of care and service that unifies enrollment, engagement, and active learning.

Celebrating academic and inclusive excellence, our forward-focused graduates are equipped with knowledge, skills, and tenacity to thrive in a rapidly evolving world. The division provides creative leadership and strategic direction for a broad array of student recruitment and retention services and programs including: Admissions (Undergraduate, Graduate, International), Assessment and Planning, Budget Management, Campus Life Services, Campus Visitors and Events, Center for Career and Leadership Development, Center for Orientation, Retention, and Exploration (CORE), Chartway Arena, Office of Counseling Services, Customer Relationship Management (CRM) and Integrated Systems, Dean of Students Office, Divisional Marketing and Communications, Divisional IT Support, Office of Educational Accessibility, Enrollment Management, Enrollment Marketing and Analytics, Student Financial Aid, Housing and Residence Life, Office of Intercultural Relations, Mail Center, Military Connection Center, Monarch Assistance Partners, Monarch Card and Business Services, Monarch Dining Services, Recreation and Wellness, Strategic Initiatives, Student Accountability and Academic Integrity, Student Engagement and Traditions, Student Health Services, University Village Bookstore, Webb Student Center, and Women's and Gender Equity Center.

Educational Accessibility

The Office of Educational Accessibility (OEA), located at 1021 in the Student Success Center, is dedicated to providing students with disabilities access to higher education. The University offers accommodations and services depending on documentation presented by the student. It complies with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and its Amendments of 2008. For students with specific learning, medical, psychological, physical or mobility, visual, hearing, or temporary and other challenges, reasonable accommodations are afforded. Students with disabilities benefit greatly from the accommodations and other supportive services offered by the Office of Educational Accessibility, which also significantly contribute to their academic performance.

All students must submit the proper documentation and register with OEA to receive help. Instructions for registering and guidelines for documentation can be found at <https://www.odu.edu/accessibility> (<https://www.odu.edu/accessibility/>). Calling (757) 683-4655 will provide more detailed information. Interactions between students and OEA are kept confidential and private. OEA expects new students who require interpreters to contact them at least 45 days before registration to prepare. As soon as a student has pre-registered for a semester, they must pre-register for accommodations for themselves.

An overview of compliance standards can be found at <https://www1.odu.edu/equity/>.

Student Outreach and Support (SOS)

Denisse Thillet-Tirado, Associate Dean of Students and Director of Student Outreach and Support

Student Outreach and Support (SOS) is a service within the Dean of Students Office that provides support to students who experience administrative, academic, or personal road blocks. These services include extended absence notifications, emergency grants, and administrative withdrawals from the University. SOS is available to help students achieve their personal and academic goals.

The University Care Team is an extension of Student Outreach and Support.

The Care Team was developed to provide a University-wide system of care and support for students who experience an unexpected crisis. The Care Team's role is to determine effective strategies for addressing concerns and connecting students with the appropriate resources. Student Outreach and Support is located in 2008 Webb Center, and can be reached at (757) 683-3442 or oducare@odu.edu. For more information please visit the SOS website at: www.odu.edu/sos (<https://www1.odu.edu/life/dean-students/student-outreach/>).

University Libraries

Old Dominion University Libraries enrich the academic, research, and learning experience of the University community by inspiring and empowering the Monarch community to learn, grow, and create. The University Libraries provide students access to extensive digital resources, online journals, e-books, streaming media, and other electronic resources in all fields of research and instruction. The Libraries also offer access to Naro Video @ ODU Libraries (<https://guides.lib.odu.edu/narovideo/>), a collection of 43,000+ videos and materials made available to the Monarch community and to any member of Friends of the ODU Libraries.

On the University Libraries' website at www.odu.edu/library (<http://www.odu.edu/library/>), students can find library guides, instructional videos, Chat reference, and many other services. The Libraries include the Patricia W. and J. Douglas Perry Library, the Elise N. Hofheimer Art Library, and the Music Library and F. Ludwig Diehn Composers Room. Each facility holds specialized book collections, maps, scores, recordings, microforms, and equipment available for borrowing. At our Help Desks, staff are on hand to provide assistance with information, location, instruction, and information technology questions. Additionally, students and faculty members have online access to the Virtual Library of Virginia's collections and may borrow books and other materials from participating libraries across the Commonwealth.

Edward E. Brickell Medical Sciences Library at Macon and Joan Brock Virginia Health Sciences at Old Dominion University

The Edward E. Brickell Medical Sciences Library is the major health care information resource for Macon and Joan Brock Virginia Health Sciences at Old Dominion University. It serves the faculty members, students, and staff of VHS (Virginia Health Sciences) as well as provides a resource for the communities of Hampton Roads.

The Brickell Library subscribes to a variety of information resources including DynaMed, UpToDate, the Cochrane Library, VisualDX, PubMed/MEDLINE, CINAHL, ClinicalKey, BMJ Best Practice, AccessMedicine, PsycINFO, Web of Science, EndNote, and others. Brickell Library employees can provide training sessions in the use of these resources and also assist with copyright questions and evaluating the validity of information.

Our Clinical Medical/Reference Librarians (CML) can help with literature searches, compile bibliographies, and provide systematic and scoping review assistance for VHS. CML librarians also work to support the Institutional Review Board (IRB) and Institutional Animal Care and Use Committee (IACUC).

The Brickell Library includes a computer lab with color and b/w printers and a scanner and is available 24/7 with badge access. Residents have unlimited free printing. VHS students are provided \$200 of printing credit annually. There are also 25 group study rooms: 16 on the second floor and nine on

the third floor. These are equipped with DVD players, 52-inch monitors and whiteboards. The Brickell Library also has a collection of hand-held ultrasound probes for check out at the Circulation desk.

Information on staffed hours of operation, additional services and resources can be found at <https://www.evms.edu/library/> or you may call the Brickell Library for information or assistance at (757) 446-5850 or email at library@evms.edu (https://olddominion-my.sharepoint.com/personal/delnekab_odu_edu/Documents/Documents/library@evms.edu). The Brickell Library employees look forward to working with you during your time at Macon and Joan Brock Virginia Health Sciences at Old Dominion University.

Elise N. Hofheimer Art Library

Barry Arts Building, 47th Street and Monarch Way, Room 2008, second floor; 757-683-4059

The Hofheimer Art Library contains specialized books, journals, online resources, videos, audio-visual titles, and other materials for students and faculty in the visual arts. Reserve materials for ODU Art Department classes are available at the service desk. Individual and group study space, computers, drawing tablet, scanner, and network printer are available. Visit the Art Library at www.odu.edu/library/art (<http://www.odu.edu/library/art/>).

Music Library and F. Ludwig Diehn Composers Room

Diehn Center for the Performing Arts, Room 189; 757-683-4173

The Music Library contains print scores, music audio, and video content. Reserve materials for School of Music classes are available at the service desk. Students have access to PC and Mac computers, a DVD/VCR player, CD player, audio cassette player, turntable, flatbed scanner, and network printer.

The Diehn Composers Room is co-located with the Music Library and contains unique and rare manuscripts, scores, audio recordings, memorabilia, and other specialized music materials. Reference and research services are available in the Reading Room, including the use of a Steinway grand piano by appointment only. Visit the Music Library and Diehn Composers Room at www.odu.edu/library/diehn (<http://www.odu.edu/library/diehn/>).

Patricia W. and J. Douglas Perry Library

Perry Library offers quiet study space, collaborative rooms for group projects, accessibility services, a café, meeting space, and other facilities for student success. The Monarch community will also find Naro Video @ ODU Libraries (<https://guides.lib.odu.edu/narovideo/>). This unique collection of 43,000+ videos and materials is located in Room 1222 of Perry Library.

Learning Commons @ Perry Library

First Floor, 757-683-4178

The Learning Commons @ Perry Library is a collaborative project of the University Libraries, Information Technology Services, and the Office of Academic Success Initiatives & Support (ASIS), providing year-round services. The facility includes individual study space, group collaboration space, presentation practice, computers, wireless access, printers, scanners, GIS/digital media/other specialized software, and a sound room that can be reserved by students. Students can access research assistance and resources, information technology assistance, tutoring and writing centers, and other services supporting student success.

At the Perry Library Help Desk, located in the Learning Commons (www.odu.edu/learningcommons (<http://www.odu.edu/learningcommons/>)), students with a valid University ID may borrow equipment, media, books, reserve materials, and other items. Graduate student study carrels are also available. Information on borrowing privileges, loan periods, and policies is available at www.odu.edu/library/services/borrowing (<http://www.odu.edu/library/services/borrowing/>).

Interlibrary Loan and Document Delivery Services

757-683-4170, 4172

Interlibrary loan allows ODU students, faculty, and staff to request journal articles, books, and other needed research materials not available in the University Libraries. The Commonwealth's Virtual Library of Virginia interlibrary loan agreement ensures that students, faculty, and staff may obtain items located in other Virginia libraries. Document delivery services provide copies of materials held in the University Libraries' collection to online and other eligible students, faculty, and staff. Interlibrary loan and document delivery requests can be submitted online at www.odu.edu/library/services/interlibrary-loan (<http://www.odu.edu/library/services/interlibrary-loan/>).

Research Help Services

Help Desk, First Floor, 757-683-4178

ODU Libraries staff assist students and faculty with all types of research using all formats of library resources. Librarians and staff provide direct individual assistance by telephone, e-mail, live online Chat, and face-to-face and virtual consultation by appointment. Local and online students may obtain assistance by visiting or calling the Help Desk, directly contacting a subject librarian, using the Chat service, or submitting a question through *Ask-A-Librarian* at <https://www.odu.edu/library/help> (<https://www.odu.edu/library/help/>).

Instructional Support

ODU Libraries offer library instruction sessions to courses with research assignments or library-related learning goals. The Libraries also provide online tutorials, videos, and online guides to help students build research skills and increase knowledge in information literacy, as well as workshops and programming designed to support student learning and to facilitate connections between students, the Libraries, and the University community. Additional information can be found at www.odu.edu/library/services/instruction (<http://www.odu.edu/library/services/instruction/>).

Special Collections & University Archives

Third floor, 757-683-4483

Special Collections & University Archives, located on the third floor of Perry Library, preserves and provides access to the Libraries' unique and rare collections documenting the history of ODU, Virginia, and the region. The collections cover a wide range of topics that enrich scholarly opportunities, and students and faculty are encouraged to visit and use the collections and services. Special Collections' materials include rare books, diaries, letters, legal and campaign files, oral histories, music, film, photographs, maps, and more. Moreover, the University Archives document the history of the University and include yearbooks, department records, student organization records, course catalogs, film, photographs, etc. Special Collections staff are available to assist students and faculty with research requests and host class sessions specializing in active-learning exercises with primary sources. Visit Special Collections at www.odu.edu/library/special-collections (<https://www.odu.edu/library/special-collections/>).

Several digitized collections of materials from Special Collections & University Archives are also freely available online. Visit the ODU Digital Collections at <https://olddomuni.access.preservica.com/>.

ODU Digital Commons and Scholarly Communications Services

The Department of Research & Scholarly Communication includes the Libraries' dedicated subject specialist librarians, who provide reference and research assistance, library instruction, collection development, and collaboration to students and faculty at ODU. Our librarians are also available to assist with questions related to copyright and author rights, research data management, publishing, and research impact. The department also oversees ODU Digital Commons (digitalcommons.odu.edu (<https://digitalcommons.odu.edu/>)), the University's institutional repository. Digital Commons brings together scholarly, creative, and institutional works for preservation, visibility, and worldwide open access. Digital Commons also provides a publishing platform for hosting journals, proceedings, and events.

Accessibility Services

First Floor, 757-683-4178

The Library Accessibility Room in the Learning Commons provides specialized equipment and quiet space for students registered with the University's Office of Educational Accessibility (<http://www.odu.edu/educationalaccessibility/>). This wheelchair-accessible room can be reserved for individual use. The facility houses CCTV, workstations with FUSION Professional, Read and Write Gold, and other adaptive technologies. Orientation, reservations, and research consultation appointments are available through the Learning Commons Help Desk.

Also, the Help Desk provides on-demand paging to students who need special assistance with retrieving materials from the upper floors. Information about accessibility is available on the University Libraries' website at www.odu.edu/library/services/accessibility (<http://www.odu.edu/library/services/accessibility/>).

College of Arts and Letters

Web Site: <http://www.odu.edu/al> (<http://www.odu.edu/al/>)

Laura Delbrugge, Dean

Martha Daas, Associate Dean for Undergraduate Studies and Administration

Dale E. Miller, Associate Dean for Graduate Studies and Research

Mission

The College of Arts and Letters is committed to the ideals of the liberal arts. Its curriculum is designed to introduce students to the full range of human experiences through the study of cultural heritage, forms of artistic and literary expression, patterns of social and political behavior, and methods of critical inquiry.

The mission of the College of Arts and Letters is to prepare students for rigorous, intellectual and creative inquiry leading to their full development as human beings and to their responsible engagement with society. We accomplish this mission by:

1. Developing the essential skills of critical reading and thinking, effective oral and written communication, and proficient use of technology
2. Providing foundational knowledge in the arts, humanities and social sciences for all undergraduates
3. Offering excellent disciplinary and interdisciplinary programs of study and training that expose students to accumulated knowledge, scholarly debate, and innovations in the field
4. Fostering global awareness and sensitivity to the breadth and diversity of the human condition, which includes acquiring an understanding of the roles of gender, race, ethnicity, and culture
5. Providing an atmosphere for the free exchange of ideas among faculty and students and by vigorously defending academic and intellectual freedom
6. Promoting challenging internship opportunities, research projects, and collaborative learning experiences that connect our students to the community and prepare them for the world of work
7. Supporting a broad array of cultural experiences that enrich the lives of students, the University, and the community

Overview

Undergraduate programs in the College of Arts and Letters are structured to make possible close personal contact between students and faculty and thus to meet the needs of individual students. Arts and Letters faculty members are dedicated to good teaching, proud of their achievements in research, and committed to enhancing in every way possible the exciting and stimulating environment that is Old Dominion University.

The College of Arts and Letters comprises the Departments of Art, Communication and Theatre Arts, English, History, Philosophy and Religious Studies, Political Science and Geography, Sociology and Criminal Justice, Women's and Gender Studies, and World Languages and Cultures; the F. Ludwig Diehn School of Music; Interdisciplinary Studies; the Institute of Humanities; the Institute for the Study of Race and Ethnicity; the Institute of Asian Studies; the Institute for Ethics and Public Affairs; the Institute for Jewish Studies and Interfaith Understanding; the Social Science Research Center; and the Community Music Division.

The College offers undergraduate degrees in African American and African Studies, Art, Asian Studies, Communication, Criminal Justice, English, Geography, History, Interdisciplinary Studies, International Studies, Music, Philosophy, Political Science, Sociology, Theatre and Dance, Visual Studies, Women's Studies, and World Languages and Cultures.

In addition to the Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Music, and Bachelor of Science degrees offered by the above departments, the College of Arts and Letters offers a variety of linked undergraduate/graduate programs and graduate degree programs. Linked programs allow students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree, which may allow students to earn both a BA or BS and an MA in five years. Linked programs are available in English, History, International Studies, Humanities, and Lifespan and Digital

Communication; concentrations in the MA in Humanities are available in Communication, Geography, individualized Interdisciplinary Studies, Philosophy, Visual Arts, and Women's Studies. A linked BA or BS to MBA program and a linked BA or BS to MPA program are available in cooperation with the Strome College of Business.

The College offers graduate degrees in Applied Linguistics, Creative Writing, Criminology and Criminal Justice, English, History, Humanities, International Studies, Lifespan and Digital Communication, and Music Education. Please refer to the Graduate Catalog for more information.

Undergraduate Degree Requirements

Arts and Letters requirements for all undergraduate degrees include all of the General Education Requirements. Students must have 30 earned credit hours in order to declare a major in the College of Arts and Letters. In addition, all Arts and Letters majors must obtain a minimum grade of C in ENGL 110C English Composition before declaring a major and in order to graduate. Arts and Letters majors must also attain a minimum grade of C in the second composition course and the writing intensive (W) course in the major in order to graduate.

Students earning a Bachelor of Arts degree must also complete the foreign language requirement. Proficiency is established at the fourth-semester level through one of the following:

1. Successful completion of the 202 or 212 course at Old Dominion University (or equivalent at another institution). American Sign Language is accepted to meet this requirement in all Bachelor of Arts programs in the college except Asian Studies, World Languages and International Studies.
2. Exemption through fourth semester granted for acceptable scores on achievement tests.
3. Advanced placement credit through fourth semester for qualifying scores on AP and IB subject examinations. See the equivalency charts on the ODU website at <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).
4. Advanced placement with up to nine hours credit at the 300 level for acceptable scores on the advanced placement test taken at the conclusion of advanced placement courses in high school.
5. Students whose native language is not English are exempt from taking a foreign language for General Education. Students pursuing degrees that require proficiency beyond the 100 level must be certified by the World Languages and Cultures Department to obtain a waiver of the 200-400 level courses. Native speakers are not eligible to earn credit for foreign language courses below the 300 level through coursework or external testing services such as CLEP.

Students who have taken three or more years of a foreign language in high school but have not been granted advanced placement as explained above must take the College Entrance Examination Board (CEEB) achievement test before continuing in the same language at Old Dominion University. An achievement test score of under 481 normally requires that such students begin with the 121F course in Spanish or the 102F course in other foreign languages.

Additional major requirements are listed under the various departments. The requirements for the Bachelor of Fine Arts and Bachelor of Music degrees are listed under art and music respectively. The requirements for the Bachelor of Science degree with a major in communication, criminal justice, geography, political science, sociology, interdisciplinary studies, and women's studies will be found under political science and geography, sociology and criminal justice, communication and theatre arts, interdisciplinary studies, and women's studies.

Students wishing to take a major or minor in the College of Arts and Letters must register with the appropriate department. The College of Arts and Letters allows a maximum of six hours of activity credit. Activity credit beyond the established maximum may be given in unusual circumstances only and will require the approval of the dean of the College of Arts and

Letters. Activity credit required by a student's major department will not be counted against the credit limitation.

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Minors in Chinese Studies, European Studies, Japanese, Latin American Studies, and World Cultures: Values and Visions

See the Minors section of the Department of World Languages and Cultures (<http://catalog.odu.edu/undergraduate/collegeofartsletters/worldlanguagesandcultures/>).

Centers and Institutes

Institute for Ethics and Public Affairs (IEPA)

The Institute for Ethics and Public Affairs seeks to raise awareness and stimulate discussion of the ethical dimension of matters of public concern within the campus community and the larger Hampton Roads community; to strengthen moral community and foster a commitment to ethical ideals in public life; to facilitate reflection on the ethical standards that govern the professions; and to highlight the unique and valuable contribution that philosophical reasoning can make to practical decision making.

Institute for the Study of Race and Ethnicity (ISRE)

The Institute for the Study of Race and Ethnicity (ISRE) seeks to develop, promote and implement academic, research and public service programs that focus on the study of race and ethnicity in Hampton Roads, Virginia, the nation, and throughout the African Diaspora. The political, social, economic, cultural and historical experiences of African Americans and other communities of color are important dimensions emphasized in the work of the institute. As such, the institute seeks to establish itself as a major archive and research center in the southeast United States focusing on the experiences of African Americans.

The institute promotes high quality teaching and rigorous policy-oriented research emphasizing interdisciplinary and multidisciplinary approaches, as well as the methods of the traditional social sciences and humanities disciplines. New and improved facilities such as a mini-archive, library, reading and meeting areas and a research/resource center for faculty and students are available.

Institute of Asian Studies

Old Dominion University seeks to promote an expanded awareness and understanding of the nations and cultures of Asia, to support and encourage research on Asia, and to make resources available to foster better understanding and more effective interaction between organizations and individuals in the Hampton Roads area and those in Asia. To achieve these goals, the Institute of Asian Studies coordinates special programs and administers a major and minor in Asian studies. It also facilitates cooperative relationships with higher education institutions and other organizations within the United States and throughout Asia. The institute director works closely with the Center for Global Engagement regarding scholarships and study abroad programs and opportunities.

The Institute for Jewish Studies and Interfaith Understanding

The Institute for Jewish Studies and Interfaith Understanding (IJIU) is dedicated to the idea that interfaith understanding involves both an appreciation of Judaism's historic role in the development of western civilization and an understanding of the cross-cultural development of the world's religions. IJIU sponsors programs and activities about religious and ethnic diversity worldwide in support of the University's commitment to open dialogue and to inspire a greater understanding of the issues and challenges that confront us at the dawn of the new century. Truly a collaboration of the University and the community, the institute seeks partners and sponsors to offer a wide array of courses to complement the Jewish studies minor and the religious studies minor and to sponsor cultural programs offered at Old Dominion University.

The IJIU is housed in the College of Arts and Letters. The office is located in the Cooper Room, BAL 2024, in the Batten Arts and Letters Building.

Monarch Institute for Game Design and Development (MIGDD)

The Monarch Institute for Game Design and Development (MIGDD) supports the college's Game Design, Development, and Criticism majors, which are housed in the Department of Interdisciplinary Studies. Its mission includes promoting collaborative gaming research and interdisciplinary cooperation between existing colleges and departments, encouraging the translation of research into product development and commercialization, providing students with internships and other experiential learning opportunities, and facilitating community engagement and outreach.

Minors

Minors

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- Holocaust and Genocide Studies Minor (p. 86)
- Jewish Studies Minor (p. 86)
- Middle Eastern Studies Minor (p. 86)

Minor

American Studies Minor

American studies offers a unique opportunity to explore the culture and society of the United States from a perspective that is inherently interdisciplinary. A minor in American studies provides a structured program to encourage students to cross traditional academic boundaries and to integrate the arts, humanities, and social sciences.

The minor in American studies is an effective program complement for those majoring in the related fields of art, music, dance and theatre; communication, English, and foreign languages; history, geography, and political science; philosophy; sociology, and criminal justice; as well as interdisciplinary majors in women's studies, African American and African studies, and international studies. The minor is also effective for international students, who may wish either to better understand American culture or to acquire an expertise useful in their home countries.

All students minoring in American studies must take AMST 300, cross-listed as ENGL 396 Topics in English and HIST 396 Topics in History

(Topics: The American Dream), and 12 credit hours of designated courses divided into two fields (the arts and the humanities, and the social sciences), for a total of 15 hours. Please note that some courses listed below require prerequisites. Students may not use more than one course from the minor to satisfy program requirements in another major or minor.

Requirements

Designated course listings for the minor in American studies are as follows:

AMST 300	Perspectives in American Studies	3
Select at least one course in the arts or the humanities from the following: *		3
ARTH 322	American Art and Architecture, 1600 to the Present	
ENGL 340	American Drama	
ENGL 342	Southern Literature	
ENGL 345	American Literature to 1860	
ENGL 346	American Literature Since 1860	
ENGL 447	The American Novel to 1920	
ENGL 448	The American Novel 1920 to Present	
ENGL 465W	African American Literature	
ENGL 466W	Asian American Literature	
MUSC 460	History of Jazz	
Select at least one course in the social sciences from the following: *		3
COMM 340	Media and Popular Culture	
COMM 473	Television and Society	
COMM 479W	American Film History	
GEOG 350	Geography of the United States and Canada	
HIST 345	Native American History	
HIST 346	Colonial and Revolutionary America	
HIST 348	The Early American Republic, 1787-1850	
HIST 351	The Civil War and Reconstruction	
HIST 353	Robber Barons, Reformers, and Radicals: The US Gilded Age and Progressive Era	
HIST 355	The United States, 1945-1991	
HIST 357	The United States in the 1960s	
HIST 361	African-American History to 1865	
HIST 362	African-American History Since 1865	
HIST 363	Women in U.S. History	
POLS 312	American Political Thought	
POLS 407	American Presidency	
POLS 408	American Constitutional Law: Individual Rights	
POLS 409	American Constitutional Law: Powers of Government	
POLS 410	African American Politics	
POLS 412	Politics of the Civil Rights Movement	
POLS 415	Women and Politics in America	
SOC 320	Social Inequality	
SOC 340	Sociology of Women	
WGS 302W	Dimensions of Diversity: Intersectionality Among Women	

* No more than two from any single department.

The director of American studies can approve other courses not listed above to fulfill the minor, including 400-level topics courses, provided they substantively address some aspect of the creation or perpetuation of an American identity.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite

courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

For further information, contact the director of the American studies minor program, Dr. Drew Lopenzina (alopenzi@odu.edu)

Minor Holocaust and Genocide Studies Minor

The minor in Holocaust and Genocide Studies provides students with an interdisciplinary examination into the causes and effects of the Holocaust and other genocides, offering a deeper understanding of antisemitism, racism, prejudice, and other extreme hatreds that led to the mass annihilation of peoples in the past and present. It explores the impact, trauma and memory of such destruction through exploration via historical, artistic, musical, literary, cultural, geographical, theatrical, philosophical, and social scientific contexts. The minor increases student awareness of genocidal atrocities around the globe, asking that they bear witness to the voices of those who have lived through such catastrophic events, with the goal of carrying the witness forward and encouraging them to be active in the prevention of genocide in the future.

The minor requires completion of 12 credit hours at the 300/400 level.

Requirements

Requirements for the minor are as follows.

JST 300	Holocaust and Genocide Studies (Core Course)	3
Select three courses from the following:		9
COMM 456	Organizations and Social Influence	
CRJS 350	Victimology	
CRJS 355	Crime and the Community	
CRJS 401	Understanding Violence	
CRJS 427	Gender-Based Violence	
ENGL 395	Topics in English (Human Rights and World Literature)	
ENGL 395	Topics in English (American Literature and Queer of Color Critique)	
ENGL 464W	Native American Literature	
ENGL 465W	African American Literature	
GER 455	Germany 1900-1945: From High Culture to Holocaust	
HIST 370	Africa and the Atlantic Slave Trade	
HIST 391	Paris/Auschwitz Study Abroad	
HIST 392	The Holocaust and Vichy France	
HIST 393	Studies in Jewish History	
HIST 396	Topics in History (Holocaust and Memory)	
HIST 402W	Senior Seminar in History (Holocaust Historiography)	
HIST 493	Holocaust and Film: Representing the Unimaginable in the Visual Turn	
JST 495	Topics in Jewish Studies	
JST 497	Research Project in Jewish Studies	
SOC 320	Social Inequality	

Total Credit Hours 12

Students must earn a grade of C (2.00) or better in all courses specified as a requirement for the minor and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Minor Jewish Studies Minor Requirements

The minor in Jewish Studies requires that students take REL 350 Judaism and three approved Jewish Studies electives (nine hours) at the 300-level or above, for a total of 12 credits. Students interested in the Jewish Studies minor are encouraged to take HEBR 111F Beginning Hebrew I to fulfill the University foreign language requirement.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor (exclusive of 100- and 200-level courses and prerequisite courses) and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

A list of approved courses is available from the academic director and in the catalog at <https://catalog.odu.edu/courses/jst/>.

Minor Middle Eastern Studies Minor

The minor in Middle Eastern studies focuses upon the study of several aspects of Middle Eastern culture, language, politics, geography, and history. The minor consists of 15 hours of course work. Students can elect Track I, which would include as a prerequisite three hours of 202-level Arabic, French, Hebrew, Farsi or any other language used in research in the region; this course is not included in the grade point average for the minor. Languages such as Armenian and Turkish could meet this requirement upon the taking of a proficiency examination. Students can also choose Track II, which is a non-language option.

Requirements

All students must take one core course from the following: GEOG 455 The Middle East or POLS 466 Politics of the Middle East.

The remaining nine hours for Track I or 12 hours for Track II can be taken from the following list of courses:

COMM/MIDE 405	Communication and Culture in the Middle East	3
MIDE 395	Topics in Middle Eastern Studies	3
MIDE 495	Topics in Middle Eastern Studies	3
ARAB 311	Advanced Arabic Language and Culture I	3
ARAB 312	Advanced Arabic Language and Culture II	3
ARAB 395	Topics in Arabic	1-6
REL 311	Hebrew Bible/Old Testament	3
REL 312	New Testament	3
REL 315	Qur'an	3
REL 350	Judaism	3
REL 351	Christianity	3
REL 352	Islam	3
HIST 396	Topics in History	1-3

Courses not taken to satisfy the core requirement, topics courses offered in addition to the courses listed above, which focus upon the Middle East, and credit earned by studying abroad in the Middle East may also be included in the minor requirements. An internship taken in the Middle East or related to organizations that focus on the Middle East may also count within the minor.

For completion of the minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University. For

further information, contact the director of the Middle Eastern Studies minor at 683-3835 or at fhassenc@odu.edu.

African American and African Studies

Marvin Chiles, Program Director

The African American and African Studies (AAST) program offers the Bachelor of Arts and Bachelor of Science degrees. The program is designed to give students an essential core of basic knowledge and analytical skills, while providing an opportunity to specialize in one of two emphasis areas: African American Studies or African Studies. The African American and African Studies major requires a total of 39 credit hours in African American and African Studies courses, including 21 credit hours of core coursework, 12 hours of coursework evenly distributed between selected upper-division social science and humanities courses, and a minimum of six credit hours of upper-division coursework in African Studies. African American and African Studies majors are also required to take AAST 105H/HIST 105H.

Students can earn either the BA or BS degree. The BA program requires a foreign language through the intermediate level (202). Students seeking the BS degree must demonstrate beginning language proficiency (102). Consistent with Old Dominion University's Career Advantage Program (CAP), students majoring in African American and African Studies have the opportunity to participate in an appropriate field internship.

Bachelor of Arts Program

- African American and African Studies (BA) (p. 87)

Bachelor of Science Program

- African American and African Studies (BS) (p. 90)

Minor

- African American Studies Minor (p. 92)

African American and African Studies as a Second Major

Students who find themselves especially interested in African American and African Studies but who already have a major may fulfill their upper-division general education requirements by selecting African American and African Studies as a second major. Such students must complete the same departmental requirements as those majoring solely in African American and African Studies, but may count up to five African American and African Studies cross-listed courses taken for their other major toward their African American and African Studies major as well. For instance, a student majoring in both sociology and African American and African Studies may apply five courses, such as SOC 337, and SOC 436 toward the foundation courses, and SOC 323, SOC 426, SOC 444, taken toward their sociology requirements, as three electives for their major in African American and African Studies.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome

College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts African American and African Studies (BA)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

STAT 130M is required to fulfill the Mathematics requirement

Language and Culture requirement - BS students' competence must be at the 102 level. BA students must have competence through the 202 level and competence is not met by the associate degree.

Information Literacy and Research requirement can be met in the major by AAST 308/POLS 308.

AAST 100S may not be used to satisfy the Human Behavior requirement.

The Interpreting the Past requirement is met in the major by AAST 105H/HIST 105H.

The requirements for African American and African Studies majors are outlined below. With the permission of the program director, courses not listed below may be approved as substitutions to fulfill program requirements.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor; 12 hours specified by the department, three of which can be in the major
- Option C. An approved certification program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours). AAST courses and any course listed as an elective choice for the major cannot be used to meet this option.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

African American and African Studies Requirements

General Education

Complete lower-division requirements	35-44
Complete upper-division requirements (minimum of 6 credits)	6
Complete foreign language coursework through the 202 level	0-6

African American and African Studies Core

AAST 100S	Introduction to African American Studies	3
AAST/HIST 105H	Interpreting the African Past	3
AAST 410	Africana Intellectual Thought and Economic Development	3
AAST 420W	African American Political and Social Thought *	3
Select one of the following:		3
AAST/POLS 308	Research Design	
AAST 320	Introduction to Research Methods	
SOC 337	Social Research Methods	
AAST 490	Senior Seminar	3
SOC 320	Social Inequality	3
Upper-Division African Studies Coursework		6
Upper-Division Humanities Coursework		6

Upper-Division Social Sciences Coursework	6
Total Credit Hours	80-95

* Grade of C or better required

Upper-Division Electives (BA and BS, 12 credit hours, 300 and 400 level courses)

Students majoring in African American and African Studies must earn a minimum of 12 credit hours in upper-division humanities and social science courses related to African American studies. Six credit hours of 300/400 level courses must be from the social sciences and six credit hours from the humanities. Courses may be selected from among those listed by category below. With the permission of the program director, courses not listed below may be approved as substitutions to fulfill program requirements.

Upper-Division Social Science Courses

AAST 310	Human Rights and Social Change in Africa	3
AAST/POLS 316	Politics of Africa	3
AAST/SOC 323	Sociology of Minority Families	3
AAST 368	Internship	3
AAST 395	Topics in African American Studies	3
AAST 396	Topics in African American Studies	3
AAST/POLS 412	Politics of the Civil Rights Movement	3
AAST/SOC 426	Minority Group Relations	3
AAST/CRJS/SOC 452	Diversity in Criminal Justice Organizations	3
AAST/PSYC 460	Psychology of African Americans	3
CRJS 450	Blacks, Crime and Justice	3
GEOG 452	Africa	3
POLS 309	Race, Culture and Public Policy	3
POLS 410	African American Politics	3
POLS 439	International Relations of African States	3
POLS 470	African Americans and Foreign Affairs	3
SOC/CRJS 444	Community Justice	3

Upper-Division Humanities Courses

AAST/HIST 361	African-American History to 1865	3
AAST 368	Internship	3
AAST 395	Topics in African American Studies	3
AAST 396	Topics in African American Studies	3
ENGL 465W	African American Literature	3
HIST 362	African-American History Since 1865	3
HIST 370	Africa and the Atlantic Slave Trade	3
HIST 455	African-American Historiography	3
HIST 475	Global Africa	3
MUSC 460	History of Jazz	3
WGS 302W	Dimensions of Diversity: Intersectionality Among Women	3

African Studies (BA and BS, 6 credit hours, 300 and 400 level electives)

In addition, students majoring in African American and African Studies must earn six credit hours in African Studies courses. Students may select courses from the following list (or topics courses as approved by the director):

AAST 310	Human Rights and Social Change in Africa	3
AAST/POLS 316	Politics of Africa	3
AAST/HIST 381	Africa in the 20th Century	3
GEOG 452	Africa	3
HIST 370	Africa and the Atlantic Slave Trade	3
HIST 382	African Civilizations	3

HIST 475	Global Africa	3
POLS 439	International Relations of African States	3

Courses taken in this category cannot duplicate upper-division social sciences and humanities courses taken to fulfill program requirements. At the discretion of the program director, substitutions may be approved to satisfy this requirement. The course options in this category will be expanded and/or modified as they become available.

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity		3
Elective or Language & Culture I (May be waived; See requirement details)		3
Oral Communication		3
AAST 100S	Introduction to African American Studies	3
Credit Hours		15
Spring		
Literature		3
STAT 130M	Elementary Statistics	3
Elective or Language & Culture II (May be waived; See requirement details)		3
Human Behavior (AAST 100S may not be used)		3
AAST/HIST 105H	Interpreting the African Past (Satisfies Interpreting the Past)	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language & Culture III		3
Elective course		3
Select one of the following:		3
AAST/POLS 308	Research Design	
AAST 320	Introduction to Research Methods	
SOC 337	Social Research Methods	
Credit Hours		16
Spring		
Information Literacy & Research (May be met in major by AAST 308 or POLS 308)		3
Nature of Science II		4

Language & Culture IV		3
Philosophy & Ethics		3
Impact of Technology		3
Credit Hours		16
Junior		
Fall		
SOC 320	Social Inequality	3
AAST 420W	African American Political and Social Thought (Grade of C or better required)	3
Approved 300-/400-level Social Science		3
Approved 300-/400-level Humanities		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
AAST 410	Africana Intellectual Thought and Economic Development	3
Approved 300-/400-level Social Science		3
Approved 300-/400-level Humanities		3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
Approved 300-/400-level African Studies		3
Elective course		3
Elective course		3
Elective course		3
Minor or Elective		3
Credit Hours		15
Spring		
AAST 490	Senior Seminar	3
Approved 300-/400-level African Studies		3
Elective course		3
Elective course		1
Minor or Elective		3
Credit Hours		13
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/>)

graduate/stromecollegeofbusiness/) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science African American and African Studies (BS)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

STAT 130M is required to fulfill the Mathematics requirement

Language and Culture requirement - BS students' competence must be at the 102 level. BA students must have competence through the 202 level and competence is not met by the associate degree.

Information Literacy and Research requirement can be met in the major by AAST 308/POLS 308.

AAST 100S may not be used to satisfy the Human Behavior requirement.

The Interpreting the Past requirement is met in the major by AAST 105H/HIST 105H.

The requirements for African American and African Studies majors are outlined below. With the permission of the program director, courses not listed below may be approved as substitutions to fulfill program requirements.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor; 12 hours specified by the department, three of which can be in the major
- Option C. An approved certification program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours). AAST courses and any course listed as an elective choice for the major cannot be used to meet this option.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

African American and African Studies Requirements

General Education

Complete lower-division requirements 35-44

Complete upper-division requirements (minimum of 6 credits) 6

African American and African Studies Core

AAST 100S	Introduction to African American Studies	3
AAST/HIST 105H	Interpreting the African Past	3
AAST 410	Africana Intellectual Thought and Economic Development	3
AAST 420W	African American Political and Social Thought *	3

Select one of the following: 3

AAST/POLS 308	Research Design	
AAST 320	Introduction to Research Methods	
SOC 337	Social Research Methods	
AAST 490	Senior Seminar	3
SOC 320	Social Inequality	3
Upper-Division African Studies Coursework		6
Upper-Division Humanities Coursework		6

Upper-Division Social Sciences Coursework	6
Total Credit Hours	80-89

* Grade of C or better required

Upper-Division Electives (BA and BS, 12 credit hours, 300 and 400 level courses)

Students majoring in African American and African Studies must earn a minimum of 12 credit hours in upper-division humanities and social science courses related to African American studies. Six credit hours of 300/400 level courses must be from the social sciences and six credit hours from the humanities. Courses may be selected from among those listed by category below. With the permission of the program director, courses not listed below may be approved as substitutions to fulfill program requirements.

Upper-Division Social Science Courses

AAST 310	Human Rights and Social Change in Africa	3
AAST/POLS 316	Politics of Africa	3
AAST/SOC 323	Sociology of Minority Families	3
AAST 368	Internship	3
AAST 395	Topics in African American Studies	3
AAST 396	Topics in African American Studies	3
AAST/POLS 412	Politics of the Civil Rights Movement	3
AAST/SOC 426	Minority Group Relations	3
AAST/CRJS/SOC 452	Diversity in Criminal Justice Organizations	3
AAST/PSYC 460	Psychology of African Americans	3
CRJS 450	Blacks, Crime and Justice	3
GEOG 452	Africa	3
POLS 309	Race, Culture and Public Policy	3
POLS 410	African American Politics	3
POLS 439	International Relations of African States	3
POLS 470	African Americans and Foreign Affairs	3
SOC/CRJS 444	Community Justice	3

Upper-Division Humanities Courses

AAST/HIST 361	African-American History to 1865	3
AAST 368	Internship	3
AAST 395	Topics in African American Studies	3
AAST 396	Topics in African American Studies	3
ENGL 465W	African American Literature	3
HIST 362	African-American History Since 1865	3
HIST 370	Africa and the Atlantic Slave Trade	3
HIST 455	African-American Historiography	3
HIST 475	Global Africa	3
MUSC 460	History of Jazz	3
WGS 302W	Dimensions of Diversity: Intersectionality Among Women	3

African Studies (BA and BS, 6 credit hours, 300 and 400 level electives)

In addition, students majoring in African American and African Studies must earn six credit hours in African Studies courses. Students may select courses from the following list (or topics courses as approved by the director):

AAST 310	Human Rights and Social Change in Africa	3
AAST/POLS 316	Politics of Africa	3
AAST/HIST 381	Africa in the 20th Century	3
GEOG 452	Africa	3
HIST 370	Africa and the Atlantic Slave Trade	3
HIST 382	African Civilizations	3

HIST 475	Global Africa	3
POLS 439	International Relations of African States	3

Courses taken in this category cannot duplicate upper-division social sciences and humanities courses taken to fulfill program requirements. At the discretion of the program director, substitutions may be approved to satisfy this requirement. The course options in this category will be expanded and/or modified as they become available.

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity		3
Elective or Language & Culture I (May be waived; See requirement details)		3
Oral Communication		3
AAST 100S	Introduction to African American Studies	3
Credit Hours		15
Spring		
Literature		3
STAT 130M	Elementary Statistics	3
Elective or Language & Culture II (May be waived; See requirement details)		3
Human Behavior (AAST 100S may not be used)		3
AAST/HIST 105H	Interpreting the African Past (Satisfies Interpreting the Past)	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Select one of the following:		3
AAST/POLS 308	Research Design	3
AAST 320	Introduction to Research Methods	
SOC 337	Social Research Methods	
Approved 300-/400-level Social Science		3
Elective course		3
Credit Hours		16
Spring		
Information Literacy & Research (May be met in major by AAST 308 or POLS 308)		3
Nature of Science II		4

Philosophy & Ethics	3
Impact of Technology	3
Approved 300-/400-level Humanities	3
Credit Hours	16
Junior	
Fall	
SOC 320	Social Inequality 3
AAST 420W	African American Political and Social Thought (Grade of C or better required) 3
Approved 300-/400-level Social Science	3
Elective course	3
Upper-Division General Education Course or Minor	3
Credit Hours	15
Spring	
AAST 410	Africana Intellectual Thought and Economic Development 3
Elective course	3
Elective course	3
Elective course	3
Upper-Division General Education Course or Minor	3
Credit Hours	15
Senior	
Fall	
Approved 300-/400-level Humanities	3
Approved 300-/400-level African Studies	3
Elective course	3
Elective course	3
Minor or Elective	3
Credit Hours	15
Spring	
AAST 490	Senior Seminar 3
Approved 300-/400-level African Studies	3
Elective course	3
Elective course	1
Minor or Elective	3
Credit Hours	13
Total Credit Hours	120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/>

graduate/stromecollegeofbusiness/) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor African American Studies Minor

The minor in African American Studies is administered by the Institute for the Study of Race and Ethnicity (ISRE). Students who wish to qualify for the program must submit a minor declaration form to the African American Studies program.

A variety of courses are offered to meet the requirements of the minor. Interdisciplinary in nature, the African American Studies minor provides an opportunity for students to investigate the history and culture of people of African descent as well as the current political, social, and economic interaction among all members of society.

Requirements

The minor in African American Studies is a 15 credit hour program, which includes the following:

AAST 100S	Introduction to African American Studies *	3
A minimum of six hours of 300/400 level humanities courses from among the following:		6
AAST/HIST 361	African-American History to 1865	
AAST 395	Topics in African American Studies	
AAST 396	Topics in African American Studies	
AAST 495	Topics in African American Studies	
ENGL 465W	African American Literature	
HIST 362	African-American History Since 1865	
HIST 370	Africa and the Atlantic Slave Trade	
HIST 455	African-American Historiography	
HIST 475	Global Africa	
MUSC 460	History of Jazz	
WGS 302W	Dimensions of Diversity: Intersectionality Among Women	
A minimum of six hours of 300/400 level social science courses from among the following:		6
AAST 310	Human Rights and Social Change in Africa	
AAST/POLS 316	Politics of Africa	
AAST/SOC 323	Sociology of Minority Families	

AAST 395	Topics in African American Studies	
AAST 396	Topics in African American Studies	
AAST 410	Africana Intellectual Thought and Economic Development	
AAST/POLS 412	Politics of the Civil Rights Movement	
AAST 420W	African American Political and Social Thought	
AAST/SOC 426	Minority Group Relations	
AAST/CRJS/SOC 452	Diversity in Criminal Justice Organizations	
AAST/PSYC 460	Psychology of African Americans	
AAST 490	Senior Seminar	
AAST 495	Topics in African American Studies	
CRJS/SOC 444	Community Justice	
CRJS 450	Blacks, Crime and Justice	
GEOG 452	Africa	
POLS 309	Race, Culture and Public Policy	
POLS 410	African American Politics	
POLS 439	International Relations of African States	
SOC 320	Social Inequality	
Total Credit Hours		15

* Does not count toward the grade point average required for the minor

With the approval of the director, courses that focus on the African American experience can also fulfill the requirements of the minor.

No course taken to satisfy the requirement of the minor can be from a student's major field.

Students must maintain a 2.00 cumulative grade point average in all courses specified as a requirement for the minor exclusive of 100- and 200-level courses and prerequisite courses. A minimum of six hours in upper-level courses in the minor must be courses offered by Old Dominion University.

Students must file a minor declaration form in the ISRE Resource Center in BAL 2023.

Art

Web Site: <http://www.odu.edu/artdept> (<http://www.odu.edu/artdept/>)

John Roth, Chair
757-683-4055

Students enrolled in Art Department classes will be expected to acquire mastery in studio skills, research skills, critical thinking, and problem solving as they become valuable contributors to the world of visual culture. A BFA can be earned in various studio majors as well as Art Education. The BA is an option in Art History and Visual Studies. Minors are also available in Art History, Print Media, Studio Art Photography, Studio Arts, and the Designed World.

Bachelor of Arts Programs

- Art with a Major in Art History (BA) (p. 94)
- Art with a Major in Visual Studies (BA) (p. 96)

Bachelor of Fine Arts Programs

- Fine Arts with a Major in 3D Media and Material Studies (BFA) (p. 99)
- Fine Arts with a Major in Art Education for Museums and Cultural Institutions (BFA) (p. 102)
- Fine Arts with a Major in Graphic Design (BFA) (p. 105)
- Fine Arts with a Major in Painting and Drawing (BFA) (p. 109)

- Fine Arts with a Major in Photography and Print Media (BFA) (p. 112)
- Fine Arts with a Major in PreK-12 Art Education (BFA) (p. 115)

Minors

- Art History Minor (p. 96)
- Print Media Minor (p. 119)
- Studio Art Photography Minor (p. 119)
- Studio Arts Minor (p. 119)
- The Designed World Minor (p. 119)

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Linked Bachelor's in Art, Visual Studies and Fine Arts and MA in Humanities

The linked bachelor's programs in art history, visual studies and fine arts and the MA in humanities make it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Please refer to the Humanities (p. 244) section of this Catalog for additional information on the linked programs.

Bachelor of Arts

Art with a Major in Art History (BA)

Requirements

Anne Muraoka, Program Director

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring a major in Art History.

Language and Culture: Proficiency through 202 level in French, German, Italian, Latin or Spanish; note that proficiency is not met by completion of an associate degree.

Neither ARTH 121A nor ARTS 122A may be used to satisfy the Human Creativity requirement.

The Impact of Technology requirement may be fulfilled in the major with ARTH 435W.

Upper-Division General Education

- Option A. Approved Minor, 12-24 credit hours; also second degree or second major
- Option B. Interdisciplinary Minor; 12 credit hours, (3 credit hours may be in the major area of study)
- Option C. An approved certification program such as teaching licensure (hours vary)
- Option D. Two Upper-Division Courses (6 credit hours) from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Art History Major

General Education	
Complete lower-division requirements	38-47
Complete upper-division requirements (minimum of 6 credit hours)	6
Complete foreign language coursework through the 202 level	0-6
Art History	
ARTH 150	Global Survey of Art History
Select one of the following Art History (ARTH) 200-level Survey courses:	3
ARTH 203	Ancient Art *
or ARTH 204	Pseudoarchaeologies and Conspirational Thinking in Art
ARTH 210	Early Modern Art in Europe
ARTH 230	Survey of Modern and Contemporary Art
ARTH 351W	Research Methods in Art History
ARTH 360	Asian Art
or ARTH 305	Egyptian Art
Major Electives	
Select one additional 200-level ARTH Survey course in each of the areas not selected previously: Ancient and Medieval, Early Modern, or Modern and Contemporary.	6
Select one 300-level ARTH course from each of the following areas: Ancient and Medieval, Early Modern, or Modern and Contemporary.	9
Select three 400-level ARTH courses	9
ARTH 481	Capstone
or ARTH 480	Senior Thesis
Select two ARTS electives	6
Total Credit Hours	89-104

* Note: Course title change for ARTH 204 from "Debunking Myths in Art" to "Pseudoarchaeologies and Conspirational Thinking in Art."

Students pursuing graduate work leading to teaching, museology, art criticism or dealing in works of art will be counseled on course selection. - For students considering graduate work in art history, 18 hours of German or French are strongly recommended. Students who wish to distinguish themselves in the major may opt for the thesis elective, ARTH 480, in their final year of study.

Electives

Completion of requirements for lower-division general education, upper-division general education and the major would entail 89 to 104 credits toward the 120 credits required for graduation. The remaining credit hours may be met with any university course the student is qualified to take, including additional courses in art.

Additional Requirements and Requirements

Transfer Requirements

For the BA degree in visual studies, students must complete a minimum of 30 credit hours at Old Dominion University. These 30 credits must include

a minimum of 21 studio credit hours that include 12 credit hours at the 300/400 levels.

For the BA degree in art history, students must complete a minimum of 30 credit hours at Old Dominion University, which must include a minimum of 12 credit hours at the 300/400 levels.

A minimum of 36 credit hours in studio art (with 12 minimum at the 300/400 levels) from Old Dominion University is required for all BFA majors except art education.

For the BFA with majors in art education, 33 credit hours in studio art and 12 credits hours in art history are required along with 15 credit hours in art education. The 15 credit hour core curriculum in art education must be completed at ODU, unless transferred from a CAEP (Council for the Accreditation of Educator Preparation) and approved by the program director. Art history and 200-level studio credits may be transferable, with approval from the Art Department chief departmental advisor. Transferable course requirements pertaining to licensure that come from the Darden College of Education and Professional Studies professional education coursework must be approved through the Darden College of Education and Professional Studies if they do not meet the already pre-approved transferable courses.

For a minor in either art history, studio arts or studio art photography, transfer students must complete two elective courses in art history at the 300/400 level at Old Dominion University.

Before registering for classes, transfer students who enroll in the BFA (all majors) or the BA in visual studies must submit a portfolio of work for review by the Art Department chief departmental advisor who will determine which transferable courses will meet equivalent requirements in the major. Transfer students for the BFA with majors in art education must also be approved by the art education program director who will determine which transferable art education and professional courses will meet equivalent requirements in the major and those that must still be completed for licensure. Appointments for transfer portfolio evaluations must be made prior to registration for classes.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Elective or Language and Culture I (May be waived; See requirement details)		3
Human Behavior		3
ARTH 150	Global Survey of Art History	3
Credit Hours		15
Spring		
Oral Communication		3
Literature		3
Elective or Language and Culture II (May be waived; See requirement details)		3
Information Literacy and Research		3
ARTH 200-level Survey course		3
Credit Hours		15

Sophomore

Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research or Writing, Rhetoric, and Research: Special Topics	3
The Nature of Science I		4
Language and Culture III		3
ARTH 200-level Survey course		3
ARTS elective course		3
Credit Hours		16
Spring		
Interpreting the Past		3
The Nature of Science II		4
Language and Culture IV		3
ARTH 200-level Survey course		3
ARTH 300-level elective course		3
Credit Hours		16

Junior

Fall		
Philosophy and Ethics		3
Impact of Technology (May be fulfilled in the major with ARTH 435W)		3
ARTH 300-level course		3
Upper-Division General Education Course or Minor		3
Non-Western Course:		
ARTH 360 or ARTH 305	Asian Art or Egyptian Art	3
Credit Hours		15
Spring		
Human Creativity (May not use ARTH 121A or ARTS 122A)		3
ARTS elective course		3
ARTH 351W	Research Methods in Art History	3
ARTH 300-level course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15

Senior

Fall		
Minor or Elective		3
Elective course		3
Elective course		3
ARTH 400-level course		3
ARTH 497	Tutorial Work in Art History (or ARTH 400-level course)	3
Credit Hours		15
Spring		
Elective course		3
Elective course		1
Minor or Elective		3
ARTH 481 or ARTH 480	Capstone or Senior Thesis	3

ARTH 400-level course	3
Credit Hours	13
Total Credit Hours	120

¹ Grade of C or better required

Linked Bachelor's in Art, Visual Studies and Fine Arts and MA in Humanities

The linked bachelor's programs in art history, visual studies and fine arts and the MA in humanities make it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Please refer to the Humanities (p. 244) section of this Catalog for additional information on the linked programs.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Art History Minor

Requirements

A student who chooses to complete a minor in art history must receive the approval of the chief departmental advisor and the art history program director. ARTH 150 and ARTH 203, ARTH 210 or ARTH 230 are prerequisite courses for the minor and are not included in the calculation of the grade point average for the minor. A reading knowledge of French, German, Italian or Spanish is strongly advised. The requirement for the minor for BA and BS students comprises 12 hours selected from ARTH 300- and 400-level courses. BFA students must complete the following:

Select one of the following courses:	3
ARTH 320W History of Graphic Design	
ARTH 350W Art Criticism	
ARTH 351W Research Methods in Art History	
ARTH 435W Modern Architecture	
ARTH 300- and 400-level courses	12
Total Credit Hours	15

For completion of the minor a student must have a minimum overall cumulative grade point average of 2.00 and no grade lower than a C in all courses specified as a requirement for the minor exclusive of prerequisite courses. Transfer students must complete a minimum of six hours in ARTH 300- and 400-level courses through courses offered by Old Dominion University.

Bachelor of Arts Art with a Major in Visual Studies (BA)

The BA degree with a major in Visual Studies cultivates the exploration of human experience through the visual arts by encouraging students to engage with the histories of art making, materials and vehicles of expression, design principles, and best practices in business administration and communication. The BA in Visual Studies major offers students a broad, yet comprehensive education in art practice, history, theory, administration, and business. This degree teaches students a broad collection of skills applicable to diverse fields or professions in the arts. Although the curriculum for the Visual Studies major is centered on the arts, these are transferrable to any profession. The degree supports the College of Art & Letters mission to: 1) introduce students to the full range of human experience through the study of cultural heritage, forms of artistic expression, and methods of critical inquiry; and 2) prepare students for rigorous, intellectual, and creative inquiry leading to their full development as human beings and to their responsible engagement with society.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3

Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring a major in visual studies.

Language and Culture: Proficiency through 202 level in French, German, Italian, Latin or Spanish; note that proficiency is not met by completion of an associate degree.

Neither ARTH 121A nor ARTS 122A may be used to satisfy the Human Creativity requirement.

The Impact of Technology requirement may be fulfilled in the major with ARTH 435W.

Upper-Division General Education (minimum 6 credit hours)

- Option A. Approved Minor, 12-24 credit hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 credit hours (3 credit hours may be in the major area of study)
- Option C. An approved certification program, such as teaching licensure (hours vary)
- Option D. Two Upper-Division Courses (6 credit hours) from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Visual Studies Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6
Complete foreign language coursework through the 202 level	0-6

Art History ¹

ARTH 150	Global Survey of Art History	3
Select one of the following Art History 200 Level Survey courses:		
ARTH 203	Ancient Art	
ARTH 210	Early Modern Art in Europe	
ARTH 230	Survey of Modern and Contemporary Art	
ARTH 305	Egyptian Art	3

or ARTH 360	Asian Art	
Select one of the following:		3
ARTH 320W	History of Graphic Design	
ARTH 350W	Art Criticism	
ARTH 351W	Research Methods in Art History	
ARTH 435W	Modern Architecture	
ART History Elective	300 or 400 level	3
ARTH 481	Capstone	3
Studio Art ¹		
ARTS 202	Two-Dimensional Design and Color Theory	3
ARTS 203	Three-Dimensional Design	3
ARTS 204	Foundational Concepts in Studio Art	3
ARTS 231	Drawing I: Fundamentals of Drawing	3
ARTS 279	Digital Basics	3
ARTS 200- or 300-level elective		3
Internship		
ARTH 368	Internship	3
or ARTS 368	Internship	
Elective Requirements ²		
Select two of the following:		6
ACCT 300	Accounting for Entrepreneurs	
COMM 260	Understanding Media	
COMM 303	Introduction to Strategic Communications	
COMM 305	Work-Life Communication	
COMM 484	Strategic Media Design and Production	
COMM 490	ROAR Communications Agency	
MGMT 350	Employee Relations Problems and Practices	
PHIL 303E	Business Ethics	
PHIL 324	Philosophy of Art	
WCS 330	Contemporary Cultures and Media	

Total Credit Hours **89-101**

- ¹ C or better required.
- ² These courses may not be used to meet the upper-division general education requirement, and they do not count towards the major GPA.

Completion of requirements for lower-division general education, upper-division general education and the major would entail 89 to 104 credits toward the 120 credits required for graduation. The remaining credit hours may be met with any university course the student is qualified to take, including additional courses in art.

Additional Requirements and Information

Transfer Requirements

For the BA degree in visual studies, students must complete a minimum of 30 credit hours at Old Dominion University. These 30 credits must include a minimum of 21 studio credit hours that include 12 credit hours at the 300/400 levels.

For the BA degree in art history, students must complete a minimum of 30 credit hours at Old Dominion University, which must include a minimum of 12 credit hours at the 300/400 levels.

A minimum of 36 credit hours in studio art (with 12 minimum at the 300/400 levels) from Old Dominion University is required for all BFA majors except art education.

For the BFA with majors in art education, 33 credit hours in studio art and 12 credits hours in art history are required along with 15 credit hours in art education. The 15 credit hour core curriculum in art education must be completed at ODU, unless transferred from a CAEP (Council for the Accreditation of Educator Preparation) and approved by the program director. Art history and 200-level studio credits may be transferable, with

approval from the Art Department chief departmental advisor. Transferable course requirements pertaining to licensure that come from the Darden College of Education and Professional Studies professional education coursework must be approved through the Darden College of Education and Professional Studies if they do not meet the already pre-approved transferable courses.

For a minor in either art history, studio arts or studio art photography, transfer students must complete two elective courses in art history at the 300/400 level at Old Dominion University.

Before registering for classes, transfer students who enroll in the BFA (all majors) or the BA in visual studies must submit a portfolio of work for review by the Art Department chief departmental advisor who will determine which transferable courses will meet equivalent requirements in the major. Transfer students for the BFA with majors in art education must also be approved by the art education program director who will determine which transferable art education and professional courses will meet equivalent requirements in the major and those that must still be completed for licensure. Appointments for transfer portfolio evaluations must be made prior to registration for classes.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition ¹	3
Mathematical Skills		3
Elective or Language and Culture I (May be waived; See requirement details)		3
ARTS 202	Two-Dimensional Design and Color Theory ¹	3
ARTS 204	Foundational Concepts in Studio Art ¹	3
Credit Hours		15
Spring		
Elective or Language and Culture II (May be waived; See requirement details)		3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research ¹ or Writing, Rhetoric, and Research: Special Topics	3
Oral Communication		3
ARTS 203	Three-Dimensional Design ¹	3
ARTS 279	Digital Basics ¹	3
Credit Hours		15
Sophomore		
Fall		
The Nature of Science I		4
Language and Culture III		3
Interpreting the Past		3
ARTH 150	Global Survey of Art History ¹	3
ARTS 231	Drawing I: Fundamentals of Drawing ¹	3
Credit Hours		16

Spring	
The Nature of Science II	4
Language and Culture IV	3
Human Creativity	3
ARTH 200-level survey course ¹	3
ARTS 200- or 300-level elective course ¹	3
Credit Hours	16

Junior		
Fall		
Literature		3
Human Behavior		3
Select one of the following: ¹		3
ARTH 320W	History of Graphic Design	
ARTH 350W	Art Criticism	
ARTH 351W	Research Methods in Art History	
ARTH 435W	Modern Architecture	
Electives		6
Credit Hours		15

Spring		
Philosophy and Ethics		3
Information Literacy and Research		3
ARTH 305 or ARTH 360	Egyptian Art ¹ or Asian Art	3
Electives		6
Credit Hours		15

Senior		
Fall		
Upper-Division General Education Course or Minor		3
Minor or Elective		3
Elective course		3
Impact of Technology (can be met by ARTH 435W)		3
ARTH 368 or ARTS 368	Internship or Internship	3
Credit Hours		15

Spring		
ARTH: 300/400-level elective course ¹		3
Upper-Division General Education Course or Minor		3
Minor or Elective		3
ARTH 481	Capstone ¹	3
Elective		1
Credit Hours		13
Total Credit Hours		120

¹ Grade of C or better required

Linked Bachelor's in Art, Visual Studies and Fine Arts and MA in Humanities

The linked bachelor's programs in art history, visual studies and fine arts and the MA in humanities make it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the

graduate degree). Please refer to the Humanities (p. 244) section of this Catalog for additional information on the linked programs.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Fine Arts Fine Arts with a Major in 3D Media and Material Studies (BFA)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3

Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring a major in fine arts.

Neither ARTH 121A nor ARTS 122A may be used to satisfy the Human Creativity requirement.

Impact of Technology can be fulfilled in the major with ARTH 435W Modern Architecture.

Upper-Division General Education

- Option A: Approved Minor (minimum 12 hours), second degree, or second major
- Option B: Interdisciplinary Minor (specifically 12 hours; 3 credit hours may be in the major area of study)
- Option C: An approved certification program, such as Teaching Licensure (hours vary)
- Option D: Two 300/400 upper level courses (6 hours) from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major.

A student may take a double major, but no more than two courses may be used for both majors. Note that a second major fulfills the upper-division general education requirements.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

3D Media and Material Studies Major

In keeping with the Art Department's mission of empowering students to become visually critical thinkers through their creative practice, the 3D Media and Material Studies major focuses on making as a form of thinking through technical mastery of both traditional craftsmanship and emerging technologies. Students are also exposed to the expanding range of working three-dimensional studio practice, including performance and installation and time-based art. Through immersion in a research and process-oriented curriculum, students develop a range of transferable skills and a body of work reflecting artistic maturity, material proficiency, and conceptual development.

Art History Foundations Core

ARTH 150	Global Survey of Art History	3
200-level Art History (ARTH) Survey Course		3
Select one of the following Writing Intensive courses: *		3
ARTH 320W	History of Graphic Design	
ARTH 350W	Art Criticism	
ARTH 351W	Research Methods in Art History	
ARTH 435W	Modern Architecture	
300-level Art History (ARTH) Elective Course		3
400-level Art History (ARTH) Elective Course		3
Total Credit Hours		15

Art Studio Foundations Core*

ARTS 202	Two-Dimensional Design and Color Theory	3
ARTS 203	Three-Dimensional Design	3
ARTS 204	Foundational Concepts in Studio Art	3
ARTS 231	Drawing I: Fundamentals of Drawing	3
ARTS 279	Digital Basics	3
Total Credit Hours		15

Art Studio Required Coursework

ARTS 211	Introduction to Digital Photography	3
ARTS 221	Introduction to Glass: Survey	3
ARTS 261	Introduction to Sculpture	3
ARTS 263	Introduction to Ceramics	3
Select one of the following:		3
ARTS 291	Introduction to Jewelry and Metalsmithing	
ARTS 392	Blacksmithing	
Total Credit Hours		15

3D Media and Material Studies Major

General Education

Complete lower-division requirements	38-47
Complete upper-division requirements (minimum of 6 credit hours)	6

Core

Complete Art History Foundations, Art Studio Foundations, and Art Studio required courses	45

3D Media and Material Studies

Select seven of the following major courses:		21
ARTS 361	Advanced Sculpture	
ARTS 363	Intermediate Ceramics	
ARTS 381	Weaving and Fibers: Intermediate	
ARTS 391	Intermediate Jewelry	
ARTS 394	Intermediate Metalsmithing	
ARTS 461	Sculpture Studio	
ARTS 463	Advanced Ceramics	
ARTS 469	Assemblage	
ARTS 481	Weaving and Fibers: Advanced	
ARTS 491	Advanced Jewelry and Metalsmithing	
ARTS 492	Wood Studio/Furniture Design	
ARTS 493	Jewelry and Metalsmithing Studio	
ARTS 368	Internship **	
ARTS 395	Topics in Studio Art (Ceramics, Metals or Fibers) **	
ARTS 495	Topics in Studio Art (Ceramics, Metals or Fibers) **	
ARTS 497	Tutorial Work in Special Studio Topics **	
ARTS 498	Tutorial Work in Special Studio Topics **	

Select two of the following elective courses:	6

ARTS 200-level Print I course		
ARTS 311	Photography 2	
ARTS 331	Drawing II	
ARTS 341	Painting II	
ARTS 395	Topics in Studio Art (Intro to Glass)	
ARTS 400	Senior Show (Capstone Course)	3
Total Credit Hours		119-128

* C or better required

** With 3D faculty approval

Additional Requirements and Information

Admission

The Bachelor of Fine Arts (BFA) is a professional degree that focuses on intensive creative work in the following majors: 3D Media and Material Studies, Graphic Design, Painting and Drawing, and Photography and Print Media. The BFA does not have a freshman entrance portfolio review for admission. Students who are pursuing the BFA degree must consult with the Art Department's Chief Departmental Advisor before or during their first semester at ODU. Students are expected to begin their art studio foundations coursework in their first year of study.

Continuance

Students seeking continuance into any of the BFA majors must first successfully complete the art studio foundations coursework with a minimum grade of C. Students must then submit a portfolio of their work for evaluation by faculty within the major. The specific submission requirements for each major are listed on the Art Department website. After successfully completing the portfolio review, students will continue upper-level coursework in the major.

Transfer Requirements

For the BA degree in visual studies, students must complete a minimum of 30 credit hours at Old Dominion University. These 30 credits must include a minimum of 21 studio credit hours that include 12 credit hours at the 300/400 levels.

For the BA degree in art history, students must complete a minimum of 30 credit hours at Old Dominion University, which must include a minimum of 12 credit hours at the 300/400 levels.

A minimum of 36 credit hours in studio art (with 12 minimum at the 300/400 levels) from Old Dominion University is required for all BFA majors except art education.

For the BFA with majors in art education, 33 credit hours in studio art and 12 credits hours in art history are required along with 15 credit hours in art education. The 15 credit hour core curriculum in art education must be completed at ODU, unless transferred from a CAEP (Council for the Accreditation of Educator Preparation) and approved by the program director. Art history and 200-level studio credits may be transferable, with approval from the Art Department chief departmental advisor. Transferable course requirements pertaining to licensure that come from the Darden College of Education and Professional Studies professional education coursework must be approved through the Darden College of Education and Professional Studies if they do not meet the already pre-approved transferable courses.

For a minor in either art history, studio arts or studio art photography, transfer students must complete two elective courses in art history at the 300/400 level at Old Dominion University.

Before registering for classes, transfer students who enroll in the BFA (all majors) or the BA in visual studies must submit a portfolio of work for review by the Art Department chief departmental advisor who will determine which transferable courses will meet equivalent requirements in the major. Transfer students for the BFA with majors in art education must also be approved by the art education program director who will determine which transferable art education and professional courses will

meet equivalent requirements in the major and those that must still be completed for licensure. Appointments for transfer portfolio evaluations must be made prior to registration for classes.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition ¹	3
Mathematical Skills		3
Language and Culture I (May be waived; See requirement details)		0-3
Human Creativity (May not use ARTH 121A or ARTS 122A)		3
Human Behavior		3
Credit Hours		12-15
Spring		
Oral Communication		3
Information Literacy and Research		3
Elective or Language and Culture II (May be waived; See requirement details)		1-3
ARTH 150	Global Survey of Art History	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research ¹ or Writing, Rhetoric, and Research: Special Topics	3
Credit Hours		13-15
Sophomore		
Fall		
Interpreting the Past		3
The Nature of Science I		4
Literature		3
ARTS 202	Two-Dimensional Design and Color Theory ¹	3
ARTH 200-level Survey course		3
Credit Hours		16
Spring		
Philosophy and Ethics		3
The Nature of Science II		4
ARTS 279	Digital Basics ¹	3
ARTS 203	Three-Dimensional Design ¹	3
ARTS 204	Foundational Concepts in Studio Art ¹	3
Credit Hours		16
Junior		
Fall		
Impact of Technology (May be fulfilled in the major with ARTH 435W)		0-3
ARTS 211	Introduction to Digital Photography	3
ARTS 261	Introduction to Sculpture	3
ARTS 231	Drawing I: Fundamentals of Drawing ¹	3

ARTS 263	Introduction to Ceramics	3
Select one of the following:		3
ARTS 291	Introduction to Jewelry and Metalsmithing	
ARTS 392	Blacksmithing	
Credit Hours		15-18
Spring		
ARTS 221	Introduction to Glass: Survey	3
ARTS-300/400 level major course		3
ARTS-300/400 level major course		3
ARTS-300/400 level major course		3
ARTH-300 level elective course		3
Select one of the following: ¹		3
ARTH 320W	History of Graphic Design	
ARTH 350W	Art Criticism	
ARTH 351W	Research Methods in Art History	
ARTH 435W	Modern Architecture	
Credit Hours		18
Senior		
Fall		
ARTS-300/400 level major course		3
ARTS-300/400 level major course		3
ARTS-300/400 level major course		3
ARTS-300/400 level major course		3
Upper-Division General Education Course		3
Credit Hours		15
Spring		
ARTS Elective course		3
ARTS Elective course		3
ARTH 400-level elective course		3
ARTS 400	Senior Show	3
Upper-Division General Education Course		3
Credit Hours		15
Total Credit Hours		120-128

¹ Grade of C or better required

Linked Bachelor's in Art, Visual Studies and Fine Arts and MA in Humanities

The linked bachelor's programs in art history, visual studies and fine arts and the MA in humanities make it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Please refer to the Humanities (p. 244) section of this Catalog for additional information on the linked programs.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-

business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Fine Arts Fine Arts with a Major in Art Education for Museums and Cultural Institutions (BFA)

Natalia Pilato
Art Education Program Director

The Art Education program offers instruction in both the practical and theoretical aspects of teaching art from kindergarten through high school in a variety of settings. The program curriculum aims to cultivate teaching artists with a strong foundation in studio arts and art education best practice methods. More than 100 hours of observation, practicum, and hands-on learning experiences in schools, museums, and cultural institutions provide students with the necessary skills to be successful teaching artists, in addition to their teaching internship. Students write lessons from a variety of entry points including big ideas, historical and contemporary artists, social justice issues, and art processes. Students will focus on the dispositions of visual art educators as defined by NAEA (National Art Education Association), the Virginia Department of Education and ODU. Additional focus will be on the development of culturally relevant curriculum and pedagogy. Students also engage in research by exploring past and current issues in Art Education and how social, cultural, and political perspectives influence Art Educational practice and policy.

The Art Education program focuses on studio arts, art history, and professional education course work. All students complete 33 credit hours in studio including 12 upper-level credits in one of the fine arts majors; Painting and Drawing, 3D Media and Material Studies, or Print and Photo. This offers students a diverse and substantive exposure to studio practice

along with a focus in the discipline of their choice. Students also complete 12 credit hours in Art History, along with 15 core credit hours in Art Education.

Students wishing to obtain a BFA in art education can choose between two majors:

PreK-12 Art Education

PreK-12 Art Education includes 9 credits in Special Education and Teaching and Learning through the Darden College of Education and Professional Studies as well as a 12-credit internship in elementary and secondary art classrooms in the public schools. Students in this major must complete required tests and clearances for K-12 teaching in the public schools and must be admitted into the teacher education program through the Office of Clinical Experiences. This major is ideal for students seeking careers as art educators in the public schools for grades K-12.

Art Education for Museums and Cultural Institutions

Art Education for Museums and Cultural Institutions includes a minor in Art History (9 additional credits in upper-level coursework), 3 credits in special education, 3 credits in art therapy and a 6-9 credit internship with a museum or cultural institution. This major prepares students seeking a career as a museum educator or as a community arts program director/education coordinator.

Old Dominion University's Art Education program is accredited by the National Council for Accreditation of Educator Preparation (CAEP) and the Virginia Department of Education.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C English Composition before declaring major in Art Education.

Neither ARTH 121A nor ARTS 122A may be used to satisfy the Human Creativity requirement.

Upper-Division General Education

Satisfied through a built-in minor in art history.

Requirements for Graduation

Requirements for graduation include completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better, completion of the Senior Assessment; a minimum cumulative 2.75 GPA in the major area and in the professional education core with no grade less than a C in the major/content and with no grade less than a C- in the professional education core; successful completion of the Teacher Candidate Internship; and a minimum of 122 credit hours, which must include both a minimum of 31 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the teacher education programs in the College of Arts and Letters are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information from their advisors and from the Office of Clinical Experiences website at <http://odu.edu/oce> (<http://odu.edu/oce/>).

Art Education Core

Art History

ARTH 150	Global Survey of Art History *	3
Select one 200-level Art History (ARTH) Survey course: *		3
ARTH 360	Asian Art *	3
or ARTH 305	Egyptian Art	
ARTH 350W	Art Criticism **	3
Total Credit Hours		12

* C or better required

** C or better required. Students who select ARTH 230 as their survey course take ARTH 351W instead of ARTH 350W.

Art Studio

ARTS 202	Two-Dimensional Design and Color Theory *	3
ARTS 203	Three-Dimensional Design *	3
ARTS 211	Introduction to Digital Photography *	3
ARTS 231	Drawing I: Fundamentals of Drawing *	3
ARTS 241	Painting I *	3
ARTS 261	Introduction to Sculpture *	3
ARTS 263	Introduction to Ceramics *	3
ARTS 279	Digital Basics *	3
Select three upper-level courses in one area (one must be at the 400 level): 3D Media and Material Studies, Painting and Drawing, and Photography and Print Media. **		9
Total Credit Hours		33

* C or better required

** The three areas may have several different focuses; in these cases upper-level coursework must be taken in separate focuses within one area, such as coursework for ceramics, sculpture, metals and/or fibers. For example, for the 3D media and materials studies major, upper-level coursework must be taken across all focus areas, which include ceramics, sculpture, metals and/or fibers. In addition, those students seeking to take print or metals

coursework can substitute a 200-level course for their 300-level major requirement.

Art Education for Museums and Cultural Institutions Major

General Education

Complete lower-division requirements	41-47

Complete upper-division requirements (satisfied in the major through the minor in art history)

Art Education Core

Complete Art Education core requirements	45

Art Education for Museums and Cultural Institutions

ARTE 301	Foundations of Art Education *	3
ARTE 305	Elementary Art Education Methods and Classroom Management *	3
ARTE 306	Secondary Art Education Methods and Classroom Management *	3
ARTE 411	Curriculum and Instruction in Art Education *	3
ARTE 480	Capstone in Art Education *	3
ARTE 485	Museum and Cultural Institutions Internship *	6
ARTS 472	Art Therapy *	3
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence **	3

Art History (ARTH) Minor: 9 additional credits of Art History with 6 at the 300 level and 3 at the 400 level

Total Credit Hours	122-128

* Grade of C or better required.

** Grade of C- or better required.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

Admission

All students must apply for and be admitted into the approved art education program. Students must meet the required criteria for admission by earning the minimum required grade point averages (GPA). Application forms for admission to teacher education programs are available on the Office of Clinical Experiences website, <http://odu.edu/oce> (<http://odu.edu/oce/>), and are to be submitted to the art education program director or Art Department chair before being submitted to Office of Clinical Experiences.

Prescribed Virginia Board of Education Assessment for Admission to an Approved Teacher Education Program

Old Dominion University students seeking admission to an approved teacher education program must satisfy the Virginia Board of Education required assessment for admission into an approved teacher education program.

For the most current information on the prescribed Virginia Board of Education admission assessment, visit the Virginia Department of Education at <https://www.doe.virginia.gov/>.

Required grade point averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required – all Art courses must be passed with a grade of C or higher.
- A professional education GPA of 2.75 is required – all professional education courses must be passed with a grade of C- or higher.

Although students may enroll in a limited number of education courses, students must be admitted into the approved art education program prior to enrolling in any instructional strategies practicum education course. Students must also meet with an art education advisor before beginning their sophomore year.

Continuance

Students must maintain a cumulative GPA of 2.75, a major/content GPA of 2.75 and a professional education GPA of 2.75. ART, ARTE, and ARTH courses must be passed with a grade of C or higher. The professional education core must be completed with a grade of C- or higher for continuance. A professional education GPA of 2.75 is required for continuance. The PRAXIS II Art content knowledge examination must be taken prior to, or while enrolled in ARTE 411 and must be passed before enrolling in ARTE 480 Capstone. All assessments must be passed and course work completed prior to enrollment in TLED 485 Student Teaching Internship and the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Students will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <https://www.odu.edu/clinical-experiences/background-checks> (<https://www.odu.edu/clinical-experiences/background-checks/>). The ODU clearance process includes the FBI fingerprint SP-24 form, the child protective service/social service check, and the sexual offender registry check. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete. Please contact the Office of Clinical Experiences at 757-683-3348 if you have any questions.

Virginia Board of Education Prescribed Assessment for Licensure

- Praxis Subject assessment (formerly Praxis II) art content knowledge (test code 5134), passing score of 158 required.

To review more information on the Virginia Board of Education prescribed assessments, visit the Office of Clinical Experiences website, <http://odu.edu/oce> (<http://odu.edu/oce/>).

Transfer Requirements

For the BA degree in visual studies, students must complete a minimum of 30 credit hours at Old Dominion University. These 30 credits must include a minimum of 21 studio credit hours that include 12 credit hours at the 300/400 levels.

For the BA degree in art history, students must complete a minimum of 30 credit hours at Old Dominion University, which must include a minimum of 12 credit hours at the 300/400 levels.

A minimum of 36 credit hours in studio art (with 12 minimum at the 300/400 levels) from Old Dominion University is required for all BFA majors except art education.

For the BFA with majors in art education, 33 credit hours in studio art and 12 credits hours in art history are required along with 15 credit hours in art education. The 15 credit hour core curriculum in art education must be completed at ODU, unless transferred from a CAEP (Council for the Accreditation of Educator Preparation) and approved by the program director. Art history and 200-level studio credits may be transferable, with approval from the Art Department chief departmental advisor. Transferable course requirements pertaining to licensure that come from the Darden College of Education and Professional Studies professional education coursework must be approved through the Darden College of Education

and Professional Studies if they do not meet the already pre-approved transferable courses.

For a minor in either art history, studio arts or studio art photography, transfer students must complete two elective courses in art history at the 300/400 level at Old Dominion University.

Before registering for classes, transfer students who enroll in the BFA (all majors) or the BA in visual studies must submit a portfolio of work for review by the Art Department chief departmental advisor who will determine which transferable courses will meet equivalent requirements in the major. Transfer students for the BFA with majors in art education must also be approved by the art education program director who will determine which transferable art education and professional courses will meet equivalent requirements in the major and those that must still be completed for licensure. Appointments for transfer portfolio evaluations must be made prior to registration for classes.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Elective or Language and Culture I (May be waived; See requirement details)		0-3
Human Creativity (May not use ARTH 121A or ARTS 122A)		3
Human Behavior		3
Credit Hours		12-15
Spring		
Oral Communication		3
Information Literacy and Research		3
Elective or Language and Culture II (May be waived; See requirement details)		0-3
ARTH 150	Global Survey of Art History	3
ARTS 231	Drawing I: Fundamentals of Drawing	3
Credit Hours		12-15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
The Nature of Science I		4
ARTS 202	Two-Dimensional Design and Color Theory	3
ARTE 301		3
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)		3
Credit Hours		16
Spring		
Philosophy and Ethics		3
The Nature of Science II		4

ARTS 203	Three-Dimensional Design	3
ARTS 279	Digital Basics	3
ARTE 305	Elementary Art Education Methods and Classroom Management	3
Credit Hours		16
Junior		
Fall		
ARTS 261	Introduction to Sculpture	3
ARTS 263	Introduction to Ceramics	3
ARTE 306	Secondary Art Education Methods and Classroom Management	3
ARTH 350W	Art Criticism *	3
Literature		3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)		3
Credit Hours		18
Spring		
ARTH 200-level Survey course		3
ARTS 211	Introduction to Digital Photography	3
ARTS 241	Painting I	3
Upper-Level Focus Area Course		3
ARTE 411	Curriculum and Instruction in Art Education	3
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
Credit Hours		18
Senior		
Fall		
ARTH 360 or ARTH 305	Asian Art or Egyptian Art	3
ARTE 480	Capstone in Art Education	3
Upper-Level Focus Area Course		3
Upper-Level Focus Area Course		3
ARTH 300/400-level Elective		3
Credit Hours		15
Spring		
ARTE 485	Museum and Cultural Institutions Internship	6
ARTS 472	Art Therapy	3
ARTH 300/400-level Elective		3
ARTH 300/400-level Elective		3
Credit Hours		15
Total Credit Hours		122-128

* Students who select ARTH 230 as their survey course take ARTH 351W instead of ARTH 350W.

Linked Bachelor's in Art, Visual Studies and Fine Arts and MA in Humanities

The linked bachelor's programs in art history, visual studies and fine arts and the MA in humanities make it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate

degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Please refer to the Humanities (p. 244) section of this Catalog for additional information on the linked programs.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Fine Arts Fine Arts with a Major in Graphic Design (BFA) Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3

Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring a major in fine arts.

Neither ARTH 121A nor ARTS 122A may be used to satisfy the Human Creativity requirement.

Impact of Technology can be fulfilled in the major with ARTH 435W Modern Architecture.

Upper-Division General Education

- Option A: Approved Minor (minimum 12 hours), second degree, or second major
- Option B: Interdisciplinary Minor (specifically 12 hours; 3 credit hours may be in the major area of study)
- Option C: An approved certification program, such as Teaching Licensure (hours vary)
- Option D: Two 300/400 upper level courses (6 hours) from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major.

A student may take a double major, but no more than two courses may be used for both majors. Note that a second major fulfills the upper-division general education requirements.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Graphic Design Major

The Graphic Design major is a professional program that addresses the wide variety of design applications in print and digital media. Students will encounter a diverse and substantive experience in the range of design activity for the contemporary knowledge economy. Students graduating from the program pursue careers in graphic design nationally in a broad range of applications or continue their education in MFA programs.

The program provides a solid foundation of traditional and emergent creative expressions. Students will be introduced to design methods and principles to develop their ability to be personally engaged, economically viable

and professionally relevant. The core graphic design curriculum stresses competencies in research, ideation, analysis and articulation, aesthetics, design theory, productivity, and the application of technology, necessary for personal expression or professional practice. Instruction throughout emphasizes and promotes social responsibility, diversity, and inclusion.

All graphic design students should expect a creative and collaborative environment built upon the experience of a faculty of practicing designers and design educators. Limited enrollment and class sizes ensure an intense and individualized course of study. The department's dedicated state-of-the-art facilities include classroom and production spaces built and equipped to facilitate instruction and invention with traditional and digital media. The program strongly encourages and supports critical interaction with the design community through lectures, workshops, internships, and professional memberships.

Graphic Design Major Requirements

Intended students in the graphic design program can complete the required art studio foundations course (ARTS 279) during the first year of study. For admission into the Graphic Design major, students must have successfully completed 12 credits of graphic design courses with a minimum grade of C.

Transfer students must demonstrate equivalent preparation at another institution to receive credit for the art studio foundations courses.

Graphic Design Program Requirements

Students accepted into the graphic design major must acquire a laptop computer and subscription to the Adobe Creative Cloud software. Specifications for the laptop and software can be obtained from the full-time graphic design faculty or the website. Continuance in the graphic design major requires a grade of C or better in all prerequisite courses and requirements in the graphic design sequence. A final course grade of C- or lower requires the student to repeat the course in order to advance in the major.

Students may focus their studies by selecting electives with New Media Design or Design Applications content. Students become eligible to take these courses after completion of GDES 280, GDES 365, GDES 371, and GDES 378.

Art History Foundations Core*

ARTH 150	Global Survey of Art History	3
200-level Art History (ARTH) Survey Course		3
Select one of the following Writing Intensive courses:		3
ARTH 320W	History of Graphic Design	
ARTH 350W	Art Criticism	
ARTH 351W	Research Methods in Art History	
ARTH 435W	Modern Architecture	
300 or 400 level Art History (ARTH) Elective Course		3
300 or 400 level Art History (ARTH) Elective Course		3
Total Credit Hours		15

Art Studio Foundations Core*

ARTS 202	Two-Dimensional Design and Color Theory	3
ARTS 203	Three-Dimensional Design	3
ARTS 204	Foundational Concepts in Studio Art	3
ARTS 231	Drawing I: Fundamentals of Drawing	3
ARTS 279	Digital Basics **	3
Total Credit Hours		15

Art Studio Required Coursework*

Select one 200 level ARTS course	3
Select two 200 or 300 level ARTS courses	6
Select one 200, 300 or 400 level ARTS course	3

Select one 200, 300 or 400 level ARTS or GDES course	3
Total Credit Hours	15
Graphic Design Major	
General Education	
Complete lower-division requirements	38-47
Complete upper-division requirements (minimum of 6 credit hours)	6
Core *	
Complete Art History Foundations, Art Studio Foundations, and Art Studio required courses	45
Graphic Design *	
GDES 280 Introduction to Graphic Design	3
GDES 365 Basic Typography	3
GDES 371 Design Concepts	3
GDES 378 Brand Identity	3
Select three of the following:	9
GDES 372 Advanced Typography	
GDES 374 Web Design	
GDES 381 Interactive Design	
GDES 382 UI (User Interface) Design ⁺	
GDES 383 UX (User Experience) Design ⁺	
GDES 385 Advanced Graphic Design ⁺⁺	
GDES 386 Socially Conscious Design ⁺⁺	
GDES 395 Topics in Graphic Design ^{***}	
GDES 470 Design Services ⁺⁺	
GDES 474 Motion Graphics	
GDES 480 Advanced New Media ⁺	
GDES 497 Tutorial Work in Graphic Design	
Additional Major Requirements *	
GDES 368 Design Internship ^{***}	3
GDES 490 Design Seminar	3
GDES 491 Design Capstone	3
Total Credit Hours	119-128

*	C or better required
**	Prerequisite to GDES 280
***	With graphic design faculty approval
+	New Media Design content
++	Design Applications content

Additional Requirements and Information

Admission

The Bachelor of Fine Arts (BFA) is a professional degree that focuses on intensive creative work in the following majors: 3D Media and Material Studies, Graphic Design, Painting and Drawing, and Photography and Print Media. The BFA does not have a freshman entrance portfolio review for admission. Students who are pursuing the BFA degree must consult with the Art Department's Chief Departmental Advisor before or during their first semester at ODU. Students are expected to begin their art studio foundations coursework in their first year of study.

Continuance

Students seeking continuance into any of the BFA majors must first successfully complete the art studio foundations coursework with a minimum grade of C. Students must then submit a portfolio of their work for evaluation by faculty within the major. The specific submission requirements for each major are listed on the Art Department website. After successfully completing the portfolio review, students will continue upper-level coursework in the major.

Transfer Requirements

For the BA degree in visual studies, students must complete a minimum of 30 credit hours at Old Dominion University. These 30 credits must include a minimum of 21 studio credit hours that include 12 credit hours at the 300/400 levels.

For the BA degree in art history, students must complete a minimum of 30 credit hours at Old Dominion University, which must include a minimum of 12 credit hours at the 300/400 levels.

A minimum of 36 credit hours in studio art (with 12 minimum at the 300/400 levels) from Old Dominion University is required for all BFA majors except art education.

For the BFA with majors in art education, 33 credit hours in studio art and 12 credits hours in art history are required along with 15 credit hours in art education. The 15 credit hour core curriculum in art education must be completed at ODU, unless transferred from a CAEP (Council for the Accreditation of Educator Preparation) and approved by the program director. Art history and 200-level studio credits may be transferable, with approval from the Art Department chief departmental advisor. Transferable course requirements pertaining to licensure that come from the Darden College of Education and Professional Studies professional education coursework must be approved through the Darden College of Education and Professional Studies if they do not meet the already pre-approved transferable courses.

For a minor in either art history, studio arts or studio art photography, transfer students must complete two elective courses in art history at the 300/400 level at Old Dominion University.

Before registering for classes, transfer students who enroll in the BFA (all majors) or the BA in visual studies must submit a portfolio of work for review by the Art Department chief departmental advisor who will determine which transferable courses will meet equivalent requirements in the major. Transfer students for the BFA with majors in art education must also be approved by the art education program director who will determine which transferable art education and professional courses will meet equivalent requirements in the major and those that must still be completed for licensure. Appointments for transfer portfolio evaluations must be made prior to registration for classes.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
Select one of the following: ¹		3
ARTS 202	Two-Dimensional Design and Color Theory	
ARTS 203	Three-Dimensional Design	
ARTS 231	Drawing I: Fundamentals of Drawing	
ARTS 279	Digital Basics	
Select one of the following: ¹		3
ARTS 202	Two-Dimensional Design and Color Theory	
ARTS 203	Three-Dimensional Design	
ARTS 231	Drawing I: Fundamentals of Drawing	
ARTS 279	Digital Basics	
ENGL 110C	English Composition ¹	3

Language and Culture I (May be waived; See requirement details)	0-3
Mathematical Skills	3
Credit Hours	12-15
Spring	
Select one of the following: ¹	3
ARTS 202	Two-Dimensional Design and Color Theory
ARTS 203	Three-Dimensional Design
ARTS 231	Drawing I: Fundamentals of Drawing
ARTS 279	Digital Basics
Select one of the following: ¹	3
ARTS 202	Two-Dimensional Design and Color Theory
ARTS 203	Three-Dimensional Design
ARTS 231	Drawing I: Fundamentals of Drawing
ARTS 279	Digital Basics
Select one of the following: ¹	3
ENGL 211C	Writing, Rhetoric, and Research
ENGL 231C	Writing, Rhetoric, and Research: Special Topics
Elective or Language and Culture II (May be waived; See requirement details)	0-3
Oral Communication	3
ARTS 200 level course ¹	3
Credit Hours	15-18

Sophomore

Fall

GDES 280	Introduction to Graphic Design ¹	3
ARTS 204	Foundational Concepts in Studio Art ¹	3
ARTH 150	Global Survey of Art History ¹	3
The Nature of Science I		4
Literature		3
Credit Hours		16

Spring

GDES 365	Basic Typography ¹	3
ARTS 200 or 300 level course ¹		3
ARTS 200 or 300 level course ¹		3
ARTH 200 level survey course ¹		3
The Nature of Science II		4
Credit Hours		16

Junior

Fall

GDES 371	Design Concepts ¹	3
GDES 378	Brand Identity ¹	3
ARTH Writing Intensive Course ¹		3
ARTS or GDES 200, 300 or 400 level course ¹		3
Human Creativity (May not use ARTH 121A or ARTS 122A)		3
Philosophy and Ethics		3
Credit Hours		18

Spring

Human Behavior	3
GDES 300/400-level Graphic Design elective course ¹	3
ARTH 300/400-level Elective course ¹	3
Interpreting the Past	3
ARTS 200, 300 or 400 level course ¹	3
Credit Hours	15

Senior

Fall

GDES 490	Design Seminar ¹	3
GDES 300/400-level Graphic Design elective course ¹		3
GDES 300/400-level Graphic Design elective course ¹		3
ARTH 300/400-level elective course ¹		3
Impact of Technology (May be fulfilled in the major with ARTH 435W)		0-3
Credit Hours		12-15

Spring

GDES 491	Design Capstone ¹	3
GDES 368	Design Internship ¹	3
Upper-Division General Education Course		3
Upper-Division General Education Course		3
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)		3
Elective		1
Credit Hours		16
Total Credit Hours		120-129

¹ Grade of C or better required

The Graphic Design curriculum is sequential; required graphic design courses must be taken in the order listed above. Continuance in the graphic design major requires a grade of C or better in all prerequisite courses and requirements in the graphic design sequence.

Linked Bachelor's in Art, Visual Studies and Fine Arts and MA in Humanities

The linked bachelor's programs in art history, visual studies and fine arts and the MA in humanities make it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Please refer to the Humanities (p. 244) section of this Catalog for additional information on the linked programs.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation

with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Fine Arts Fine Arts with a Major in Painting and Drawing (BFA)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring a major in fine arts.

Neither ARTH 121A nor ARTS 122A may be used to satisfy the Human Creativity requirement.

Impact of Technology can be fulfilled in the major with ARTH 435W Modern Architecture.

Upper-Division General Education

- Option A: Approved Minor (minimum 12 hours), second degree, or second major
- Option B: Interdisciplinary Minor (specifically 12 hours; 3 credit hours may be in the major area of study)
- Option C: An approved certification program, such as Teaching Licensure (hours vary)
- Option D: Two 300/400 upper level courses (6 hours) from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major.

A student may take a double major, but no more than two courses may be used for both majors. Note that a second major fulfills the upper-division general education requirements.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Painting and Drawing Major

The Painting and Drawing major supports the investigation of various methods, forms and histories of painting and drawing in addition to the spaces these modes occupy in the contemporary sphere. Students begin their studies with a thorough grounding in the skills required to successfully engage the traditions and contemporary practices of painting and drawing. Initial coursework provides students strong technical, perceptual and visualization skills through a comprehensive and rigorous Foundations and Studio Core curriculum, gaining material handling competencies of both painting and drawing media. Intermediate coursework includes a review and expansion of these competencies with exploration into the expressive potential of painting and drawing through thematically-driven projects. Advanced coursework provides students the tools to develop individual bodies of work exploring individualized preferred concepts, subject matter, techniques, and media.

Painting and Drawing students are recognized as artists and are treated as such; their individual voices are vital to the learning experience cultivated within the program. Painting and Drawing students generate artworks that position them for success in today's competitive market. At the conclusion of their studies, painting and drawing students are capable of creating works of personal pursuit that display an understanding of the historical and contemporary contexts of art making. Additionally, students will have obtained a high level of technical facility, knowledge of professional practice standards, as well as an appreciation for the limitless possibilities of their creativity and the multitude of tools at their disposal.

Art History Foundations Core

ARTH 150	Global Survey of Art History	3
200-level Art History (ARTH) Survey Course		3
Select one of the following Writing Intensive courses: *		3
ARTH 320W	History of Graphic Design	
ARTH 350W	Art Criticism	
ARTH 351W	Research Methods in Art History	
ARTH 435W	Modern Architecture	
300-level Art History (ARTH) Elective Course		3
400-level Art History (ARTH) Elective Course		3
Total Credit Hours		15

Art Studio Foundations Core*

ARTS 202	Two-Dimensional Design and Color Theory	3
ARTS 203	Three-Dimensional Design	3
ARTS 204	Foundational Concepts in Studio Art	3
ARTS 231	Drawing I: Fundamentals of Drawing	3
ARTS 279	Digital Basics	3
Total Credit Hours		15

Art Studio Required Coursework

ARTS 211	Introduction to Digital Photography	3
ARTS 241	Painting I	3
ARTS 261	Introduction to Sculpture	3
ARTS 331	Drawing II	3
Select one of the following Printmaking courses:		3
ARTS 257	Print I: Intaglio and Relief	
ARTS 258	Print I: Screenprint and Lithography	
ARTS 259	Print I: Letterpress and Book Arts	
Total Credit Hours		15

Painting and Drawing Major

General Education

Complete lower-division requirements	38-47
Complete upper-division requirements (minimum of 6 credit hours)	6

Core

Complete Art History Foundations, Art Studio Foundations, and Art Studio required courses	45

Painting and Drawing

ARTS 341	Painting II	3
ARTS 343	Techniques in Abstraction	3
ARTS 432	Figure Drawing Anatomy	3
ARTS 441	Advanced Painting and Drawing	3
ARTS 442	Painting and Drawing Studio	3
ARTS 445	Hybrid Approaches to Painting and Drawing	3
ARTS 456	2D Seminar	3
Select two of the following elective courses:		6
ARTS 263	Introduction to Ceramics	
ARTS 291 or ARTS 392	Introduction to Jewelry and Metalsmithing Blacksmithing	
ARTS 351 or ARTS 352	Print II: The Hybrid Print Print II: Medium Intensive	
ARTS 368	Internship **	
ARTS 395	Topics in Studio Art (Painting and/or Drawing) **	
ARTS 433	Figure Drawing/ Composition	
ARTS 469	Assemblage	
ARTS 473	The Book	

ARTS 495	Topics in Studio Art (Painting and/or Drawing) **	
ARTS 497	Tutorial Work in Special Studio Topics **	
ARTS 498	Tutorial Work in Special Studio Topics **	
ARTS 400	Senior Show (Capstone Course)	3
Total Credit Hours		119-128

* C or better required

** With painting and drawing faculty approval

Additional Requirements and Information

Admission

The Bachelor of Fine Arts (BFA) is a professional degree that focuses on intensive creative work in the following majors: 3D Media and Material Studies, Graphic Design, Painting and Drawing, and Photography and Print Media. The BFA does not have a freshman entrance portfolio review for admission. Students who are pursuing the BFA degree must consult with the Art Department's Chief Departmental Advisor before or during their first semester at ODU. Students are expected to begin their art studio foundations coursework in their first year of study.

Continuance

Students seeking continuance into any of the BFA majors must first successfully complete the art studio foundations coursework with a minimum grade of C. Students must then submit a portfolio of their work for evaluation by faculty within the major. The specific submission requirements for each major are listed on the Art Department website. After successfully completing the portfolio review, students will continue upper-level coursework in the major.

Transfer Requirements

For the BA degree in visual studies, students must complete a minimum of 30 credit hours at Old Dominion University. These 30 credits must include a minimum of 21 studio credit hours that include 12 credit hours at the 300/400 levels.

For the BA degree in art history, students must complete a minimum of 30 credit hours at Old Dominion University, which must include a minimum of 12 credit hours at the 300/400 levels.

A minimum of 36 credit hours in studio art (with 12 minimum at the 300/400 levels) from Old Dominion University is required for all BFA majors except art education.

For the BFA with majors in art education, 33 credit hours in studio art and 12 credits hours in art history are required along with 15 credit hours in art education. The 15 credit hour core curriculum in art education must be completed at ODU, unless transferred from a CAEP (Council for the Accreditation of Educator Preparation) and approved by the program director. Art history and 200-level studio credits may be transferable, with approval from the Art Department chief departmental advisor. Transferable course requirements pertaining to licensure that come from the Darden College of Education and Professional Studies professional education coursework must be approved through the Darden College of Education and Professional Studies if they do not meet the already pre-approved transferable courses.

For a minor in either art history, studio arts or studio art photography, transfer students must complete two elective courses in art history at the 300/400 level at Old Dominion University.

Before registering for classes, transfer students who enroll in the BFA (all majors) or the BA in visual studies must submit a portfolio of work for review by the Art Department chief departmental advisor who will determine which transferable courses will meet equivalent requirements in the major. Transfer students for the BFA with majors in art education must also be approved by the art education program director who will determine which transferable art education and professional courses will meet equivalent requirements in the major and those that must still be

completed for licensure. Appointments for transfer portfolio evaluations must be made prior to registration for classes.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition ¹	3
Language and Culture I (May be waived; See requirement details)		0-3
ARTS 202	Two-Dimensional Design and Color Theory ¹	3
ARTS 204	Foundational Concepts in Studio Art ¹	3
ARTS 231	Drawing I: Fundamentals of Drawing ¹	3
Credit Hours		12-15
Spring		
Elective or Language and Culture II (May be waived; See requirement details)		1-3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research ¹ or Writing, Rhetoric, and Research: Special Topics	3
ARTS 203	Three-Dimensional Design ¹	3
ARTS 279	Digital Basics ¹	3
ARTS 331	Drawing II	3
Credit Hours		13-15
Sophomore		
Fall		
The Nature of Science I		4
Mathematical Skills		3
ARTH 150	Global Survey of Art History	3
ARTS 241	Painting I	3
Select one of the following:		3
ARTS 257	Print I: Intaglio and Relief	
ARTS 258	Print I: Screenprint and Lithography	
ARTS 259	Print I: Letterpress and Book Arts	
Credit Hours		16
Spring		
The Nature of Science II		4
ARTH 200-level Survey course		3
ARTS 211	Introduction to Digital Photography	3
ARTS 261	Introduction to Sculpture	3
ARTS 341	Painting II	3
Credit Hours		16
Junior		
Fall		
Human Behavior		3

Select one of the following:		3
COMM 101R	Public Speaking	
COMM 103R	Voice and Diction	
COMM 112R	Introduction to Interpersonal Communication	
Select one of the following: ¹		3
ARTH 320W	History of Graphic Design	
ARTH 350W	Art Criticism	
ARTH 351W	Research Methods in Art History	
ARTH 435W	Modern Architecture	
ARTS 432	Figure Drawing Anatomy	3
ARTS 445	Hybrid Approaches to Painting and Drawing	3
Credit Hours		15
Spring		
ARTS 343	Techniques in Abstraction	3
ARTH 300-level elective course		3
ARTS 2XX/3XX/4XX elective course		3
Human Creativity (May not use ARTH 121A or ARTS 122A)		3
Interpreting the Past		3
Credit Hours		15
Senior		
Fall		
ARTS 441	Advanced Painting and Drawing	3
ARTS 456	2D Seminar	3
ARTH 400-level elective course		3
Upper-Division General Education Option D Course		3
Select one of the following:		3
ENGL 112L	Introduction to Literature	
ENGL 114L	American Writers, American Experiences	
WCS 100L	Introduction to World Literatures and Cultures	
Philosophy and Ethics		3
Credit Hours		18
Spring		
ARTS 442	Painting and Drawing Studio	3
ARTS 400	Senior Show	3
Impact of Technology (May be fulfilled in the major with ARTH 435W)		0-3
ARTS 3XX/4XX-level elective course		3
Upper-Division General Education Option D Course		3
Information Literacy and Research		3
Credit Hours		15-18
Total Credit Hours		120-128

¹ Grade of C or better required

Linked Bachelor's in Art, Visual Studies and Fine Arts and MA in Humanities

The linked bachelor's programs in art history, visual studies and fine arts and the MA in humanities make it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Please refer to the Humanities (p. 244) section of this Catalog for additional information on the linked programs.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Fine Arts Fine Arts with a Major in Photography and Print Media (BFA)

Requirements

Lower-Division General Education

Written Communication (<http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written>)

6

Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring a major in fine arts.

Neither ARTH 121A nor ARTS 122A may be used to satisfy the Human Creativity requirement.

Impact of Technology can be fulfilled in the major with ARTH 435W Modern Architecture.

Upper-Division General Education

- Option A: Approved Minor (minimum 12 hours), second degree, or second major
- Option B: Interdisciplinary Minor (specifically 12 hours; 3 credit hours may be in the major area of study)
- Option C: An approved certification program, such as Teaching Licensure (hours vary)
- Option D: Two 300/400 upper level courses (6 hours) from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major.

A student may take a double major, but no more than two courses may be used for both majors. Note that a second major fulfills the upper-division general education requirements.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Photography and Print Media Major

The Photography and Print Media major is a unique combination of reproducible media and concept-driven art practice. This pairing provides students with the ability to experiment across disciplines or to concentrate mainly in photography or print media. Each student will develop an individual program of courses that meets their interests.

In photography, students will gain a broad understanding of contemporary photography and its applications in today's world. From digital to analog, students will become well versed in technique as well as contemporary theory. Classes focus on darkroom, digital editing and studio lighting along with learning how to develop their own unique voice as a photographer and artist.

In print media, students have the opportunity to learn a wide range of print techniques and strategies. Every major image reproduction technology, from woodblock printing to large-format inkjet prints, is available to students. Print technique, history, and theory are brought together in guiding students' creative work and artistic development.

Classes take place in the department's brand-new art building equipped with a state-of-the-art computer lab dedicated to photo students and supplied with the latest software. In addition, the photo area contains a darkroom, lighting studio, advanced print lab and general workroom. The print area is equipped for letterpress, screenprint, lithography, relief, and intaglio printmaking, in addition to a digital print lab.

At the end of the program students will take a yearlong seminar dedicated to developing a provocative senior project that will culminate in the senior exhibition at the Baron and Ellin Gordon Art Galleries.

Art History Foundations Core

ARTH 150	Global Survey of Art History	3
200-level Art History (ARTH) Survey Course		3
Select one of the following Writing Intensive courses: *		3
ARTH 320W	History of Graphic Design	
ARTH 350W	Art Criticism	
ARTH 351W	Research Methods in Art History	
ARTH 435W	Modern Architecture	
300-level Art History (ARTH) Elective Course		3
400-level Art History (ARTH) Elective Course		3
Total Credit Hours		15

Art Studio Foundations Core*

ARTS 202	Two-Dimensional Design and Color Theory	3
ARTS 203	Three-Dimensional Design	3
ARTS 204	Foundational Concepts in Studio Art	3
ARTS 231	Drawing I: Fundamentals of Drawing	3
ARTS 279	Digital Basics	3
Total Credit Hours		15

Art Studio Required Coursework

ARTS 211	Introduction to Digital Photography	3
ARTS 241	Painting I	3
ARTS 261	Introduction to Sculpture	3
ARTS 331	Drawing II	3
Select one of the following Printmaking courses:		3
ARTS 257	Print I: Intaglio and Relief	
ARTS 258	Print I: Screenprint and Lithography	
ARTS 259	Print I: Letterpress and Book Arts	
Total Credit Hours		15

Photography and Print Media Major

General Education

Complete lower-division requirements	38-47
Complete upper-division requirements (minimum of 6 credit hours)	6

Core

Complete Art History Foundations, Art Studio Foundations, and Art Studio required courses	45

Photography and Printing

ARTS 311	Photography 2	3
ARTS 351	Print II: The Hybrid Print	3
or ARTS 352	Print II: Medium Intensive	
Select one of the following concentrations:		15

Photography Concentration:

ARTS 312	Lighting for Photography	
ARTS 313	Darkroom Photography	
ARTS 411	Photography 3	
ARTS 412	Photo Seminar 1	
ARTS 413	Photo Seminar 2	

Print Media Concentration:

ARTS 200-level Print I Course (selected from remaining electives)		
ARTS 300-level Print II Course (selected from remaining electives)		
ARTS 450	Printmaking III	
ARTS 456	2D Seminar	
Select Major Elective (see below)		

Select two of the following elective courses:

ARTS 200-level Print I course (selected from remaining electives)		6
ARTS 312	Lighting for Photography	
ARTS 313	Darkroom Photography	
ARTS 351	Print II: The Hybrid Print	
ARTS 352	Print II: Medium Intensive	
ARTS 411	Photography 3	
ARTS 412	Photo Seminar 1	
ARTS 413	Photo Seminar 2	
ARTS 450	Printmaking III	
ARTS 456	2D Seminar	
ARTS 473	The Book	
ARTS 368	Internship **	
ARTS 395	Topics in Studio Art **	
ARTS 495	Topics in Studio Art **	
ARTS 497	Tutorial Work in Special Studio Topics **	
ARTS 498	Tutorial Work in Special Studio Topics **	
ARTS 400	Senior Show (Capstone Course)	3

Total Credit Hours	119-128

* C or better required

** With photography or print media faculty approval

Additional Requirements and Information

Admission

The Bachelor of Fine Arts (BFA) is a professional degree that focuses on intensive creative work in the following majors: 3D Media and Material Studies, Graphic Design, Painting and Drawing, and Photography and Print Media. The BFA does not have a freshman entrance portfolio review for admission. Students who are pursuing the BFA degree must consult with the Art Department's Chief Departmental Advisor before or during their first

semester at ODU. Students are expected to begin their art studio foundations coursework in their first year of study.

Continuance

Students seeking continuance into any of the BFA majors must first successfully complete the art studio foundations coursework with a minimum grade of C. Students must then submit a portfolio of their work for evaluation by faculty within the major. The specific submission requirements for each major are listed on the Art Department website. After successfully completing the portfolio review, students will continue upper-level coursework in the major.

Transfer Requirements

For the BA degree in visual studies, students must complete a minimum of 30 credit hours at Old Dominion University. These 30 credits must include a minimum of 21 studio credit hours that include 12 credit hours at the 300/400 levels.

For the BA degree in art history, students must complete a minimum of 30 credit hours at Old Dominion University, which must include a minimum of 12 credit hours at the 300/400 levels.

A minimum of 36 credit hours in studio art (with 12 minimum at the 300/400 levels) from Old Dominion University is required for all BFA majors except art education.

For the BFA with majors in art education, 33 credit hours in studio art and 12 credits hours in art history are required along with 15 credit hours in art education. The 15 credit hour core curriculum in art education must be completed at ODU, unless transferred from a CAEP (Council for the Accreditation of Educator Preparation) and approved by the program director. Art history and 200-level studio credits may be transferable, with approval from the Art Department chief departmental advisor. Transferable course requirements pertaining to licensure that come from the Darden College of Education and Professional Studies professional education coursework must be approved through the Darden College of Education and Professional Studies if they do not meet the already pre-approved transferable courses.

For a minor in either art history, studio arts or studio art photography, transfer students must complete two elective courses in art history at the 300/400 level at Old Dominion University.

Before registering for classes, transfer students who enroll in the BFA (all majors) or the BA in visual studies must submit a portfolio of work for review by the Art Department chief departmental advisor who will determine which transferable courses will meet equivalent requirements in the major. Transfer students for the BFA with majors in art education must also be approved by the art education program director who will determine which transferable art education and professional courses will meet equivalent requirements in the major and those that must still be completed for licensure. Appointments for transfer portfolio evaluations must be made prior to registration for classes.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition ¹	3
Mathematical Skills		3
Language and Culture I (May be waived; See requirement details)		0-3
Human Creativity (May not use ARTH 121A or ARTS 122A)		3

Human Behavior		3
Credit Hours		12-15
Spring		
Oral Communication		3
Information Literacy and Research		3
Elective or Language and Culture II (May be waived; See requirement details)		1-3
ARTH 150	Global Survey of Art History	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research ¹ or Writing, Rhetoric, and Research: Special Topics	3
Credit Hours		13-15
Sophomore		
Fall		
Interpreting the Past		3
The Nature of Science I		4
Literature		3
ARTS 202	Two-Dimensional Design and Color Theory ¹	3
ARTS 231	Drawing I: Fundamentals of Drawing ¹	3
Credit Hours		16
Spring		
The Nature of Science II		4
ARTS 279	Digital Basics ¹	3
ARTS 203	Three-Dimensional Design ¹	3
ARTS 204	Foundational Concepts in Studio Art ¹	3
ARTS 211	Introduction to Digital Photography	3
Credit Hours		16
Junior		
Fall		
Impact of Technology (May be fulfilled in the major with ARTH 435W)		0-3
ARTS 261	Introduction to Sculpture	3
ARTH 200-level Survey course		3
ARTS 241	Painting I	3
Select one of the following:		3
ARTS 257	Print I: Intaglio and Relief	
ARTS 258	Print I: Screenprint and Lithography	
ARTS 259	Print I: Letterpress and Book Arts	
ARTS 311	Photography 2	3
Credit Hours		15-18
Spring		
Philosophy and Ethics		3
ARTS 331	Drawing II	3
ARTS 351 or ARTS 352	Print II: The Hybrid Print or Print II: Medium Intensive	3
Select one of the following: ¹		3
ARTH 320W	History of Graphic Design	

ARTH 350W	Art Criticism	
ARTH 351W	Research Methods in Art History	
ARTH 435W	Modern Architecture	
ARTH 300-level elective course		3
ARTS Major course		3
Credit Hours		18
Senior		
Fall		
ARTS Elective course		3
ARTS Major course		3
ARTS Major course		3
ARTS Major course		3
Upper-Division General Education Course		3
Credit Hours		15
Spring		
ARTS Major course		3
ARTS Elective course		3
ARTH 400-level elective course		3
ARTS 400	Senior Show	3
Upper-Division General Education Course		3
Credit Hours		15
Total Credit Hours		120-128

¹ Grade of C or better required

Linked Bachelor's in Art, Visual Studies and Fine Arts and MA in Humanities

The linked bachelor's programs in art history, visual studies and fine arts and the MA in humanities make it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Please refer to the Humanities (p. 244) section of this Catalog for additional information on the linked programs.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Fine Arts Fine Arts with a Major in PreK-12 Art Education (BFA)

Natalia Pilato
Art Education Program Director

The Art Education program offers instruction in both the practical and theoretical aspects of teaching art from kindergarten through high school in a variety of settings. The program curriculum aims to cultivate teaching artists with a strong foundation in studio arts and art education best practice methods. More than 100 hours of observation, practicum, and hands-on learning experiences in schools, museums, and cultural institutions provide students with the necessary skills to be successful teaching artists, in addition to their teaching internship. Students write lessons from a variety of entry points including big ideas, historical and contemporary artists, social justice issues, and art processes. Students will focus on the dispositions of visual art educators as defined by NAEA (National Art Education Association), the Virginia Department of Education and ODU. Additional focus will be on the development of culturally relevant curriculum and pedagogy. Students also engage in research by exploring past and current issues in Art Education and how social, cultural, and political perspectives influence Art Educational practice and policy.

The Art Education program focuses on studio arts, art history, and professional education course work. All students complete 33 credit hours in studio including 12 upper-level credits in one of the fine arts majors; Painting and Drawing, 3D Media and Material Studies, or Print and Photo. This offers students a diverse and substantive exposure to studio practice along with a focus in the discipline of their choice. Students also complete 12 credit hours in Art History, along with 15 core credit hours in Art Education.

Students wishing to obtain a BFA in art education can choose between two majors:

PreK-12 Art Education

PreK-12 Art Education includes 9 credits in Special Education and Teaching and Learning through the Darden College of Education and Professional Studies as well as a 12-credit internship in elementary and secondary art classrooms in the public schools. Students in this major must complete required tests and clearances for K-12 teaching in the public schools and must be admitted into the teacher education program through the Office of

Clinical Experiences. This major is ideal for students seeking careers as art educators in the public schools for grades K-12.

Art Education for Museums and Cultural Institutions

Art Education for Museums and Cultural Institutions includes a minor in Art History (9 additional credits in upper-level coursework), 3 credits in special education, 3 credits in art therapy and a 6-9 credit internship with a museum or cultural Institution. This major prepares students seeking a career as a museum educator or as a community arts program director/education coordinator.

Old Dominion University's Art Education program is accredited by the National Council for Accreditation of Educator Preparation (CAEP) and the Virginia Department of Education.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C English Composition before declaring major in Art Education.

Neither ARTH 121A nor ARTS 122A may be used to satisfy the Human Creativity requirement.

Upper-Division General Education

Satisfied through the professional education sequence.

Requirements for Graduation

Requirements for graduation include completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better, completion of the Senior Assessment; a minimum cumulative 2.75 GPA in the major area and in the professional education core with no grade less than a C- in the professional education core; successful completion of the Teacher Candidate Internship; and a minimum of 122 credit hours, which must include both a minimum of 31 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect

Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the teacher education programs in the College of Arts and Letters are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information from their advisors and from the Office of Clinical Experiences website at <http://odu.edu/oce> (<http://odu.edu/oce/>).

Art Education Core

Art History

ARTH 150	Global Survey of Art History *	3
Select one 200-level Art History (ARTH) Survey course: *		3
ARTH 360	Asian Art *	3
or ARTH 305	Egyptian Art	
ARTH 350W	Art Criticism **	3
Total Credit Hours		12

* C or better required

** C or better required. Students who select ARTH 230 as their survey course take ARTH 351W instead of ARTH 350W.

Art Studio

ARTS 202	Two-Dimensional Design and Color Theory *	3
ARTS 203	Three-Dimensional Design *	3
ARTS 211	Introduction to Digital Photography *	3
ARTS 231	Drawing I: Fundamentals of Drawing *	3
ARTS 241	Painting I *	3
ARTS 261	Introduction to Sculpture *	3
ARTS 263	Introduction to Ceramics *	3
ARTS 279	Digital Basics *	3
Select three upper-level courses in one area (one must be at the 400 level): 3D Media and Material Studies, Painting and Drawing, and Photography and Print Media. **		9
Total Credit Hours		33

* C or better required

** The three areas may have several different focuses; in these cases upper-level coursework must be taken in separate focuses within one area, such as coursework for ceramics, sculpture, metals and/or fibers. For example, for the 3D media and materials studies major, upper-level coursework must be taken across all focus areas, which include ceramics, sculpture, metals and/or fibers. In addition, those students seeking to take print or metals coursework can substitute a 200-level course for their 300-level major requirement.

PreK-12 Art Education Major

General Education

Complete lower-division requirements	41-47
Complete upper-division requirements (satisfied in the major)	

Art Education Core

Complete Art Education core requirements	45

PreK-12 Art Education

ARTE 301	Foundations of Art Education *	3

ARTE 305	Elementary Art Education Methods and Classroom Management *	3
ARTE 306	Secondary Art Education Methods and Classroom Management *	3
ARTE 411	Curriculum and Instruction in Art Education *	3
ARTE 480	Capstone in Art Education *	3
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence **	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics **	3
TLED 408	Reading and Writing in Content Areas **	3
TLED 485	Teacher Candidate Internship **	12
Total Credit Hours		122-128

* Grade of C or better required.

** Grade of C- or better required.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

Admission

All students must apply for and be admitted into the approved art education program. Students must meet the required criteria for admission by earning the minimum required grade point averages (GPA). Application forms for admission to teacher education programs are available on the Office of Clinical Experiences website, <http://odu.edu/oce> (<http://odu.edu/oce/>), and are to be submitted to the art education program director or Art Department chair before being submitted to Office of Clinical Experiences.

Prescribed Virginia Board of Education Assessment for Admission to an Approved Teacher Education Program

Old Dominion University students seeking admission to an approved teacher education program must satisfy the Virginia Board of Education required assessment for admission into an approved teacher education program.

For the most current information on the prescribed Virginia Board of Education admission assessment, visit the Virginia Department of Education at <https://www.doe.virginia.gov/>.

Required grade point averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required – all Art courses must be passed with a grade of C or higher.
- A professional education GPA of 2.75 is required – all professional education courses must be passed with a grade of C- or higher.

Although students may enroll in a limited number of education courses, students must be admitted into the approved art education program prior to enrolling in any instructional strategies practicum education course. Students must also meet with an art education advisor before beginning their sophomore year.

Continuance

Students must maintain a cumulative GPA of 2.75, a major/content GPA of 2.75 and a professional education GPA of 2.75. ART, ARTE, and ARTH courses must be passed with a grade of C or higher. The professional education core must be completed with a grade of C- or higher for continuance. A professional education GPA of 2.75 is required for continuance. The PRAXIS II Art content knowledge examination must be taken prior to, or while enrolled in ARTE 411 and must be passed before enrolling in ARTE 480 Capstone. All assessments must be passed and course work completed prior to enrollment in TLED 485 Student Teaching Internship and the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Students will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <https://www.odu.edu/clinical-experiences/placement/background-checks> (<https://www.odu.edu/clinical-experiences/placement/background-checks/>). The ODU clearance process includes the FBI fingerprint SP-24 form, the child protective service/social service check, and the sexual offender registry check. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete. Please contact the Office of Clinical Experiences at 757-683-3348 if you have any questions.

Virginia Board of Education Prescribed Assessment for Licensure

- Praxis Subject assessment (formerly Praxis II) art content knowledge (test code 5134), passing score of 158 required.

To review more information on the Virginia Board of Education prescribed assessments, visit the Office of Clinical Experiences website, <http://odu.edu/oce> (<http://odu.edu/oce/>).

Transfer Requirements

For the BA degree in visual studies, students must complete a minimum of 30 credit hours at Old Dominion University. These 30 credits must include a minimum of 21 studio credit hours that include 12 credit hours at the 300/400 levels.

For the BA degree in art history, students must complete a minimum of 30 credit hours at Old Dominion University, which must include a minimum of 12 credit hours at the 300/400 levels.

A minimum of 36 credit hours in studio art (with 12 minimum at the 300/400 levels) from Old Dominion University is required for all BFA majors except art education.

For the BFA with majors in art education, 33 credit hours in studio art and 12 credits hours in art history are required along with 15 credit hours in art education. The 15 credit hour core curriculum in art education must be completed at ODU, unless transferred from a CAEP (Council for the Accreditation of Educator Preparation) and approved by the program director. Art history and 200-level studio credits may be transferable, with approval from the Art Department chief departmental advisor. Transferable course requirements pertaining to licensure that come from the Darden College of Education and Professional Studies professional education coursework must be approved through the Darden College of Education and Professional Studies if they do not meet the already pre-approved transferable courses.

For a minor in either art history, studio arts or studio art photography, transfer students must complete two elective courses in art history at the 300/400 level at Old Dominion University.

Before registering for classes, transfer students who enroll in the BFA (all majors) or the BA in visual studies must submit a portfolio of work for review by the Art Department chief departmental advisor who will determine which transferable courses will meet equivalent requirements in the major. Transfer students for the BFA with majors in art education must also be approved by the art education program director who will determine which transferable art education and professional courses will meet equivalent requirements in the major and those that must still be completed for licensure. Appointments for transfer portfolio evaluations must be made prior to registration for classes.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work

and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Elective or Language and Culture I (May be waived; See requirement details)		0-3
Human Creativity (May not use ARTH 121A or ARTS 122A)		3
Human Behavior		3
Credit Hours		12-15
Spring		
Oral Communication		3
Information Literacy and Research		3
Elective or Language and Culture II (May be waived; See requirement details)		0-3
ARTH 150	Global Survey of Art History	3
ARTS 231	Drawing I: Fundamentals of Drawing	3
Credit Hours		12-15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
The Nature of Science I		4
ARTS 202	Two-Dimensional Design and Color Theory	3
ARTE 301	Foundations of Art Education	3
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)		3
Credit Hours		16
Spring		
Philosophy and Ethics		3
The Nature of Science II		4
ARTS 203	Three-Dimensional Design	3
ARTS 279	Digital Basics	3
ARTE 305	Elementary Art Education Methods and Classroom Management	3
Credit Hours		16
Junior		
Fall		
ARTS 261	Introduction to Sculpture	3
ARTS 263	Introduction to Ceramics	3
ARTE 306	Secondary Art Education Methods and Classroom Management	3
ARTH 350W	Art Criticism	3
Literature		3

Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)		3
Credit Hours		18
Spring		
ARTH 200-level Survey course		3
ARTS 211	Introduction to Digital Photography	3
ARTS 241	Painting I	3
Upper-Level Focus Area Course		3
ARTE 411	Curriculum and Instruction in Art Education	3
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
Credit Hours		18
Senior		
Fall		
ARTH 360 or ARTH 305	Asian Art or Egyptian Art	3
ARTE 480	Capstone in Art Education	3
Upper-Level Focus Area Course		3
Upper-Level Focus Area Course		3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
TLED 408	Reading and Writing in Content Areas	3
Credit Hours		18
Spring		
TLED 485	Teacher Candidate Internship	12
Credit Hours		12
Total Credit Hours		122-128

Linked Bachelor's in Art, Visual Studies and Fine Arts and MA in Humanities

The linked bachelor's programs in art history, visual studies and fine arts and the MA in humanities make it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Please refer to the Humanities (p. 244) section of this Catalog for additional information on the linked programs.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/>)

graduate/stromecollegeofbusiness/) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor

Print Media Minor

A minor in print media gives students an introduction to a wide range of printmaking techniques. From historical techniques like stone lithography to cutting edge processes such as laser engraving and cut vinyl. Through their coursework, students learn to work on paper, fabric, and non-traditional materials. The minor in print prepares students to produce fine art prints, custom clothing designs, hand printed posters, and more.

Students majoring in 3D Media and Material Studies, Photography and Print Media, Painting and Drawing, Art Education for Museums and Cultural Institutions, and PreK-12 Art Education are not eligible for this minor.

Select four of the following:		12
ARTS 350	Advanced Printmaking	
ARTS 351	Print II: The Hybrid Print	
ARTS 450	Printmaking III	
ARTS 455	Letterpress Printmaking	
ARTS 473	The Book	
ARTS 456	2D Seminar	
Total Credit Hours		12

For completion of the minor a student must have a minimum overall cumulative grade point average of 2.00 and no grade lower than a C in all courses specified as a requirement for the minor exclusive of prerequisite courses. Transfer students must complete a minimum of six credit hours in ARTS 300- and 400-level courses through courses offered by Old Dominion University.

Minor

Studio Art Photography Minor

The minor in studio art photography enables students to gain a broad understanding of contemporary photography and its applications as a universal language in today's world. From digital to analog, students will become well versed in both technique and contemporary theories related to photography. Classes focus on darkroom, digital editing, studio lighting, and helping each student to develop their own unique voice as a photographer and artist.

Requirements

ARTS 211 is a prerequisite course for the minor and is not included in the calculation of the grade point average for the minor. A student who seeks to minor in studio art photography must receive approval from the chief departmental advisor.

Select four from the following:		12
ARTS 311	Photography 2	
ARTS 312	Lighting for Photography	
ARTS 411	Photography 3	
ARTS 412	Photo Seminar 1	
ARTS 313	Darkroom Photography	
Total Credit Hours		12

For completion of the minor a student must have a minimum overall cumulative grade point average of 2.00 and no grade lower than a C in all courses specified as a requirement for the minor exclusive of prerequisite courses. Transfer students must complete a minimum of six credit hours in ARTS 300- and 400-level courses through courses offered by Old Dominion University.

Minor

Studio Arts Minor

Requirements

A student who chooses to complete a minor in studio arts must receive the approval of the chief departmental advisor. A total of 12 hours in studio art 300- and 400-level courses is required. These courses have prerequisites that must be met by lower-level studio art courses chosen as electives. Normally the total number of prerequisite electives should not exceed nine hours. Students who choose a minor in studio arts should consult with the chief departmental advisor before their sophomore year to determine the specific courses and prerequisites that must be met to complete the minor. There are no specific minors in concentration areas such as painting, photo and print media, and graphic design except for the minor in studio art photography. However, course selection will be done on an individual basis and may be focused upon a specific area of interest.

For completion of the minor a student must have a minimum overall cumulative grade point average of 2.00 and no grade lower than a C in all courses specified as a requirement for the minor exclusive of prerequisite courses. Transfer students must complete a minimum of six credit hours in ARTS 300- and 400-level courses through courses offered by Old Dominion University.

Minor

The Designed World Minor

Agnieszka Whelan, Department of Art, Coordinator

This interdisciplinary minor explores the interwoven historical, cultural, aesthetic, perceptual, and technical domains of the designed world. That virtually all aspects of the human-built world are designed is a generally accepted belief. Creative planning and critical analysis of design dynamics are emphasized within these disciplinary course subjects.

Requirements

The designed world interdisciplinary minor requires 12 credit hours of 300/400-level courses selected from at least two different disciplines with a maximum of six credits from any one discipline. For completion of the interdisciplinary minor, students must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses. At least six hours of 300/400 upper-level courses must be taken through courses offered by Old Dominion University. Three credit hours may be in the major, if a major course is listed as an option for the interdisciplinary minor. As such, it will be credited toward both the major and the interdisciplinary minor.

Course options are as follows:

Select four of the following (12 credits) from at least two disciplines:

ARTH 320W	History of Graphic Design	3
ARTH 327	History of Photography	3
ARTH 435W	Modern Architecture	3
ARTS 455	Letterpress Printmaking	3
COMM 341	Lighting Design for Stage and Film	3
COMM 349	Costume Design for Stage and Camera	3
ENGL 371W	Language and Culture	3
ENGL 382	Reporting News for Television and Digital Media	3
ENGL 477	Language, Gender and Power	3
GEOG 310	Geography of the City	3
GEOG 412	Cities of the World	3
PSYC 344	Human Factors	3
PSYC 413	Sensation and Perception	3
SEPS 422	Fashion Product Development	3
STEM 382	Industrial Design	3

Asian Studies

Web Site: <http://www.odu.edu/asianstudies> (<http://www.odu.edu/asianstudies/>)

Programs

Bachelor of Arts Program

- Asian Studies (BA) (p. 120)

Minor Program

- Asian Studies Minor (p. 123)

Minor in Chinese Studies

The Chinese Studies minor consists of 12 credit hours of 300- and 400-level courses that combine the study of language and culture. For a more complete description and requirements, please refer to the minors section in the Department of World Languages and Cultures (<http://catalog.odu.edu/undergraduate/collegeofartsletters/worldlanguagesandcultures/>).

Minor in Japanese

The Japanese minor consists of 12 credit hours of 300- and 400-level courses that combine the study of language and culture. For a more complete description and requirements, please refer to the minors section in the Department of World Languages and Cultures (<http://catalog.odu.edu/undergraduate/collegeofartsletters/worldlanguagesandcultures/>).

Major in Japanese

Please refer to the majors section in the Department of World Languages and Cultures (<http://catalog.odu.edu/undergraduate/collegeofartsletters/worldlanguagesandcultures/>).

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course

of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Asian Studies (BA)

Qiu Jin Hailstork, Director

Requirements

A total of 120 credit hours is required for the Bachelor of Arts (BA) in Asian Studies. The 120 credit hours are divided into two major categories:

1. Requirements for General Education and electives and
2. 30-32 hours at the upper level required for the Asian Studies major

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8

Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major

Information Literacy and Research can be met in the major by HIST 201 or POLS 308.

HIST 101H is required for Interpreting the Past.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours). ASIA courses and any course listed as an elective choice for the major cannot be used to meet this option.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Asian Studies Major

General Education

Complete lower-division requirements	38-47
Complete upper-division requirements (minimum of 6 credits)	6
Complete foreign language coursework through the 202 level	0-6

Research Methods

Select one of the following:	3
HIST 201	Introduction to Historical Methods
POLS 308	Research Design
SOC 337	Social Research Methods
PSYC 317	Quantitative Methods
ECON 400	From Correlation to Causation: Applied Causal Inference

Upper-Level Elective Courses

Capstone Seminar in Asian Studies	
ASIA 461W	Asian Studies Capstone Seminar *
	3

Total Credit Hours

* Grade of C or better required.

Upper-level Elective Courses (24-26 credit hours at the 300 or 400 Level)

These courses can be elected from the list below. Students are strongly encouraged to take courses in more than one region of Asia. Courses are under development in different disciplines, and additional courses with an

Asian content may be approved by the program director. No course listed below may be used to fulfill more than one requirement.

Asian Studies

ASIA 332	South Asia Since Independence	3
ASIA/HIST 336	The Emergence of New China	3
ASIA 337/HIST 338	Japan's Era of Transformation	3
ASIA/POLS 338W	Politics of East Asia	3
ASIA/PHIL 353	Asian Religions	3
ASIA 360	Asian Art	3
ASIA 395	Topics in Asian Studies	3
ASIA/POLS 435	Chinese Politics	3
ASIA 461W	Asian Studies Capstone Seminar	3
ASIA 495	Topics in Asian Studies	3
Asian Experience (Study Abroad or an approved practicum; consult with the director for arrangements)		3

Business Management and Marketing

MGMT 463	Management Seminar Abroad (Korea, Philippines, China and/or other Asian countries)	3
MKTG 496	Selected Topics in Marketing (Asian content)	3

Communication

COMM 300	International Sojourning	3
COMM 400W	Intercultural Communication	3
COMM 495/496	Topics in Communication (Asian content)	1-3

Economics

ECON 450	International Economics	3
ECON 454W	Economic Development	3
ECON 495	Selected Topics in Economics (Asian content)	1-3

English

ENGL 396	Topics in English (Contemporary Filipino/Filipino-American Literature)	1-3
ENGL 495	Topics in English (Techno-Orientalism in Science Fiction Film & Literature)	1-3

Filipino American Studies

FAST 395	Topics in Filipino American Studies	3

Foreign Languages

CHIN 395	Topics in Chinese	1-3
CHIN 311	Advanced Chinese Language and Culture I	3
CHIN 312	Advanced Chinese Language and Culture II	3
JAPN 301	Intermediate to Advanced Japanese I	3
JAPN 302	Intermediate to Advanced Japanese II	3
JAPN 309	Kanji Skills for Reading Japanese	3
JAPN 310	Japan: A Cultural Odyssey	3
JAPN 311	Global Conversations	3
JAPN 312W	Writing Around the World	3
JAPN 323	World Cultures and Contexts	3
JAPN 335	Japanese Society and Language	3
JAPN 396	Topics in Japanese	1-3
WCS 310	Japan: A Cultural Odyssey (Culture class in English)	3

Geography

GEOG 453	Asia	3
GEOG 495/496	Topics in Geography (Asian content)	1-4

History

HIST/ASIA 336	The Emergence of New China	3
HIST 338/ASIA 337	Japan's Era of Transformation	3
HIST 396	Topics in History	1-3
HIST 495	Topics in History	1-3

International Business		
INBU 433	Doing Business in Asia	3
INBU 463	International Business Seminar Abroad	3
Philosophy and Religious Studies		
REL 352	Islam	3
PHIL/ASIA 353	Asian Religions	3
PHIL 380	Hinduism	3
PHIL 381	Buddhist Traditions	3
PHIL 482	Chinese Religion and Philosophy	3
PHIL 485	Japanese Religion and Philosophy	3
PHIL 495/496	Topics in Philosophy (Asian content)	1-3
Political Science		
POLS 336	South Asia Since Independence	3
POLS/ASIA 338W	Politics of East Asia	3
POLS/ASIA 435	Chinese Politics	3
POLS 436	Japanese Politics	3
POLS 437	International Relations in East Asia	3
POLS 495/496	Topics in Political Science (Asian content)	1-3
Psychology		
PSYC 420	Cross-Cultural Psychology	3
Sociology		
SOC 306	Religion and Society	3
SOC 395	Topics in Sociology (Asian content)	3
Women's Studies		
WGS 401W	Women: A Global Perspective	3
WGS 495	Topics in Women's, Gender, and Sexuality Studies	3

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Oral Communication		3
Mathematical Skills		3
Language & Culture I (CHIN 111F or JAPN 111F recommended)		6
Credit Hours		15
Spring		
Human Behavior		3
Interpreting the Past: HIST 101H required		3
Language & Culture II (CHIN 212 or JAPN 212 recommended)		6
Human Creativity		3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3

Nature of Science I		4
Philosophy and Ethics		3
300/400-level elective		3
Research Methods:		
Select one of the following:		3
HIST 201	Introduction to Historical Methods	
POLS 308	Research Design	
SOC 337	Social Research Methods	
PSYC 317	Quantitative Methods	
ECON 400	From Correlation to Causation: Applied Causal Inference	
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
Impact of Technology		3
Information Literacy and Research (Can be met in the major by HIST 201 or POLS 308)		3
Elective course		3
Credit Hours		16
Junior		
Fall		
300/400-level major elective course		3
300/400-level major elective course		3
Elective course		3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
300/400-level major elective course		3
300/400-level major elective course		3
Elective course		3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
ASIA 461W	Asian Studies Capstone Seminar	3
300/400-level major elective course		3
300/400-level major elective course		3
Elective course		3
Minor or Elective		3
Credit Hours		15
Spring		
300/400-level major elective course		3
300/400-level major elective course		3
Elective course		3
Elective course		1

Minor or Elective	3
Credit Hours	13
Total Credit Hours	120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Asian Studies Minor

Students who wish to qualify for the minor in Asian studies must file a program declaration with the director of the Institute of Asian Studies and complete a total of 12 credit hours at the 300-400 level. No more than two courses may be taken from any one discipline. For completion of the minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses required for the minor exclusive of 100- and 200-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Requirements

The courses listed below can be used to fulfill the requirements of the Asian Studies minor. Additional courses with an Asian content may be approved by the program director.

Select four of the following (12 credits) from at least two different disciplines: ⁺

Asian Studies		
ASIA 332	South Asia Since Independence	3
ASIA 336	The Emergence of New China	3
ASIA 337	Japan's Era of Transformation	3
ASIA 338W	Politics of East Asia	3
ASIA 353	Asian Religions	3
ASIA 360	Asian Art	3
ASIA 395	Topics in Asian Studies *	3
ASIA 435	Chinese Politics	3
ASIA 461W	Asian Studies Capstone Seminar	3
ASIA 495	Topics in Asian Studies *	3
Business Management and Marketing		
MGMT 463	Management Seminar Abroad	3
MKTG 496	Selected Topics in Marketing *	1-3
Communication		
COMM 300	International Sojourning	3
COMM 400W	Intercultural Communication	3
COMM 495/496	Topics in Communication *	1-3
Economics		
ECON 450	International Economics	3
ECON 454W	Economic Development	3
ECON 495	Selected Topics in Economics *	1-3
English		
ENGL 395	Topics in English *	1-3
ENGL 396	Topics in English *	1-3
ENGL 495	Topics in English *	1-3
Filipino-American Studies		
FAST 395	Topics in Filipino American Studies	3
Foreign Languages		
CHIN 311	Advanced Chinese Language and Culture I	3
CHIN 312	Advanced Chinese Language and Culture II	3
CHIN 395	Topics in Chinese	1-3
JAPN 311	Global Conversations	3
JAPN 312W	Writing Around the World	3
JAPN 396	Topics in Japanese	1-3
JAPN 495	Topics in Japanese	1-3
WCS 310	Japan: A Cultural Odyssey	3
Geography		
GEOG 453	Asia	3
GEOG 495/496	Topics in Geography *	1-4
History		
HIST 336	The Emergence of New China	3
HIST 338	Japan's Era of Transformation	3
HIST 396	Topics in History *	1-3
HIST 495	Topics in History *	1-3
International Business		
INBU 433	Doing Business in Asia	3
INBU 463	International Business Seminar Abroad	3
Philosophy and Religious Studies		
PHIL 353	Asian Religions	3
PHIL 380	Hinduism	3
PHIL 381	Buddhist Traditions	3
PHIL 482	Chinese Religion and Philosophy	3
PHIL 485	Japanese Religion and Philosophy	3
PHIL 495/496	Topics in Philosophy *	1-3
REL 352	Islam	3
Political Science		

POLS 338W	Politics of East Asia	3
POLS 435	Chinese Politics	3
POLS 436	Japanese Politics	3
POLS 437	International Relations in East Asia	3
POLS 495/496	Topics in Political Science *	1-3
Psychology		
PSYC 420	Cross-Cultural Psychology	3
PSYC 495	Topics in Psychology *	1-3
Sociology		
SOC 306	Religion and Society	3
SOC 395	Topics in Sociology *	3
SOC 396	Topics in Sociology *	3
Women's Studies		
WGS 401W	Women: A Global Perspective	3
WGS 495	Topics in Women's, Gender, and Sexuality Studies	3
WGS 496	Topics in Women's, Gender, and Sexuality Studies	3

- +
- No more than two courses may be taken from any one discipline.
- *
- With significant portion of the course about Asia, to be approved by the director.

Communication and Theatre Arts

Web Site: <http://www.odu.edu/commtheatre> (<http://www.odu.edu/commtheatre/>)

Tim Anderson, Chair

The Department of Communication and Theatre Arts offers the following undergraduate degree programs.

Bachelor of Arts or Bachelor of Science in Communication with majors in the following areas:

- Cinema & TV Production
- Communication Studies
- Media Studies
- Organizational and Interpersonal Communication
- Strategic Communication and Journalism
- Professional Communication (Bachelor of Science only)

Bachelor of Arts in Theatre and Dance with majors in the following areas:

- Cinema Production
- Dance
- PreK-12 Dance Education
- Design/Technology
- Performance
- Theatre
- PreK-12 Theatre Education

Minors are offered in Communication, Film Studies, Media Studies, Theatre, and Dance.

Students must maintain a 2.00 GPA or better in the major and the minor. All majors must fulfill the requirements of the College of Arts and Letters.

Bachelor of Arts Programs

- Communication with a Major in Cinema & TV Production (BA) (p. 125)
- Communication with a Major in Communication Studies (BA) (p. 132)
- Communication with a Major in Media Studies (BA) (p. 140)

- Communication with a Major in Organizational and Interpersonal Communication (BA) (p. 147)
- Communication with a Major in Strategic Communication and Journalism (BA) (p. 156)
- Theatre & Dance with a Major in Cinema Production (BA) (p. 165)
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Bachelor of Science Programs

- Communication with a Major in Cinema & TV Production (BS) (p. 128)
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Minors

- Communication Minor (p. 164)
- Dance Minor (p. 183)
- Film Studies Minor (p. 164)
- Media Studies Minor (p. 164)
- Theatre Minor (p. 184)

Linked BA/BS in Communication and MA in Lifespan and Digital Communication

The linked bachelor's/master's degree in communication/lifespan and digital communication is administered by the Communication and Theatre Arts Department. The purpose of this option is to allow exceptional majors in communication to count up to 12 hours of 500-level graduate coursework towards both the BA or BS in communication and, if accepted, the MA in lifespan and digital communication. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credits for the undergraduate degree and 30 discrete credits for the graduate degree). For more information, please contact Dr. Gary Beck.

Linked BA/BS in Communication and MA in Humanities

Please refer to the Humanities section of this Catalog for information on the linked program leading to a BA or BS in communication and an MA in humanities.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the

graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Communication with a Major in Cinema & TV Production (BA)

David Mallin, Program Director
Carolina Conte, Chief Departmental Advisor of Cinema & TV Production

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8

Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

COMM 101R or THEA 152R is required to fulfill the Oral Communication requirement.

STAT 130M is required to fulfill the Mathematics requirement (BS only).

COMM 270A/THEA 270A may not be used to satisfy the Human Creativity requirement.

The Information Literacy and Research requirement may be met in the major with COMM 272G.

The Impact of Technology requirement may be met in the major with COMM 280T or COMM 372T.

For the Language and Culture requirement, BA students must have competence through the 202 level (competence is not met by completion of the associate degree); BS students must have competence at the 102 level.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Six Hours of Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Communication Core

BA Core Courses

COMM 200S	Introduction to Human Communication	3
COMM 260	Understanding Media	3
COMM 301	Critical Methodologies	3
COMM writing intensive (W) course (see the major areas for appropriate selection)		3

BA Additional Core Course

COMM 335W	Rhetorical Criticism	3
or COMM 445	Communication Analysis and Criticism	

Total Credit Hours	15

Cinema & TV Production Major

David Mallin, Program Director
Carolina Conte, Chief Departmental Advisor of Cinema & TV Production

Choose nine courses (27 credit hours): three courses (9 credit hours) from Foundations and six courses (18 credit hours) from Applied Theories. Note that all Foundations courses can apply towards degree completion. The

Senior Experience can be fulfilled by writing a screenplay for a feature film (COMM 482), studying abroad, participating in an internship (COMM 368), collaborating with a broadcast station (COMM 439), or by participation in one of the Film Program's Departmental Productions (COMM 486 or COMM 493). Students may also enroll in a research practicum or capstone course. Students should consult with their advisors about approved courses that can fulfill the Identity and Inclusion requirement.

Cinema & TV Production students need to complete COMM 271 Introduction to Filmmaking prior to enrollment in any Foundations course, and should not enroll in COMM 269.

General Education

Complete lower-division requirements	35-47
Complete upper-division requirements (minimum of 6 credit hours)	6
Complete foreign language coursework through the 202 level	0-6

Communication Core

Complete communication core requirements	15

Foundations

Select three of the following:	9
COMM 342 Post-Production 1	
COMM 346 Screenwriting I	
COMM 383 Directing the Actor	
COMM 385 Cinematography	

Applied Theories

COMM 471W International Film History *	3
or COMM 479W American Film History	
Select five from the following for a total of 15 credits:	15

COMM 330 The Short Script	
COMM 348 Acting for the Camera	
COMM 353 Animation	
COMM 356 3D Animation 1	
COMM 358 Color for Digital Cinema & TV	
COMM 361 Editing Aesthetics	
COMM 368 Internship	
COMM 375 Television Production	
COMM 380 Documentary Production I	
COMM 386 Post-Production 2	
COMM 387 TV News Production	
COMM 388 Motion Picture Aesthetics	
COMM 389 Sound Recording and Mixing for Film	
COMM 430 TV Screenwriting	
COMM 433 Capstone	
COMM 439 WHRO Production	
COMM 440 Documentary Filmmaking Study Abroad	
COMM 446 Directing for the Camera	
COMM 471W International Film History (whichever course was not already taken) *	
or COMM 479W American Film History	
COMM 480 Documentary Production II	
COMM 482 Screenwriting II	
COMM 483 Advanced Cinema Projects	
COMM 485 Film and Television Genres	
COMM 486 Advanced Filmmaking	
COMM 487 Advanced TV News Production	
COMM 492 Cinematography 2	
COMM 493 Feature Film Production	

COMM Elective

Complete COMM elective	3

Total Credit Hours	86-104

* Grade of C or better required if used to meet University Writing Requirement

Electives

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

ALL students majoring in programs in Communication, Dance, and Theatre are required to complete a **Senior Experience** as part of their degree. Senior Experiences are designed as stepping stones for students to apply knowledge and skills accrued throughout their coursework toward preparing for future careers. Senior Experience course options will vary by major but include options for an internship, a study abroad/away experience, a service-learning course, a senior capstone, or more specialized experiences within students' chosen majors. Please see descriptions included under each major for more options. Students become eligible for Senior Experience options once they reach 90 credits or with permission of the Senior Experience Coordinator. Students will be directed by their advisor to opportunities that are suited for their area of study and as other opportunities become available. For more information please reach out to the Senior Experience Coordinator, Alison Lietzenmayer.

Cinema & TV Production students need to complete COMM 271 Introduction to Filmmaking prior to enrollment in any Foundations course, and should not enroll in COMM 269.

Departmental Requirements

Majors must maintain a 2.0 GPA or better in the major in order to graduate.

Additional Communication Major Courses

Students pursuing either the BA or the BS degree are required to take 10 Communication classes beyond the core course requirements listed above (these courses include the Senior Experience requirement listed above). Nine of those 10 courses (27 credit hours) must be in the student's selected major (see major details below). One course (3 credit hours) may be 100-200 level and/or from any major area.

The Senior Experience requirement in the Communication program (which includes the Cinema & TV Production major, Communication Studies major, Media Studies major, Professional Communication major, and Strategic Communication and Journalism major) can be achieved by completing opportunities such as the following:

Internship

COMM 368 Internship	3,6

Study Abroad

COMM 300 International Sojourning	3
COMM 440 Documentary Filmmaking Study Abroad	3

Other study abroad/study away offerings offered within the Department

Service Learning

Approved Service Learning Courses (varies by semester)

Capstone

COMM 433 Capstone	3

Research Practicum

COMM 369 Research Practicum	3
or COMM 469 Communication Education Practicum	

ROAR

COMM 490 ROAR Communications Agency (available only for Strategic Communication and Journalism majors)	3

COMM Cinema & TV Production Majors may also choose from:

COMM 439 WHRO Production	
COMM 482 Screenwriting II	

COMM 483	Advanced Cinema Projects
COMM 486	Advanced Filmmaking
COMM 493	Feature Film Production

Communication Electives

Select one COMM elective (3 credit hours), which may be any COMM class that is not in the student's major in addition to the following.

COMM 103R	Voice and Diction	3
COMM 112R	Introduction to Interpersonal Communication	3
COMM 195	Topics in Communication	1-3
COMM 225	Introduction to Production Technology	3
COMM 269	Visual Storytelling	3
COMM 270A	Film Appreciation	3
COMM 271	Introduction to Filmmaking	3
COMM 272G	Digital Literacy	3
COMM 280T	Entertainment Technologies	3
COMM 295	Topics in Communication	1-3
COMM 304	Advanced Public Speaking	3
COMM 307	Understanding European Film	3
COMM 321	Production Management for Television and Stage	3
COMM 325	Sound Design for Stage and Camera	3
COMM 341	Lighting Design for Stage and Film	3
COMM 349	Costume Design for Stage and Camera	3
COMM 354	Drafting and Rendering for Stage and Screen	3
COMM 356	3D Animation 1	3
COMM 357	3D Animation 2	3
COMM 359	Costume Crafts	3
COMM 367	Cooperative Education	1-3
COMM 369	Research Practicum	3
COMM 382	Reporting News for Television and Digital Media	3
COMM 453	Voice Over	3
COMM 469	Communication Education Practicum	3

Writing Intensive Requirement

Communication majors must complete at least one writing intensive course in the major from the following courses:

COMM 308W	Effective Media Writing	3
COMM 315W	Sex, Gender, and Communication	3
COMM 335W	Rhetorical Criticism	3
COMM 400W	Intercultural Communication	3
COMM 412W	Interpersonal Communication Theory and Research	3
COMM 447W	Electronic Media Law and Policy	3
COMM 471W	International Film History	3
COMM 479W	American Film History	3

Internships and Practicum courses

Students may apply three credit hours of COMM 368 Internship toward their major credit hours. Three additional credit hours may count as elective credits toward the overall total credit hour count for the degree. In addition, students may apply only six credits total from the following classes toward the major:

COMM 368	Internship	3-6
COMM 369	Research Practicum	3
COMM 469	Communication Education Practicum	3

Special Topics in Communication Courses and Communication Tutorials

Special Topics in Communication courses and Communication Tutorials courses may be included in a given major when and where appropriate and as approved by the student's communication advisor:

COMM 395	Topics in Communication	1-3
COMM 396	Topics in Communication	1-3
COMM 495	Topics in Communication	1-3
COMM 496	Topics in Communication	1-3
COMM 497	Tutorial Work in Special Topics in Communication	1-3

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity (May not use COMM 270A / THEA 270A)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
COMM 101R or THEA 152R	Public Speaking or Acting One	3
Credit Hours		15
Spring		
Human Behavior (May not use COMM 200S)		3
Interpreting the Past		3
Information Literacy and Research (Can be met by COMM 272G)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
COMM 260	Understanding Media	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Philosophy and Ethics		3
COMM 200S	Introduction to Human Communication	3
Credit Hours		16
Spring		
Nature of Science II		4
Language and Culture IV		3
Impact of Technology (Can be met with COMM 280T or COMM 372T)		3
COMM 271	Introduction to Filmmaking	3

COMM 335W or COMM 445	Rhetorical Criticism or Communication Analysis and Criticism	3
Credit Hours		16
Junior		
Fall		
Literature		3
Applied Theories or Foundations course in Major Area (depending on major selected)		3
Applied Theories course in Major Area		3
COMM 301	Critical Methodologies	3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
Foundation course in Major Area		3
Applied Theories course in Major Area		3
Applied Theories course in Major Area		3
COMM Elective		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
Applied Theories course in Major Area		3
COMM 471W or COMM 479W	International Film History ² or American Film History	3
Senior Experience course ¹		3
Foundation course in Major Area		3
Minor or Elective		3
Credit Hours		15
Spring		
Applied Theories course in Major Area		3
Elective course		3
Elective course		3
Elective course		1
Minor or Elective		3
Credit Hours		13
Total Credit Hours		120

¹ Please consult list of Senior Experience options relevant to each major.

² Grade of C or better required if used to meet University Writing Requirement

Linked BA/BS in Communication and MA in Lifespan and Digital Communication

The linked bachelor's/master's degree in communication/lifespan and digital communication is administered by the Communication and Theatre Arts Department. The purpose of this option is to allow exceptional majors in communication to count up to 12 hours of 500-level graduate coursework towards both the BA or BS in communication and, if accepted, the MA in lifespan and digital communication. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credits for the undergraduate degree and 30 discrete credits for the graduate degree). For more information, please contact Dr. Gary Beck.

Linked BA/BS in Communication and MA in Humanities

Please refer to the Humanities section of this Catalog for information on the linked program leading to a BA or BS in communication and an MA in humanities.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Communication with a Major in Cinema & TV Production (BS)

David Mallin, Program Director
Carolina Conte, Chief Departmental Advisor of Cinema & TV Production

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3

Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

COMM 101R or THEA 152R is required to fulfill the Oral Communication requirement.

STAT 130M is required to fulfill the Mathematics requirement (BS only).

COMM 270A/THEA 270A may not be used to satisfy the Human Creativity requirement.

The Information Literacy and Research requirement may be met in the major with COMM 272G.

The Impact of Technology requirement may be met in the major with COMM 280T or COMM 372T.

For the Language and Culture requirement, BA students must have competence through the 202 level (competence is not met by completion of the associate degree); BS students must have competence at the 102 level.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Six Hours of Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Communication Core

BS Core Courses

COMM 200S	Introduction to Human Communication	3

COMM 260	Understanding Media	3
COMM 301	Critical Methodologies	3
COMM 302	Communication Research Methods I	3
COMM writing intensive (W) course (see the major areas for appropriate selection)		3
BS Additional Core Requirements		
Six hours of approved 300/400-level social science courses		6
Total Credit Hours		21

Cinema & TV Production Major

David Mallin, Program Director

Carolina Conte, Chief Departmental Advisor of Cinema & TV Production

Choose nine courses (27 credit hours): three courses (9 credit hours) from Foundations and six courses (18 credit hours) from Applied Theories. Note that all Foundations courses can apply towards degree completion. The Senior Experience can be fulfilled by writing a screenplay for a feature film (COMM 482), studying abroad, participating in an internship (COMM 368), collaborating with a broadcast station (COMM 439), or by participation in one of the Film Program's Departmental Productions (COMM 486 or COMM 493). Students may also enroll in a research practicum or capstone course. Students should consult with their advisors about approved courses that can fulfill the Identity and Inclusion requirement.

Cinema & TV Production students need to complete COMM 271

Introduction to Filmmaking prior to enrollment in any Foundations course, and should not enroll in COMM 269.

General Education

Complete lower-division requirements	35-47
Complete upper-division requirements (minimum of 6 credit hours)	6

Communication Core

Complete communication core requirements	21

Foundations

Select three of the following:	9
COMM 342	Post-Production 1
COMM 346	Screenwriting I
COMM 383	Directing the Actor
COMM 385	Cinematography

Applied Theories

COMM 471W	International Film History *	3
or COMM 479W	American Film History	
Select five from the following for a total of 15 credits:		15

COMM 330	The Short Script
COMM 348	Acting for the Camera
COMM 353	Animation
COMM 356	3D Animation 1
COMM 358	Color for Digital Cinema & TV
COMM 361	Editing Aesthetics
COMM 368	Internship
COMM 375	Television Production
COMM 380	Documentary Production I
COMM 386	Post-Production 2
COMM 387	TV News Production
COMM 388	Motion Picture Aesthetics
COMM 389	Sound Recording and Mixing for Film
COMM 430	TV Screenwriting
COMM 433	Capstone
COMM 439	WHRO Production
COMM 440	Documentary Filmmaking Study Abroad
COMM 446	Directing for the Camera
COMM 471W	International Film History (whichever course was not already taken) *

or COMM 479W American Film History

COMM 480	Documentary Production II
COMM 482	Screenwriting II
COMM 483	Advanced Cinema Projects
COMM 485	Film and Television Genres
COMM 486	Advanced Filmmaking
COMM 487	Advanced TV News Production
COMM 492	Cinematography 2
COMM 493	Feature Film Production

COMM Elective

Complete COMM elective 3

Total Credit Hours 92-104

* Grade of C or better required if used to meet University Writing Requirement

Electives

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

ALL students majoring in programs in Communication, Dance, and Theatre are required to complete a **Senior Experience** as part of their degree. Senior Experiences are designed as stepping stones for students to apply knowledge and skills accrued throughout their coursework toward preparing for future careers. Senior Experience course options will vary by major but include options for an internship, a study abroad/away experience, a service-learning course, a senior capstone, or more specialized experiences within students' chosen majors. Please see descriptions included under each major for more options. Students become eligible for Senior Experience options once they reach 90 credits or with permission of the Senior Experience Coordinator. Students will be directed by their advisor to opportunities that are suited for their area of study and as other opportunities become available. For more information please reach out to the Senior Experience Coordinator, Alison Lietzenmayer.

Cinema & TV Production students need to complete COMM 271 Introduction to Filmmaking prior to enrollment in any Foundations course, and should not enroll in COMM 269.

Departmental Requirements

Majors must maintain a 2.0 GPA or better in the major in order to graduate.

Additional Communication Major Courses

Students pursuing either the BA or the BS degree are required to take 10 Communication classes beyond the core course requirements listed above (these courses include the Senior Experience requirement listed above). Nine of those 10 courses (27 credit hours) must be in the student's selected major (see major details below). One course (3 credit hours) may be 100-200 level and/or from any major area.

The Senior Experience requirement in the Communication program (which includes the Cinema & TV Production major, Communication Studies major, Media Studies major, Professional Communication major, and Strategic Communication and Journalism major) can be achieved by completing opportunities such as the following:

Internship

COMM 368 Internship 3,6

Study Abroad

COMM 300 International Sojourning 3

COMM 440 Documentary Filmmaking Study Abroad 3

Other study abroad/study away offerings offered within the Department

Service Learning

Approved Service Learning Courses (varies by semester)

Capstone

COMM 433 Capstone 3

Research Practicum

COMM 369 Research Practicum 3

or COMM 469 Communication Education Practicum

ROAR

COMM 490 ROAR Communications Agency (available only for Strategic Communication and Journalism majors) 3

COMM Cinema & TV Production Majors may also choose from:

COMM 439 WHRO Production

COMM 482 Screenwriting II

COMM 483 Advanced Cinema Projects

COMM 486 Advanced Filmmaking

COMM 493 Feature Film Production

Communication Electives

Select one COMM elective (3 credit hours), which may be any COMM class that is not in the student's major in addition to the following.

COMM 103R Voice and Diction 3

COMM 112R Introduction to Interpersonal Communication 3

COMM 195 Topics in Communication 1-3

COMM 225 Introduction to Production Technology 3

COMM 269 Visual Storytelling 3

COMM 270A Film Appreciation 3

COMM 271 Introduction to Filmmaking 3

COMM 272G Digital Literacy 3

COMM 280T Entertainment Technologies 3

COMM 295 Topics in Communication 1-3

COMM 304 Advanced Public Speaking 3

COMM 307 Understanding European Film 3

COMM 321 Production Management for Television and Stage 3

COMM 325 Sound Design for Stage and Camera 3

COMM 341 Lighting Design for Stage and Film 3

COMM 349 Costume Design for Stage and Camera 3

COMM 354 Drafting and Rendering for Stage and Screen 3

COMM 356 3D Animation 1 3

COMM 357 3D Animation 2 3

COMM 359 Costume Crafts 3

COMM 367 Cooperative Education 1-3

COMM 369 Research Practicum 3

COMM 382 Reporting News for Television and Digital Media 3

COMM 453 Voice Over 3

COMM 469 Communication Education Practicum 3

Writing Intensive Requirement

Communication majors must complete at least one writing intensive course in the major from the following courses:

COMM 308W Effective Media Writing 3

COMM 315W Sex, Gender, and Communication 3

COMM 335W Rhetorical Criticism 3

COMM 400W Intercultural Communication 3

COMM 412W Interpersonal Communication Theory and Research 3

COMM 447W Electronic Media Law and Policy 3

COMM 471W International Film History 3

COMM 479W American Film History 3

Internships and Practicum courses

Students may apply three credit hours of COMM 368 Internship toward their major credit hours. Three additional credit hours may count as elective credits toward the overall total credit hour count for the degree. In addition, students may apply only six credits total from the following classes toward the major:

COMM 368	Internship	3-6
COMM 369	Research Practicum	3
COMM 469	Communication Education Practicum	3

Special Topics in Communication Courses and Communication Tutorials

Special Topics in Communication courses and Communication Tutorials courses may be included in a given major when and where appropriate and as approved by the student's communication advisor:

COMM 395	Topics in Communication	1-3
COMM 396	Topics in Communication	1-3
COMM 495	Topics in Communication	1-3
COMM 496	Topics in Communication	1-3
COMM 497	Tutorial Work in Special Topics in Communication	1-3

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity (May not use COMM 270A / THEA 270A)		3
Human Behavior (COMM 200S may not be used)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
COMM 101R or THEA 152R	Public Speaking or Acting One	3
Credit Hours		15
Spring		
Interpreting the Past		3
Mathematical Skills: STAT 130M Required		3
Information Literacy and Research (can be met by COMM 272G)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
COMM 260	Understanding Media	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Philosophy and Ethics		3
COMM Elective		3

COMM 200S	Introduction to Human Communication	3
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
Impact of Technology (Can be met with COMM 280T or Comm 372T)		3
COMM 271	Introduction to Filmmaking	3
COMM 302	Communication Research Methods I	3
Credit Hours		16
Junior		
Fall		
Foundation course in Major Area		3
Applied Theories or Foundations course in Major Area (depending on major selected)		3
300/400-level Social Science course		3
COMM 301	Critical Methodologies	3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
Applied Theories course in Major Area		3
Applied Theories course in Major Area		3
Applied Theories course in Major Area		3
300/400-level Social Science course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
Applied Theories course in Major Area		3
COMM 471W or COMM 479W	International Film History ² or American Film History	3
Senior Experience Course ¹		3
Foundation course in Major Area		3
Elective course (or Professional Communication elective course if choose Professional Communication major)		3
Credit Hours		15
Spring		
Elective courses (or Professional Communication elective courses if choose Professional Communication major)		9
Applied Theories course in Major Area		3
Elective course		1
Credit Hours		13
Total Credit Hours		120

1 Please consult list of Senior Experience options relevant to each major.

2 Grade of C or better required if used to meet University Writing Requirement

Linked BA/BS in Communication and MA in Lifespan and Digital Communication

The linked bachelor's/master's degree in communication/lifespan and digital communication is administered by the Communication and Theatre Arts Department. The purpose of this option is to allow exceptional majors in communication to count up to 12 hours of 500-level graduate coursework towards both the BA or BS in communication and, if accepted, the MA in lifespan and digital communication. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credits for the undergraduate degree and 30 discrete credits for the graduate degree). For more information, please contact Dr. Gary Beck.

Linked BA/BS in Communication and MA in Humanities

Please refer to the Humanities section of this Catalog for information on the linked program leading to a BA or BS in communication and an MA in humanities.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Communication with a Major in Communication Studies (BA)

Carla Harrell, Program Director and Chief Departmental Advisor

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

COMM 101R is required to fulfill the Oral Communication requirement.

STAT 130M is required to fulfill the Mathematics requirement (BS only).

COMM 270A/THEA 270A may not be used to satisfy the Human Creativity requirement.

The Information Literacy and Research requirement may be met in the major with COMM 272G.

The Impact of Technology requirement may be met in the major with COMM 280T or COMM 372T.

For the Language and Culture requirement, BA students must have competence through the 202 level (competence is not met by completion of the associate degree); BS students must have competence at the 102 level.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Six Hours of Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Communication Core

BA Core Courses

COMM 200S	Introduction to Human Communication	3
COMM 260	Understanding Media	3
COMM 301	Critical Methodologies	3
COMM writing intensive (W) course (see the major areas for appropriate selection)		3

BA Additional Core Course

COMM 335W	Rhetorical Criticism	3
or COMM 445	Communication Analysis and Criticism	

Total Credit Hours	15

General Education

Complete lower-division requirements	35-47
Complete upper-division requirements (minimum of 6 credit hours)	6
Complete foreign language coursework through the 202 level	0-6

Communication Core

Complete communication core requirements	15

Foundations (Choose 9 courses)

COMM 300	International Sojourning
COMM 302	Communication Research Methods I
COMM 303	Introduction to Strategic Communications
COMM 304	Advanced Public Speaking
COMM 305	Work-Life Communication
COMM 307	Understanding European Film
COMM 308W	Effective Media Writing
COMM 309	Media Relations
COMM 310	Strategic Communications Campaigns
COMM 311	Strategic Communications Tactics
COMM 314	Nonverbal Communication
COMM 315W	Sex, Gender, and Communication
COMM 321	Production Management for Television and Stage
COMM 323	Leadership and Events Management
COMM 325	Sound Design for Stage and Camera
COMM 326	Foundations of Group Communication
COMM 330	The Short Script
COMM 333	Persuasion
COMM 334	Narrative Adaptation
COMM 339	Entertainment Journalism
COMM 340	Media and Popular Culture
COMM 341	Lighting Design for Stage and Film
COMM 344	Introduction to Media Industries
COMM 345	Media Audiences
COMM 346	Screenwriting I
COMM 348	Acting for the Camera
COMM 349	Costume Design for Stage and Camera
COMM 351	Interpersonal Communication in Organizations

COMM 353	Animation
COMM 355	Organizational Communication
COMM 356	3D Animation 1
COMM 357	3D Animation 2
COMM 358	Color for Digital Cinema & TV
COMM 359	Costume Crafts
COMM 367	Cooperative Education
COMM 368	Internship
COMM 369	Research Practicum
COMM 372T	Introduction to New Media Technologies
COMM 375	Television Production
COMM 380	Documentary Production I
COMM 382	Reporting News for Television and Digital Media
COMM 383	Directing the Actor
COMM 386	Post-Production 2
COMM 387	TV News Production
COMM 388	Motion Picture Aesthetics
COMM 389	Sound Recording and Mixing for Film
COMM 395	Topics in Communication
COMM 400W	Intercultural Communication
COMM 401	Communication Theory
COMM 403	Public Information and Crisis Communications
COMM 404	Emergency Management Communication
COMM 405	Communication and Culture in the Middle East
COMM 408	Health Communication
COMM 412W	Interpersonal Communication Theory and Research
COMM 421	Communication and Conflict Management
COMM 422	Listening to Self, Others, Nature and the Divine
COMM 423	Nonviolent Communication and Peace
COMM 424	Communicating Love
COMM 425	Family Communication Theory and Research
COMM 427	Children's Communication Theory and Research
COMM 430	TV Screenwriting
COMM 433	Capstone
COMM 439	WHRO Production
COMM 440	Documentary Filmmaking Study Abroad
COMM 441	The Music Industry and Communication
COMM 442	Media Spaces
COMM 443	Hispanic Film
COMM 444	German Cinema I
COMM 446	Directing for the Camera
COMM 447W	Electronic Media Law and Policy
COMM 448	Global Media Industries
COMM 453	Voice Over
COMM 454	Strategic Communications Case Studies
COMM 455	Critical Analysis of Journalism
COMM 456	Organizations and Social Influence
COMM 457	Market Research
COMM 460	Social Marketing
COMM 462	Sport Communication
COMM 469	Communication Education Practicum
COMM 471W	International Film History
COMM 472	New Media Topics: Theories and Practices

COMM 473	Television and Society
COMM 474	Reality Television
COMM 478	Media Marketing and Promotion
COMM 479W	American Film History
COMM 480	Documentary Production II
COMM 482	Screenwriting II
COMM 483	Advanced Cinema Projects
COMM 484	Strategic Media Design and Production
COMM 485	Film and Television Genres
COMM 486	Advanced Filmmaking
COMM 487	Advanced TV News Production
COMM 488	Introduction to Critical Race and Media Studies
COMM 489	Health and Interpersonal Communication
COMM 490	ROAR Communications Agency
COMM 491	Communication and Activism
COMM 492	Cinematography 2
COMM 493	Feature Film Production
COMM 494	Entrepreneurship and Public Relations
COMM 495	Topics in Communication
COMM 497	Tutorial Work in Special Topics in Communication
COMM 498	Tutorial Work in Special Topics in Communication
COMM Elective	
Select one of the following:	
COMM 103R	Voice and Diction
COMM 112R	Introduction to Interpersonal Communication
COMM 195	Topics in Communication
COMM 225	Introduction to Production Technology
COMM 269	Visual Storytelling
COMM 270A	Film Appreciation
COMM 271	Introduction to Filmmaking
COMM 272G	Digital Literacy
COMM 278G	Advertising & Society
COMM 280T	Entertainment Technologies
COMM 295	Topics in Communication
Total Credit Hours	

86-104

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

ALL students majoring in programs in Communication, Dance, and Theatre are required to complete a **Senior Experience** as part of their degree. Senior Experiences are designed as stepping stones for students to apply knowledge and skills accrued throughout their coursework toward preparing for future careers. Senior Experience course options will vary by major but include options for an internship, a study abroad/away experience, a service-learning course, a senior capstone, or more specialized experiences within students' chosen majors. Please see descriptions included under each major for more options. Students become eligible for Senior Experience options once they reach 90 credits or with permission of the Senior Experience Coordinator. Students will be directed by their advisor to opportunities that are suited for their area of study and as other opportunities become available. For more information please reach out to the Senior Experience Coordinator, Alison Lietzenmayer.

Cinema & TV Production students need to complete COMM 271 Introduction to Filmmaking prior to enrollment in any Foundations course, and should not enroll in COMM 269.

Departmental Requirements

Majors must maintain a 2.0 GPA or better in the major in order to graduate.

Additional Communication Major Courses

Students pursuing either the BA or the BS degree are required to take 10 Communication classes beyond the core course requirements listed above (these courses include the Senior Experience requirement listed above). Nine of those 10 courses (27 credit hours) must be in the student's selected major (see major details below). One course (3 credit hours) may be 100-200 level and/or from any major area.

The Senior Experience requirement in the Communication program (which includes the Cinema & TV Production major, Communication Studies major, Media Studies major, Professional Communication major, and Strategic Communication and Journalism major) can be achieved by completing opportunities such as the following:

Internship

COMM 368	Internship	3,6

Study Abroad

COMM 300	International Sojourning	3
COMM 440	Documentary Filmmaking Study Abroad	3

Other study abroad/study away offerings offered within the Department

Service Learning

Approved Service Learning Courses (varies by semester)

Capstone

COMM 433	Capstone	3

Research Practicum

COMM 369	Research Practicum	3
or COMM 469	Communication Education Practicum	

ROAR

COMM 490	ROAR Communications Agency (available only for Strategic Communication and Journalism majors)	3

COMM Cinema & TV Production Majors may also choose from:

COMM 439	WHRO Production	
COMM 482	Screenwriting II	
COMM 483	Advanced Cinema Projects	
COMM 486	Advanced Filmmaking	
COMM 493	Feature Film Production	

Communication Electives

Select one COMM elective (3 credit hours), which may be any COMM class that is not in the student's major in addition to the following.

COMM 103R	Voice and Diction	3
COMM 112R	Introduction to Interpersonal Communication	3
COMM 195	Topics in Communication	1-3
COMM 225	Introduction to Production Technology	3
COMM 269	Visual Storytelling	3
COMM 270A	Film Appreciation	3
COMM 271	Introduction to Filmmaking	3
COMM 272G	Digital Literacy	3
COMM 280T	Entertainment Technologies	3
COMM 295	Topics in Communication	1-3
COMM 304	Advanced Public Speaking	3
COMM 307	Understanding European Film	3
COMM 321	Production Management for Television and Stage	3
COMM 325	Sound Design for Stage and Camera	3
COMM 341	Lighting Design for Stage and Film	3
COMM 349	Costume Design for Stage and Camera	3

COMM 354	Drafting and Rendering for Stage and Screen	3
COMM 356	3D Animation 1	3
COMM 357	3D Animation 2	3
COMM 359	Costume Crafts	3
COMM 367	Cooperative Education	1-3
COMM 369	Research Practicum	3
COMM 382	Reporting News for Television and Digital Media	3
COMM 453	Voice Over	3
COMM 469	Communication Education Practicum	3

Writing Intensive Requirement

Communication majors must complete at least one writing intensive course in the major from the following courses:

COMM 308W	Effective Media Writing	3
COMM 315W	Sex, Gender, and Communication	3
COMM 335W	Rhetorical Criticism	3
COMM 400W	Intercultural Communication	3
COMM 412W	Interpersonal Communication Theory and Research	3
COMM 447W	Electronic Media Law and Policy	3
COMM 471W	International Film History	3
COMM 479W	American Film History	3

Internships and Practicum courses

Students may apply three credit hours of COMM 368 Internship toward their major credit hours. Three additional credit hours may count as elective credits toward the overall total credit hour count for the degree. In addition, students may apply only six credits total from the following classes toward the major:

COMM 368	Internship	3-6
COMM 369	Research Practicum	3
COMM 469	Communication Education Practicum	3

Special Topics in Communication Courses and Communication Tutorials

Special Topics in Communication courses and Communication Tutorials courses may be included in a given major when and where appropriate and as approved by the student's communication advisor:

COMM 395	Topics in Communication	1-3
COMM 396	Topics in Communication	1-3
COMM 495	Topics in Communication	1-3
COMM 496	Topics in Communication	1-3
COMM 497	Tutorial Work in Special Topics in Communication	1-3

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity (May not use COMM 270A / THEA 270A)		3

Elective or Language and Culture I (May be waived; See requirement details)		3
COMM 101R	Public Speaking	3
Credit Hours		15
Spring		
Human Behavior (May not use COMM 200S)		3
Interpreting the Past		3
Information Literacy and Research (Can be met by COMM 272G)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
COMM 260	Understanding Media	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Philosophy and Ethics		3
COMM 200S	Introduction to Human Communication	3
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
Language and Culture IV		3
Impact of Technology (Can be met with COMM 280T or COMM 372T)		3
COMM 335W or COMM 445	Rhetorical Criticism or Communication Analysis and Criticism	3
Credit Hours		16
Junior		
Fall		
Foundation course in Major Area		3
Applied Theories or Foundations course in Major Area (depending on major selected)		3
Applied Theories course in Major Area		3
COMM 301	Critical Methodologies	3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
Foundation course in Major Area		3
Applied Theories course in Major Area		3
Applied Theories course in Major Area		3
COMM Elective		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
Applied Theories course in Major Area		3

COMM Writing Intensive Course	3
Senior Experience course ¹	3
Elective course	3
Minor or Elective	3
Credit Hours	15
Spring	
Applied Theories course in Major Area	3
Applied Theories course in Major Area	3
Elective course	3
Elective course	1
Minor or Elective	3
Credit Hours	13
Total Credit Hours	120

¹ Please consult list of Senior Experience options relevant to each major.

Linked BA/BS in Communication and MA in Lifespan and Digital Communication

The linked bachelor's/master's degree in communication/lifespan and digital communication is administered by the Communication and Theatre Arts Department. The purpose of this option is to allow exceptional majors in communication to count up to 12 hours of 500-level graduate coursework towards both the BA or BS in communication and, if accepted, the MA in lifespan and digital communication. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credits for the undergraduate degree and 30 discrete credits for the graduate degree). For more information, please contact Dr. Gary Beck.

Linked BA/BS in Communication and MA in Humanities

Please refer to the Humanities section of this Catalog for information on the linked program leading to a BA or BS in communication and an MA in humanities.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated

students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Communication with a Major in Communication Studies (BS)

Carla Harrell, Program Director and Chief Departmental Advisor

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

COMM 101R is required to fulfill the Oral Communication requirement.

STAT 130M is required to fulfill the Mathematics requirement (BS only).

COMM 270A/THEA 270A may not be used to satisfy the Human Creativity requirement.

The Information Literacy and Research requirement may be met in the major with COMM 272G.

The Impact of Technology requirement may be met in the major with COMM 280T or COMM 372T.

For the Language and Culture requirement, BA students must have competence through the 202 level (competence is not met by completion of the associate degree); BS students must have competence at the 102 level.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Six Hours of Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Communication Core

BS Core Courses

COMM 200S	Introduction to Human Communication	3
COMM 260	Understanding Media	3
COMM 301	Critical Methodologies	3
COMM 302	Communication Research Methods I	3
COMM writing intensive (W) course (see the major areas for appropriate selection)		3

BS Additional Core Requirements

Six hours of approved 300/400-level social science courses	6

Total Credit Hours	21

General Education

Complete lower-division requirements	35-47
Complete upper-division requirements (minimum of 6 credit hours)	6

Communication Core

Complete communication core requirements	21

Foundations (Choose 9 courses)

COMM 300	International Sojourning
COMM 303	Introduction to Strategic Communications
COMM 304	Advanced Public Speaking
COMM 305	Work-Life Communication
COMM 307	Understanding European Film
COMM 308W	Effective Media Writing
COMM 309	Media Relations
COMM 310	Strategic Communications Campaigns
COMM 311	Strategic Communications Tactics
COMM 314	Nonverbal Communication
COMM 315W	Sex, Gender, and Communication
COMM 321	Production Management for Television and Stage
COMM 323	Leadership and Events Management
COMM 325	Sound Design for Stage and Camera
COMM 326	Foundations of Group Communication

COMM 330	The Short Script
COMM 333	Persuasion
COMM 334	Narrative Adaptation
COMM 335W	Rhetorical Criticism
COMM 339	Entertainment Journalism
COMM 340	Media and Popular Culture
COMM 341	Lighting Design for Stage and Film
COMM 344	Introduction to Media Industries
COMM 345	Media Audiences
COMM 346	Screenwriting I
COMM 348	Acting for the Camera
COMM 349	Costume Design for Stage and Camera
COMM 351	Interpersonal Communication in Organizations
COMM 353	Animation
COMM 355	Organizational Communication
COMM 356	3D Animation 1
COMM 357	3D Animation 2
COMM 358	Color for Digital Cinema & TV
COMM 359	Costume Crafts
COMM 367	Cooperative Education
COMM 368	Internship
COMM 369	Research Practicum
COMM 372T	Introduction to New Media Technologies
COMM 375	Television Production
COMM 380	Documentary Production I
COMM 382	Reporting News for Television and Digital Media
COMM 383	Directing the Actor
COMM 386	Post-Production 2
COMM 387	TV News Production
COMM 388	Motion Picture Aesthetics
COMM 389	Sound Recording and Mixing for Film
COMM 395	Topics in Communication
COMM 400W	Intercultural Communication
COMM 401	Communication Theory
COMM 403	Public Information and Crisis Communications
COMM 404	Emergency Management Communication
COMM 405	Communication and Culture in the Middle East
COMM 408	Health Communication
COMM 412W	Interpersonal Communication Theory and Research
COMM 421	Communication and Conflict Management
COMM 422	Listening to Self, Others, Nature and the Divine
COMM 423	Nonviolent Communication and Peace
COMM 424	Communicating Love
COMM 425	Family Communication Theory and Research
COMM 427	Children's Communication Theory and Research
COMM 430	TV Screenwriting
COMM 433	Capstone
COMM 439	WHRO Production
COMM 440	Documentary Filmmaking Study Abroad
COMM 441	The Music Industry and Communication
COMM 442	Media Spaces
COMM 443	Hispanic Film
COMM 444	German Cinema I

COMM 445	Communication Analysis and Criticism	
COMM 446	Directing for the Camera	
COMM 447W	Electronic Media Law and Policy	
COMM 448	Global Media Industries	
COMM 453	Voice Over	
COMM 454	Strategic Communications Case Studies	
COMM 455	Critical Analysis of Journalism	
COMM 456	Organizations and Social Influence	
COMM 457	Market Research	
COMM 460	Social Marketing	
COMM 462	Sport Communication	
COMM 469	Communication Education Practicum	
COMM 471W	International Film History	
COMM 472	New Media Topics: Theories and Practices	
COMM 473	Television and Society	
COMM 474	Reality Television	
COMM 478	Media Marketing and Promotion	
COMM 479W	American Film History	
COMM 480	Documentary Production II	
COMM 482	Screenwriting II	
COMM 483	Advanced Cinema Projects	
COMM 484	Strategic Media Design and Production	
COMM 485	Film and Television Genres	
COMM 486	Advanced Filmmaking	
COMM 487	Advanced TV News Production	
COMM 488	Introduction to Critical Race and Media Studies	
COMM 489	Health and Interpersonal Communication	
COMM 490	ROAR Communications Agency	
COMM 491	Communication and Activism	
COMM 492	Cinematography 2	
COMM 493	Feature Film Production	
COMM 494	Entrepreneurship and Public Relations	
COMM 495	Topics in Communication	
COMM 497	Tutorial Work in Special Topics in Communication	
COMM 498	Tutorial Work in Special Topics in Communication	
COMM Elective		
Select one of the following:		3
COMM 103R	Voice and Diction	
COMM 112R	Introduction to Interpersonal Communication	
COMM 195	Topics in Communication	
COMM 225	Introduction to Production Technology	
COMM 269	Visual Storytelling	
COMM 270A	Film Appreciation	
COMM 271	Introduction to Filmmaking	
COMM 272G	Digital Literacy	
COMM 278G	Advertising & Society	
COMM 280T	Entertainment Technologies	
COMM 295	Topics in Communication	
Total Credit Hours		92-104

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

ALL students majoring in programs in Communication, Dance, and Theatre are required to complete a **Senior Experience** as part of their degree. Senior Experiences are designed as stepping stones for students to apply knowledge

and skills accrued throughout their coursework toward preparing for future careers. Senior Experience course options will vary by major but include options for an internship, a study abroad/away experience, a service-learning course, a senior capstone, or more specialized experiences within students' chosen majors. Please see descriptions included under each major for more options. Students become eligible for Senior Experience options once they reach 90 credits or with permission of the Senior Experience Coordinator. Students will be directed by their advisor to opportunities that are suited for their area of study and as other opportunities become available. For more information please reach out to the Senior Experience Coordinator, Alison Lietzenmayer.

Cinema & TV Production students need to complete COMM 271 Introduction to Filmmaking prior to enrollment in any Foundations course, and should not enroll in COMM 269.

Departmental Requirements

Majors must maintain a 2.0 GPA or better in the major in order to graduate.

Additional Communication Major Courses

Students pursuing either the BA or the BS degree are required to take 10 Communication classes beyond the core course requirements listed above (these courses include the Senior Experience requirement listed above). Nine of those 10 courses (27 credit hours) must be in the student's selected major (see major details below). One course (3 credit hours) may be 100-200 level and/or from any major area.

The Senior Experience requirement in the Communication program (which includes the Cinema & TV Production major, Communication Studies major, Media Studies major, Professional Communication major, and Strategic Communication and Journalism major) can be achieved by completing opportunities such as the following:

Internship

COMM 368	Internship	3,6

Study Abroad

COMM 300	International Sojourning	3
COMM 440	Documentary Filmmaking Study Abroad	3

Other study abroad/study away offerings offered within the Department

Service Learning

Approved Service Learning Courses (varies by semester)

Capstone

COMM 433	Capstone	3

Research Practicum

COMM 369	Research Practicum	3
or COMM 469	Communication Education Practicum	

ROAR

COMM 490	ROAR Communications Agency (available only for Strategic Communication and Journalism majors)	3

COMM Cinema & TV Production Majors may also choose from:

COMM 439	WHRO Production	
COMM 482	Screenwriting II	
COMM 483	Advanced Cinema Projects	
COMM 486	Advanced Filmmaking	
COMM 493	Feature Film Production	

Communication Electives

Select one COMM elective (3 credit hours), which may be any COMM class that is not in the student's major in addition to the following.

COMM 103R	Voice and Diction	3
COMM 112R	Introduction to Interpersonal Communication	3
COMM 195	Topics in Communication	1-3
COMM 225	Introduction to Production Technology	3
COMM 269	Visual Storytelling	3

COMM 270A	Film Appreciation	3
COMM 271	Introduction to Filmmaking	3
COMM 272G	Digital Literacy	3
COMM 280T	Entertainment Technologies	3
COMM 295	Topics in Communication	1-3
COMM 304	Advanced Public Speaking	3
COMM 307	Understanding European Film	3
COMM 321	Production Management for Television and Stage	3
COMM 325	Sound Design for Stage and Camera	3
COMM 341	Lighting Design for Stage and Film	3
COMM 349	Costume Design for Stage and Camera	3
COMM 354	Drafting and Rendering for Stage and Screen	3
COMM 356	3D Animation 1	3
COMM 357	3D Animation 2	3
COMM 359	Costume Crafts	3
COMM 367	Cooperative Education	1-3
COMM 369	Research Practicum	3
COMM 382	Reporting News for Television and Digital Media	3
COMM 453	Voice Over	3
COMM 469	Communication Education Practicum	3

Writing Intensive Requirement

Communication majors must complete at least one writing intensive course in the major from the following courses:

COMM 308W	Effective Media Writing	3
COMM 315W	Sex, Gender, and Communication	3
COMM 335W	Rhetorical Criticism	3
COMM 400W	Intercultural Communication	3
COMM 412W	Interpersonal Communication Theory and Research	3
COMM 447W	Electronic Media Law and Policy	3
COMM 471W	International Film History	3
COMM 479W	American Film History	3

Internships and Practicum courses

Students may apply three credit hours of COMM 368 Internship toward their major credit hours. Three additional credit hours may count as elective credits toward the overall total credit hour count for the degree. In addition, students may apply only six credits total from the following classes toward the major:

COMM 368	Internship	3-6
COMM 369	Research Practicum	3
COMM 469	Communication Education Practicum	3

Special Topics in Communication Courses and Communication Tutorials

Special Topics in Communication courses and Communication Tutorials courses may be included in a given major when and where appropriate and as approved by the student's communication advisor:

COMM 395	Topics in Communication	1-3
COMM 396	Topics in Communication	1-3
COMM 495	Topics in Communication	1-3
COMM 496	Topics in Communication	1-3
COMM 497	Tutorial Work in Special Topics in Communication	1-3

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work

and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity (May not use COMM 270A / THEA 270A)		3
Human Behavior (COMM 200S may not be used)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
COMM 101R	Public Speaking	3
Credit Hours		15
Spring		
Interpreting the Past		3
Mathematical Skills: STAT 130M Required		3
Information Literacy and Research (can be met by COMM 272G)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
COMM 260	Understanding Media	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Philosophy and Ethics		3
COMM Elective		3
COMM 200S	Introduction to Human Communication	3
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
Impact of Technology (Can be met with COMM 280T or COMM 372T)		3
Foundation Course in Major Area		3
COMM 302	Communication Research Methods I	3
Credit Hours		16
Junior		
Fall		
Foundation course in Major Area		3
Applied Theories or Foundations course in Major Area (depending on major selected)		3
300/400-level Social Science course		3
COMM 301	Critical Methodologies	3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
Applied Theories course in Major Area		3

Applied Theories course in Major Area	3
Applied Theories course in Major Area	3
300/400-level Social Science course	3
Upper-Division General Education Course or Minor	3
Credit Hours	15
Senior	
Fall	
Applied Theories course in Major Area	3
Applied Theories course in Major Area	3
Senior Experience Course ¹	3
COMM Writing Intensive Course	3
Elective course (or Professional Communication elective course if choose Professional Communication major)	3
Credit Hours	15
Spring	
Elective courses (or Professional Communication elective courses if choose Professional Communication major)	9
Applied Theories course in Major Area	3
Elective course	1
Credit Hours	13
Total Credit Hours	120

¹ Please consult list of Senior Experience options relevant to each major.

Linked BA/BS in Communication and MA in Lifespan and Digital Communication

The linked bachelor's/master's degree in communication/lifespan and digital communication is administered by the Communication and Theatre Arts Department. The purpose of this option is to allow exceptional majors in communication to count up to 12 hours of 500-level graduate coursework towards both the BA or BS in communication and, if accepted, the MA in lifespan and digital communication. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credits for the undergraduate degree and 30 discrete credits for the graduate degree). For more information, please contact Dr. Gary Beck.

Linked BA/BS in Communication and MA in Humanities

Please refer to the Humanities section of this Catalog for information on the linked program leading to a BA or BS in communication and an MA in humanities.

Bachelor of Arts Communication with a Major in Media Studies (BA)

Carla Harrell, Chief Departmental Advisor
Myles McNutt, Program Director

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3

Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

COMM 101R is required to fulfill the Oral Communication requirement.

STAT 130M is required to fulfill the Mathematics requirement (BS only).

COMM 270A/THEA 270A may not be used to satisfy the Human Creativity requirement.

The Information Literacy and Research requirement may be met in the major with COMM 272G.

The Impact of Technology requirement may be met in the major with COMM 280T or COMM 372T.

For the Language and Culture requirement, BA students must have competence through the 202 level (competence is not met by completion of the associate degree); BS students must have competence at the 102 level.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Six Hours of Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Communication Core

BA Core Courses

COMM 200S	Introduction to Human Communication	3
COMM 260	Understanding Media	3
COMM 301	Critical Methodologies	3
COMM writing intensive (W) course (see the major areas for appropriate selection)		3

BA Additional Core Course

COMM 335W	Rhetorical Criticism	3
or COMM 445	Communication Analysis and Criticism	

Total Credit Hours	15

Media Studies Major

Carla Harrell, Chief Departmental Advisor
Myles McNutt, Program Director

Choose nine courses (27 credit hours): three courses (9 credit hours) from Foundations and six courses (18 credit hours) from Applied Theories. Students majoring in Media Studies may not use COMM 372T to satisfy their Impact of Technology general education requirement. The Senior Experience can be met by completing an internship, a study abroad/away, taking a designated service learning course, doing a research practicum, or by enrolling in the Capstone course (COMM 433).

General Education

Complete lower-division requirements	35-47
Complete upper-division requirements (minimum of 6 credit hours)	6
Complete foreign language coursework through the 202 level	0-6

Communication Core

Complete communication core requirements	15

Foundations

COMM 344	Introduction to Media Industries	3
COMM 345	Media Audiences	3
COMM 372T	Introduction to New Media Technologies	3

Applied Theories

Select six of the following:		18
COMM 334	Narrative Adaptation	
COMM 339	Entertainment Journalism	
COMM 340	Media and Popular Culture	
COMM 346	Screenwriting I	
COMM 368	Internship	
COMM 375	Television Production	
COMM 382	Reporting News for Television and Digital Media	
COMM 388	Motion Picture Aesthetics	
COMM 395	Topics in Communication	
COMM 430	TV Screenwriting	
COMM 433	Capstone	
COMM 441	The Music Industry and Communication	
COMM 442	Media Spaces	
COMM 443	Hispanic Film	
COMM 444	German Cinema I	
or WCS 445	German Cinema I	
COMM 447W	Electronic Media Law and Policy	
COMM 448	Global Media Industries	
COMM 455	Critical Analysis of Journalism	
COMM 471W	International Film History	
COMM 472	New Media Topics: Theories and Practices	
COMM 473	Television and Society	
COMM 474	Reality Television	
COMM 478	Media Marketing and Promotion	

COMM 479W	American Film History	
COMM 482	Screenwriting II	
COMM 485	Film and Television Genres	
COMM 488	Introduction to Critical Race and Media Studies	
COMM 491	Communication and Activism	
DANC 361	Hip Hop Dance & Culture 1	
DANC 362	Hip Hop Dance & Culture 2	
THEA 371	History of Animation	
WGS 304	Gender and Sexuality in Film	
WGS 405	Gender and Media	

COMM Elective

Complete COMM elective	3

Total Credit Hours	86-104

Electives

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

ALL students majoring in programs in Communication, Dance, and Theatre are required to complete a **Senior Experience** as part of their degree. Senior Experiences are designed as stepping stones for students to apply knowledge and skills accrued throughout their coursework toward preparing for future careers. Senior Experience course options will vary by major but include options for an internship, a study abroad/away experience, a service-learning course, a senior capstone, or more specialized experiences within students' chosen majors. Please see descriptions included under each major for more options. Students become eligible for Senior Experience options once they reach 90 credits or with permission of the Senior Experience Coordinator. Students will be directed by their advisor to opportunities that are suited for their area of study and as other opportunities become available. For more information please reach out to the Senior Experience Coordinator, Alison Lietzenmayer.

Cinema & TV Production students need to complete COMM 271 Introduction to Filmmaking prior to enrollment in any Foundations course, and should not enroll in COMM 269.

Departmental Requirements

Majors must maintain a 2.0 GPA or better in the major in order to graduate.

Additional Communication Major Courses

Students pursuing either the BA or the BS degree are required to take 10 Communication classes beyond the core course requirements listed above (these courses include the Senior Experience requirement listed above). Nine of those 10 courses (27 credit hours) must be in the student's selected major (see major details below). One course (3 credit hours) may be 100-200 level and/or from any major area.

The Senior Experience requirement in the Communication program (which includes the Cinema & TV Production major, Communication Studies major, Media Studies major, Professional Communication major, and Strategic Communication and Journalism major) can be achieved by completing opportunities such as the following:

Internship

COMM 368	Internship	3,6

Study Abroad

COMM 300	International Sojourning	3
COMM 440	Documentary Filmmaking Study Abroad	3

Other study abroad/study away offerings offered within the Department

Service Learning

Approved Service Learning Courses (varies by semester)

Capstone

COMM 433	Capstone	3
Research Practicum		
COMM 369 or COMM 469	Research Practicum Communication Education Practicum	3
ROAR		
COMM 490	ROAR Communications Agency (available only for Strategic Communication and Journalism majors)	3
COMM Cinema & TV Production Majors may also choose from:		
COMM 439	WHRO Production	
COMM 482	Screenwriting II	
COMM 483	Advanced Cinema Projects	
COMM 486	Advanced Filmmaking	
COMM 493	Feature Film Production	

Communication Electives

Select one COMM elective (3 credit hours), which may be any COMM class that is not in the student's major in addition to the following.

COMM 103R	Voice and Diction	3
COMM 112R	Introduction to Interpersonal Communication	3
COMM 195	Topics in Communication	1-3
COMM 225	Introduction to Production Technology	3
COMM 269	Visual Storytelling	3
COMM 270A	Film Appreciation	3
COMM 271	Introduction to Filmmaking	3
COMM 272G	Digital Literacy	3
COMM 280T	Entertainment Technologies	3
COMM 295	Topics in Communication	1-3
COMM 304	Advanced Public Speaking	3
COMM 307	Understanding European Film	3
COMM 321	Production Management for Television and Stage	3
COMM 325	Sound Design for Stage and Camera	3
COMM 341	Lighting Design for Stage and Film	3
COMM 349	Costume Design for Stage and Camera	3
COMM 354	Drafting and Rendering for Stage and Screen	3
COMM 356	3D Animation 1	3
COMM 357	3D Animation 2	3
COMM 359	Costume Crafts	3
COMM 367	Cooperative Education	1-3
COMM 369	Research Practicum	3
COMM 382	Reporting News for Television and Digital Media	3
COMM 453	Voice Over	3
COMM 469	Communication Education Practicum	3

Writing Intensive Requirement

Communication majors must complete at least one writing intensive course in the major from the following courses:

COMM 308W	Effective Media Writing	3
COMM 315W	Sex, Gender, and Communication	3
COMM 335W	Rhetorical Criticism	3
COMM 400W	Intercultural Communication	3
COMM 412W	Interpersonal Communication Theory and Research	3
COMM 447W	Electronic Media Law and Policy	3
COMM 471W	International Film History	3
COMM 479W	American Film History	3

Internships and Practicum courses

Students may apply three credit hours of COMM 368 Internship toward their major credit hours. Three additional credit hours may count as elective credits toward the overall total credit hour count for the degree. In addition, students may apply only six credits total from the following classes toward the major:

COMM 368	Internship	3-6
COMM 369	Research Practicum	3
COMM 469	Communication Education Practicum	3

Special Topics in Communication Courses and Communication Tutorials

Special Topics in Communication courses and Communication Tutorials courses may be included in a given major when and where appropriate and as approved by the student's communication advisor:

COMM 395	Topics in Communication	1-3
COMM 396	Topics in Communication	1-3
COMM 495	Topics in Communication	1-3
COMM 496	Topics in Communication	1-3
COMM 497	Tutorial Work in Special Topics in Communication	1-3

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity (May not use COMM 270A / THEA 270A)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
COMM 101R	Public Speaking	3
Credit Hours		15
Spring		
Human Behavior (May not use COMM 200S)		3
Interpreting the Past		3
Information Literacy and Research (Can be met by COMM 272G)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
COMM 260	Understanding Media	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Philosophy and Ethics		3

COMM 200S	Introduction to Human Communication	3
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
Language and Culture IV		3
Impact of Technology (Can be met with COMM 280T or COMM 372T)		3
COMM 335W or COMM 445	Rhetorical Criticism or Communication Analysis and Criticism	3
Credit Hours		16
Junior		
Fall		
Foundation course in Major Area		3
Applied Theories or Foundations course in Major Area (depending on major selected)		3
Applied Theories course in Major Area		3
COMM 301	Critical Methodologies	3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
Foundation course in Major Area		3
Applied Theories course in Major Area		3
Applied Theories course in Major Area		3
COMM Elective		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
Applied Theories course in Major Area		3
COMM Writing Intensive Course		3
Senior Experience course ¹		3
Elective course		3
Minor or Elective		3
Credit Hours		15
Spring		
Applied Theories course in Major Area		3
Applied Theories course in Major Area		3
Elective course		3
Elective course		1
Minor or Elective		3
Credit Hours		13
Total Credit Hours		120

¹ Please consult list of Senior Experience options relevant to each major.

Linked BA/BS in Communication and MA in Lifespan and Digital Communication

The linked bachelor's/master's degree in communication/lifespan and digital communication is administered by the Communication and Theatre Arts

Department. The purpose of this option is to allow exceptional majors in communication to count up to 12 hours of 500-level graduate coursework towards both the BA or BS in communication and, if accepted, the MA in lifespan and digital communication. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credits for the undergraduate degree and 30 discrete credits for the graduate degree). For more information, please contact Dr. Gary Beck.

Linked BA/BS in Communication and MA in Humanities

Please refer to the Humanities section of this Catalog for information on the linked program leading to a BA or BS in communication and an MA in humanities.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Communication with a Major in Media Studies (BS)

Carla Harrell, Chief Departmental Advisor
Myles McNutt, Program Director

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

COMM 101R is required to fulfill the Oral Communication requirement.

STAT 130M is required to fulfill the Mathematics requirement (BS only).

COMM 270A/THEA 270A may not be used to satisfy the Human Creativity requirement.

The Information Literacy and Research requirement may be met in the major with COMM 272G.

The Impact of Technology requirement may be met in the major with COMM 280T or COMM 372T.

For the Language and Culture requirement, BA students must have competence through the 202 level (competence is not met by completion of the associate degree); BS students must have competence at the 102 level.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Six Hours of Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.

- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Communication Core

BS Core Courses

COMM 200S	Introduction to Human Communication	3
COMM 260	Understanding Media	3
COMM 301	Critical Methodologies	3
COMM 302	Communication Research Methods I	3
COMM writing intensive (W) course (see the major areas for appropriate selection)		3

BS Additional Core Requirements

Six hours of approved 300/400-level social science courses	6

Total Credit Hours	21

Media Studies Major

Carla Harrell, Chief Departmental Advisor
Myles McNutt, Program Director

Choose nine courses (27 credit hours): three courses (9 credit hours) from Foundations and six courses (18 credit hours) from Applied Theories. Students majoring in Media Studies may not use COMM 372T to satisfy their Impact of Technology general education requirement. The Senior Experience can be met by completing an internship, a study abroad/away, taking a designated service learning course, doing a research practicum, or by enrolling in the Capstone course (COMM 433).

General Education

Complete lower-division requirements	35-47
Complete upper-division requirements (minimum of 6 credit hours)	6

Communication Core

Complete communication core requirements	21

Foundations

COMM 344	Introduction to Media Industries	3
COMM 345	Media Audiences	3
COMM 372T	Introduction to New Media Technologies	3

Applied Theories

Select six of the following:		18
COMM 334	Narrative Adaptation	
COMM 339	Entertainment Journalism	
COMM 340	Media and Popular Culture	
COMM 346	Screenwriting I	
COMM 368	Internship	
COMM 375	Television Production	
COMM 382	Reporting News for Television and Digital Media	
COMM 388	Motion Picture Aesthetics	
COMM 395	Topics in Communication	
COMM 430	TV Screenwriting	
COMM 433	Capstone	
COMM 441	The Music Industry and Communication	
COMM 442	Media Spaces	
COMM 443	Hispanic Film	
COMM 444	German Cinema I	
or WCS 445	German Cinema I	
COMM 447W	Electronic Media Law and Policy	
COMM 448	Global Media Industries	
COMM 455	Critical Analysis of Journalism	
COMM 471W	International Film History	
COMM 472	New Media Topics: Theories and Practices	

COMM 473	Television and Society	
COMM 474	Reality Television	
COMM 478	Media Marketing and Promotion	
COMM 479W	American Film History	
COMM 482	Screenwriting II	
COMM 485	Film and Television Genres	
COMM 488	Introduction to Critical Race and Media Studies	
COMM 491	Communication and Activism	
DANC 361	Hip Hop Dance & Culture 1	
DANC 362	Hip Hop Dance & Culture 2	
THEA 371	History of Animation	
WGS 304	Gender and Sexuality in Film	
WGS 405	Gender and Media	
COMM Elective		
Complete COMM elective		3
Total Credit Hours		92-104

Electives

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

ALL students majoring in programs in Communication, Dance, and Theatre are required to complete a **Senior Experience** as part of their degree. Senior Experiences are designed as stepping stones for students to apply knowledge and skills accrued throughout their coursework toward preparing for future careers. Senior Experience course options will vary by major but include options for an internship, a study abroad/away experience, a service-learning course, a senior capstone, or more specialized experiences within students' chosen majors. Please see descriptions included under each major for more options. Students become eligible for Senior Experience options once they reach 90 credits or with permission of the Senior Experience Coordinator. Students will be directed by their advisor to opportunities that are suited for their area of study and as other opportunities become available. For more information please reach out to the Senior Experience Coordinator, Alison Lietzenmayer.

Cinema & TV Production students need to complete COMM 271 Introduction to Filmmaking prior to enrollment in any Foundations course, and should not enroll in COMM 269.

Departmental Requirements

Majors must maintain a 2.0 GPA or better in the major in order to graduate.

Additional Communication Major Courses

Students pursuing either the BA or the BS degree are required to take 10 Communication classes beyond the core course requirements listed above (these courses include the Senior Experience requirement listed above). Nine of those 10 courses (27 credit hours) must be in the student's selected major (see major details below). One course (3 credit hours) may be 100-200 level and/or from any major area.

The Senior Experience requirement in the Communication program (which includes the Cinema & TV Production major, Communication Studies major, Media Studies major, Professional Communication major, and Strategic Communication and Journalism major) can be achieved by completing opportunities such as the following:

Internship		
COMM 368	Internship	3,6
Study Abroad		
COMM 300	International Sojourning	3
COMM 440	Documentary Filmmaking Study Abroad	3
Other study abroad/study away offerings offered within the Department		

Service Learning

Approved Service Learning Courses (varies by semester)

Capstone

COMM 433	Capstone	3

Research Practicum

COMM 369	Research Practicum	3
or COMM 469	Communication Education Practicum	

ROAR

COMM 490	ROAR Communications Agency (available only for Strategic Communication and Journalism majors)	3

COMM Cinema & TV Production Majors may also choose from:

COMM 439	WHRO Production	
COMM 482	Screenwriting II	
COMM 483	Advanced Cinema Projects	
COMM 486	Advanced Filmmaking	
COMM 493	Feature Film Production	

Communication Electives

Select one COMM elective (3 credit hours), which may be any COMM class that is not in the student's major in addition to the following.

COMM 103R	Voice and Diction	3
COMM 112R	Introduction to Interpersonal Communication	3
COMM 195	Topics in Communication	1-3
COMM 225	Introduction to Production Technology	3
COMM 269	Visual Storytelling	3
COMM 270A	Film Appreciation	3
COMM 271	Introduction to Filmmaking	3
COMM 272G	Digital Literacy	3
COMM 280T	Entertainment Technologies	3
COMM 295	Topics in Communication	1-3
COMM 304	Advanced Public Speaking	3
COMM 307	Understanding European Film	3
COMM 321	Production Management for Television and Stage	3
COMM 325	Sound Design for Stage and Camera	3
COMM 341	Lighting Design for Stage and Film	3
COMM 349	Costume Design for Stage and Camera	3
COMM 354	Drafting and Rendering for Stage and Screen	3
COMM 356	3D Animation 1	3
COMM 357	3D Animation 2	3
COMM 359	Costume Crafts	3
COMM 367	Cooperative Education	1-3
COMM 369	Research Practicum	3
COMM 382	Reporting News for Television and Digital Media	3
COMM 453	Voice Over	3
COMM 469	Communication Education Practicum	3

Writing Intensive Requirement

Communication majors must complete at least one writing intensive course in the major from the following courses:

COMM 308W	Effective Media Writing	3
COMM 315W	Sex, Gender, and Communication	3
COMM 335W	Rhetorical Criticism	3
COMM 400W	Intercultural Communication	3
COMM 412W	Interpersonal Communication Theory and Research	3
COMM 447W	Electronic Media Law and Policy	3

COMM 471W	International Film History	3
COMM 479W	American Film History	3

Internships and Practicum courses

Students may apply three credit hours of COMM 368 Internship toward their major credit hours. Three additional credit hours may count as elective credits toward the overall total credit hour count for the degree. In addition, students may apply only six credits total from the following classes toward the major:

COMM 368	Internship	3-6
COMM 369	Research Practicum	3
COMM 469	Communication Education Practicum	3

Special Topics in Communication Courses and Communication Tutorials

Special Topics in Communication courses and Communication Tutorials courses may be included in a given major when and where appropriate and as approved by the student's communication advisor:

COMM 395	Topics in Communication	1-3
COMM 396	Topics in Communication	1-3
COMM 495	Topics in Communication	1-3
COMM 496	Topics in Communication	1-3
COMM 497	Tutorial Work in Special Topics in Communication	1-3

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity (May not use COMM 270A / THEA 270A)		3
Human Behavior (COMM 200S may not be used)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
COMM 101R	Public Speaking	3
Credit Hours		15
Spring		
Interpreting the Past		3
Mathematical Skills: STAT 130M Required		3
Information Literacy and Research (can be met by COMM 272G)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
COMM 260	Understanding Media	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Philosophy and Ethics		3

COMM Elective		3
COMM 200S	Introduction to Human Communication	3
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
Impact of Technology (Can be met with COMM 280T or Comm 372T)		3
Foundation Course in Major Area		3
COMM 302	Communication Research Methods I	3
Credit Hours		16
Junior		
Fall		
Foundation course in Major Area		3
Applied Theories or Foundations course in Major Area (depending on major selected)		3
300/400-level Social Science course		3
COMM 301	Critical Methodologies	3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
Applied Theories course in Major Area		3
Applied Theories course in Major Area		3
Applied Theories course in Major Area		3
300/400-level Social Science course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
Applied Theories course in Major Area		3
Applied Theories course in Major Area		3
Senior Experience Course ¹		3
COMM Writing Intensive Course		3
Elective course (or Professional Communication elective course if choose Professional Communication major)		3
Credit Hours		15
Spring		
Elective courses (or Professional Communication elective courses if choose Professional Communication major)		9
Applied Theories course in Major Area		3
Elective course		1
Credit Hours		13
Total Credit Hours		120

¹ Please consult list of Senior Experience options relevant to each major.

Linked BA/BS in Communication and MA in Lifespan and Digital Communication

The linked bachelor's/master's degree in communication/lifespan and digital communication is administered by the Communication and Theatre Arts Department. The purpose of this option is to allow exceptional majors in

communication to count up to 12 hours of 500-level graduate coursework towards both the BA or BS in communication and, if accepted, the MA in lifespan and digital communication. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credits for the undergraduate degree and 30 discrete credits for the graduate degree). For more information, please contact Dr. Gary Beck.

Linked BA/BS in Communication and MA in Humanities

Please refer to the Humanities section of this Catalog for information on the linked program leading to a BA or BS in communication and an MA in humanities.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Communication with a Major in Organizational and Interpersonal Communication (BA)

Carla Harrell, Program Director and Chief Departmental Advisor

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

COMM 101R is required to fulfill the Oral Communication requirement.

STAT 130M is required to fulfill the Mathematics requirement (BS only).

COMM 270A/THEA 270A may not be used to satisfy the Human Creativity requirement.

The Information Literacy and Research requirement may be met in the major with COMM 272G.

The Impact of Technology requirement may be met in the major with COMM 280T or COMM 372T.

For the Language and Culture requirement, BA students must have competence through the 202 level (competence is not met by completion of the associate degree); BS students must have competence at the 102 level.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Six Hours of Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.

- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Communication Core

BA Core Courses

COMM 200S	Introduction to Human Communication	3
COMM 260	Understanding Media	3
COMM 301	Critical Methodologies	3
COMM writing intensive (W) course (see the major areas for appropriate selection)		3

BA Additional Core Course

COMM 335W	Rhetorical Criticism	3
or COMM 445	Communication Analysis and Criticism	

Total Credit Hours	15

Organizational and Interpersonal Communication Major

Carla Harrell, Program Director and Chief Departmental Advisor

Choose nine courses (27 credit hours): three courses (9 credit hours) from Foundations and six courses (18 credit hours) from Applied Theories. Students may take Foundations courses to apply toward Applied Theories courses if they choose to take more than three Foundations courses. The Senior Experience can be met by completing an internship, a study abroad/away, taking a designated service learning course, doing a research practicum, or by enrolling in the Capstone course (COMM 433).

General Education

Complete lower-division requirements	35-47
Complete upper-division requirements (minimum of 6 credit hours)	6
Complete foreign language coursework through the 202 level	0-6

Communication Core

Complete communication core requirements	15

Foundations

Select three of the following:	9
COMM 314	Nonverbal Communication
COMM 326	Foundations of Group Communication
COMM 355	Organizational Communication
COMM 400W	Intercultural Communication
COMM 401	Communication Theory
COMM 412W	Interpersonal Communication Theory and Research
COMM 422	Listening to Self, Others, Nature and the Divine

Applied Theories

Select six of the following: ¹	18
COMM 300	International Sojourning
COMM 304	Advanced Public Speaking
COMM 305	Work-Life Communication
COMM 315W	Sex, Gender, and Communication
COMM 323	Leadership and Events Management
COMM 333	Persuasion
COMM 351	Interpersonal Communication in Organizations
COMM 368	Internship
COMM 405	Communication and Culture in the Middle East
COMM 408	Health Communication
COMM 421	Communication and Conflict Management
COMM 423	Nonviolent Communication and Peace

COMM 424	Communicating Love
COMM 425	Family Communication Theory and Research
COMM 427	Children's Communication Theory and Research
COMM 433	Capstone
COMM 456	Organizations and Social Influence
COMM 489	Health and Interpersonal Communication
COMM 491	Communication and Activism
COMM 495	Topics in Communication

COMM Elective

Complete COMM elective	3

Total Credit Hours	86-104

¹ Students may take Foundations courses to apply toward Applied Theories courses if they choose to take more than three Foundations courses.

Electives

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

ALL students majoring in programs in Communication, Dance, and Theatre are required to complete a **Senior Experience** as part of their degree. Senior Experiences are designed as stepping stones for students to apply knowledge and skills accrued throughout their coursework toward preparing for future careers. Senior Experience course options will vary by major but include options for an internship, a study abroad/away experience, a service-learning course, a senior capstone, or more specialized experiences within students' chosen majors. Please see descriptions included under each major for more options. Students become eligible for Senior Experience options once they reach 90 credits or with permission of the Senior Experience Coordinator. Students will be directed by their advisor to opportunities that are suited for their area of study and as other opportunities become available. For more information please reach out to the Senior Experience Coordinator, Alison Lietzenmayer.

Cinema & TV Production students need to complete COMM 271 Introduction to Filmmaking prior to enrollment in any Foundations course, and should not enroll in COMM 269.

Departmental Requirements

Majors must maintain a 2.0 GPA or better in the major in order to graduate.

Additional Communication Major Courses

Students pursuing either the BA or the BS degree are required to take 10 Communication classes beyond the core course requirements listed above (these courses include the Senior Experience requirement listed above). Nine of those 10 courses (27 credit hours) must be in the student's selected major (see major details below). One course (3 credit hours) may be 100-200 level and/or from any major area.

The Senior Experience requirement in the Communication program (which includes the Cinema & TV Production major, Communication Studies major, Media Studies major, Professional Communication major, and Strategic Communication and Journalism major) can be achieved by completing opportunities such as the following:

Internship

COMM 368	Internship	3,6

Study Abroad

COMM 300	International Sojourning	3
COMM 440	Documentary Filmmaking Study Abroad	3

Other study abroad/study away offerings offered within the Department

Service Learning

Approved Service Learning Courses (varies by semester)		
Capstone		
COMM 433	Capstone	3
Research Practicum		
COMM 369 or COMM 469	Research Practicum Communication Education Practicum	3
ROAR		
COMM 490	ROAR Communications Agency (available only for Strategic Communication and Journalism majors)	3
COMM Cinema & TV Production Majors may also choose from:		
COMM 439	WHRO Production	
COMM 482	Screenwriting II	
COMM 483	Advanced Cinema Projects	
COMM 486	Advanced Filmmaking	
COMM 493	Feature Film Production	

Communication Electives

Select one COMM elective (3 credit hours), which may be any COMM class that is not in the student's major in addition to the following.

COMM 103R	Voice and Diction	3
COMM 112R	Introduction to Interpersonal Communication	3
COMM 195	Topics in Communication	1-3
COMM 225	Introduction to Production Technology	3
COMM 269	Visual Storytelling	3
COMM 270A	Film Appreciation	3
COMM 271	Introduction to Filmmaking	3
COMM 272G	Digital Literacy	3
COMM 280T	Entertainment Technologies	3
COMM 295	Topics in Communication	1-3
COMM 304	Advanced Public Speaking	3
COMM 307	Understanding European Film	3
COMM 321	Production Management for Television and Stage	3
COMM 325	Sound Design for Stage and Camera	3
COMM 341	Lighting Design for Stage and Film	3
COMM 349	Costume Design for Stage and Camera	3
COMM 354	Drafting and Rendering for Stage and Screen	3
COMM 356	3D Animation 1	3
COMM 357	3D Animation 2	3
COMM 359	Costume Crafts	3
COMM 367	Cooperative Education	1-3
COMM 369	Research Practicum	3
COMM 382	Reporting News for Television and Digital Media	3
COMM 453	Voice Over	3
COMM 469	Communication Education Practicum	3

Writing Intensive Requirement

Communication majors must complete at least one writing intensive course in the major from the following courses:

COMM 308W	Effective Media Writing	3
COMM 315W	Sex, Gender, and Communication	3
COMM 335W	Rhetorical Criticism	3
COMM 400W	Intercultural Communication	3
COMM 412W	Interpersonal Communication Theory and Research	3
COMM 447W	Electronic Media Law and Policy	3

COMM 471W	International Film History	3
COMM 479W	American Film History	3

Internships and Practicum courses

Students may apply three credit hours of COMM 368 Internship toward their major credit hours. Three additional credit hours may count as elective credits toward the overall total credit hour count for the degree. In addition, students may apply only six credits total from the following classes toward the major:

COMM 368	Internship	3-6
COMM 369	Research Practicum	3
COMM 469	Communication Education Practicum	3

Special Topics in Communication Courses and Communication Tutorials

Special Topics in Communication courses and Communication Tutorials courses may be included in a given major when and where appropriate and as approved by the student's communication advisor:

COMM 395	Topics in Communication	1-3
COMM 396	Topics in Communication	1-3
COMM 495	Topics in Communication	1-3
COMM 496	Topics in Communication	1-3
COMM 497	Tutorial Work in Special Topics in Communication	1-3

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity (May not use COMM 270A / THEA 270A)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
COMM 101R	Public Speaking	3
Credit Hours		15
Spring		
Human Behavior (May not use COMM 200S)		3
Interpreting the Past		3
Information Literacy and Research (Can be met by COMM 272G)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
COMM 260	Understanding Media	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4

Language and Culture III		3
Philosophy and Ethics		3
COMM 200S	Introduction to Human Communication	3
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
Language and Culture IV		3
Impact of Technology (Can be met with COMM 280T or COMM 372T)		3
COMM 335W or COMM 445	Rhetorical Criticism or Communication Analysis and Criticism	3
Credit Hours		16
Junior		
Fall		
Foundation course in Major Area		3
Applied Theories or Foundations course in Major Area (depending on major selected)		3
Applied Theories course in Major Area		3
COMM 301	Critical Methodologies	3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
Foundation course in Major Area		3
Applied Theories course in Major Area		3
Applied Theories course in Major Area		3
COMM Elective		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
Applied Theories course in Major Area		3
COMM Writing Intensive Course		3
Senior Experience course ¹		3
Elective course		3
Minor or Elective		3
Credit Hours		15
Spring		
Applied Theories course in Major Area		3
Applied Theories course in Major Area		3
Elective course		3
Elective course		1
Minor or Elective		3
Credit Hours		13
Total Credit Hours		120

¹ Please consult list of Senior Experience options relevant to each major.

Linked BA/BS in Communication and MA in Lifespan and Digital Communication

The linked bachelor's/master's degree in communication/lifespan and digital communication is administered by the Communication and Theatre Arts Department. The purpose of this option is to allow exceptional majors in communication to count up to 12 hours of 500-level graduate coursework towards both the BA or BS in communication and, if accepted, the MA in lifespan and digital communication. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credits for the undergraduate degree and 30 discrete credits for the graduate degree). For more information, please contact Dr. Gary Beck.

Linked BA/BS in Communication and MA in Humanities

Please refer to the Humanities section of this Catalog for information on the linked program leading to a BA or BS in communication and an MA in humanities.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Communication with a Major in Organizational and Interpersonal Communication (BS)

Carla Harrell, Program Director and Chief Departmental Advisor

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

COMM 101R is required to fulfill the Oral Communication requirement.

STAT 130M is required to fulfill the Mathematics requirement (BS only).

COMM 270A/THEA 270A may not be used to satisfy the Human Creativity requirement.

The Information Literacy and Research requirement may be met in the major with COMM 272G.

The Impact of Technology requirement may be met in the major with COMM 280T or COMM 372T.

For the Language and Culture requirement, BA students must have competence through the 202 level (competence is not met by completion of the associate degree); BS students must have competence at the 102 level.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Six Hours of Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Communication Core

BS Core Courses

COMM 200S	Introduction to Human Communication	3
COMM 260	Understanding Media	3
COMM 301	Critical Methodologies	3
COMM 302	Communication Research Methods I	3
COMM writing intensive (W) course (see the major areas for appropriate selection)		3

BS Additional Core Requirements

Six hours of approved 300/400-level social science courses	6
Total Credit Hours	21

Organizational and Interpersonal Communication Major

Carla Harrell, Program Director and Chief Departmental Advisor

Choose nine courses (27 credit hours): three courses (9 credit hours) from Foundations and six courses (18 credit hours) from Applied Theories. Students may take Foundations courses to apply toward Applied Theories courses if they choose to take more than three Foundations courses. The Senior Experience can be met by completing an internship, a study abroad/away, taking a designated service learning course, doing a research practicum, or by enrolling in the Capstone course (COMM 433).

General Education

Complete lower-division requirements	35-47
Complete upper-division requirements (minimum of 6 credit hours)	6

Communication Core

Complete communication core requirements	21

Foundations

Select three of the following:		9
COMM 314	Nonverbal Communication	
COMM 326	Foundations of Group Communication	
COMM 355	Organizational Communication	
COMM 400W	Intercultural Communication	
COMM 401	Communication Theory	
COMM 412W	Interpersonal Communication Theory and Research	
COMM 422	Listening to Self, Others, Nature and the Divine	

Applied Theories

Select six of the following: ¹		18
COMM 300	International Sojourning	
COMM 304	Advanced Public Speaking	
COMM 305	Work-Life Communication	
COMM 315W	Sex, Gender, and Communication	
COMM 323	Leadership and Events Management	
COMM 333	Persuasion	

COMM 351	Interpersonal Communication in Organizations	
COMM 368	Internship	
COMM 405	Communication and Culture in the Middle East	
COMM 408	Health Communication	
COMM 421	Communication and Conflict Management	
COMM 423	Nonviolent Communication and Peace	
COMM 424	Communicating Love	
COMM 425	Family Communication Theory and Research	
COMM 427	Children's Communication Theory and Research	
COMM 433	Capstone	
COMM 456	Organizations and Social Influence	
COMM 489	Health and Interpersonal Communication	
COMM 491	Communication and Activism	
COMM 495	Topics in Communication	
COMM Elective		
Complete COMM elective		3
Total Credit Hours		92-104

¹ Students may take Foundations courses to apply toward Applied Theories courses if they choose to take more than three Foundations courses.

Electives

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

ALL students majoring in programs in Communication, Dance, and Theatre are required to complete a **Senior Experience** as part of their degree. Senior Experiences are designed as stepping stones for students to apply knowledge and skills accrued throughout their coursework toward preparing for future careers. Senior Experience course options will vary by major but include options for an internship, a study abroad/away experience, a service-learning course, a senior capstone, or more specialized experiences within students' chosen majors. Please see descriptions included under each major for more options. Students become eligible for Senior Experience options once they reach 90 credits or with permission of the Senior Experience Coordinator. Students will be directed by their advisor to opportunities that are suited for their area of study and as other opportunities become available. For more information please reach out to the Senior Experience Coordinator, Alison Lietzenmayer.

Cinema & TV Production students need to complete COMM 271 Introduction to Filmmaking prior to enrollment in any Foundations course, and should not enroll in COMM 269.

Departmental Requirements

Majors must maintain a 2.0 GPA or better in the major in order to graduate.

Additional Communication Major Courses

Students pursuing either the BA or the BS degree are required to take 10 Communication classes beyond the core course requirements listed above (these courses include the Senior Experience requirement listed above). Nine of those 10 courses (27 credit hours) must be in the student's selected major (see major details below). One course (3 credit hours) may be 100-200 level and/or from any major area.

The Senior Experience requirement in the Communication program (which includes the Cinema & TV Production major, Communication Studies major, Media Studies major, Professional Communication major, and Strategic Communication and Journalism major) can be achieved by completing opportunities such as the following:

Internship		
COMM 368	Internship	3,6
Study Abroad		
COMM 300	International Sojourning	3
COMM 440	Documentary Filmmaking Study Abroad	3
Other study abroad/study away offerings offered within the Department		
Service Learning		
Approved Service Learning Courses (varies by semester)		
Capstone		
COMM 433	Capstone	3
Research Practicum		
COMM 369	Research Practicum	3
or COMM 469	Communication Education Practicum	
ROAR		
COMM 490	ROAR Communications Agency (available only for Strategic Communication and Journalism majors)	3
COMM Cinema & TV Production Majors may also choose from:		
COMM 439	WHRO Production	
COMM 482	Screenwriting II	
COMM 483	Advanced Cinema Projects	
COMM 486	Advanced Filmmaking	
COMM 493	Feature Film Production	

Communication Electives

Select one COMM elective (3 credit hours), which may be any COMM class that is not in the student's major in addition to the following.

COMM 103R	Voice and Diction	3
COMM 112R	Introduction to Interpersonal Communication	3
COMM 195	Topics in Communication	1-3
COMM 225	Introduction to Production Technology	3
COMM 269	Visual Storytelling	3
COMM 270A	Film Appreciation	3
COMM 271	Introduction to Filmmaking	3
COMM 272G	Digital Literacy	3
COMM 280T	Entertainment Technologies	3
COMM 295	Topics in Communication	1-3
COMM 304	Advanced Public Speaking	3
COMM 307	Understanding European Film	3
COMM 321	Production Management for Television and Stage	3
COMM 325	Sound Design for Stage and Camera	3
COMM 341	Lighting Design for Stage and Film	3
COMM 349	Costume Design for Stage and Camera	3
COMM 354	Drafting and Rendering for Stage and Screen	3
COMM 356	3D Animation 1	3
COMM 357	3D Animation 2	3
COMM 359	Costume Crafts	3
COMM 367	Cooperative Education	1-3
COMM 369	Research Practicum	3
COMM 382	Reporting News for Television and Digital Media	3
COMM 453	Voice Over	3
COMM 469	Communication Education Practicum	3

Writing Intensive Requirement

Communication majors must complete at least one writing intensive course in the major from the following courses:

COMM 308W	Effective Media Writing	3
COMM 315W	Sex, Gender, and Communication	3
COMM 335W	Rhetorical Criticism	3
COMM 400W	Intercultural Communication	3
COMM 412W	Interpersonal Communication Theory and Research	3
COMM 447W	Electronic Media Law and Policy	3
COMM 471W	International Film History	3
COMM 479W	American Film History	3

Internships and Practicum courses

Students may apply three credit hours of COMM 368 Internship toward their major credit hours. Three additional credit hours may count as elective credits toward the overall total credit hour count for the degree. In addition, students may apply only six credits total from the following classes toward the major:

COMM 368	Internship	3-6
COMM 369	Research Practicum	3
COMM 469	Communication Education Practicum	3

Special Topics in Communication Courses and Communication Tutorials

Special Topics in Communication courses and Communication Tutorials courses may be included in a given major when and where appropriate and as approved by the student's communication advisor:

COMM 395	Topics in Communication	1-3
COMM 396	Topics in Communication	1-3
COMM 495	Topics in Communication	1-3
COMM 496	Topics in Communication	1-3
COMM 497	Tutorial Work in Special Topics in Communication	1-3

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity (May not use COMM 270A / THEA 270A)		3
Human Behavior (COMM 200S may not be used)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
COMM 101R	Public Speaking	3
Credit Hours		15
Spring		
Interpreting the Past		3
Mathematical Skills: STAT 130M Required		3
Information Literacy and Research (can be met by COMM 272G)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
COMM 260	Understanding Media	3
Credit Hours		15

Sophomore

Fall

ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Philosophy and Ethics		3
COMM Elective		3
COMM 200S	Introduction to Human Communication	3
Credit Hours		16

Spring

Literature		3
Nature of Science II		4
Impact of Technology (Can be met with COMM 280T or Comm 372T)		3
Foundation Course in Major Area		3
COMM 302	Communication Research Methods I	3
Credit Hours		16

Junior

Fall

Foundation course in Major Area		3
Applied Theories or Foundations course in Major Area (depending on major selected)		3
300/400-level Social Science course		3
COMM 301	Critical Methodologies	3
Upper-Division General Education Course or Minor		3
Credit Hours		15

Spring

Applied Theories course in Major Area		3
Applied Theories course in Major Area		3
Applied Theories course in Major Area		3
300/400-level Social Science course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15

Senior

Fall

Applied Theories course in Major Area		3
Applied Theories course in Major Area		3
Senior Experience Course ¹		3
COMM Writing Intensive Course		3
Elective course (or Professional Communication elective course if choose Professional Communication major)		3
Credit Hours		15

Spring

Elective courses (or Professional Communication elective courses if choose Professional Communication major)		9
Applied Theories course in Major Area		3
Elective course		1
Credit Hours		13
Total Credit Hours		120

1 Please consult list of Senior Experience options relevant to each major.

Linked BA/BS in Communication and MA in Lifespan and Digital Communication

The linked bachelor's/master's degree in communication/lifespan and digital communication is administered by the Communication and Theatre Arts Department. The purpose of this option is to allow exceptional majors in communication to count up to 12 hours of 500-level graduate coursework towards both the BA or BS in communication and, if accepted, the MA in lifespan and digital communication. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credits for the undergraduate degree and 30 discrete credits for the graduate degree). For more information, please contact Dr. Gary Beck.

Linked BA/BS in Communication and MA in Humanities

Please refer to the Humanities section of this Catalog for information on the linked program leading to a BA or BS in communication and an MA in humanities.

Bachelor of Science Communication with a Major in Professional Communication (BS)

Fran Hassencahl, Chief Departmental Advisor for Professional Communication Major

The Bachelor of Science in Professional Communication is also available through ODUGlobal. Online students who have completed a university parallel associate degree can complete two additional years of course work through the University's ODUGlobal program in order to earn a BS in Communication with a major in Professional Communication. Online students without a university parallel associate degree must complete the lower-division general education requirements. The Senior Experience can be met by completing an internship, a study abroad/away, taking a designated service learning course, doing a research practicum, or by enrolling in the Capstone course (COMM 433).

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3

The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

COMM 101R is required to fulfill the Oral Communication requirement.

STAT 130M is required to fulfill the Mathematics requirement (BS only).

COMM 270A/THEA 270A may not be used to satisfy the Human Creativity requirement.

The Information Literacy and Research requirement may be met in the major with COMM 272G.

The Impact of Technology requirement may be met in the major with COMM 280T, COMM 372T or CS 300T.

For the Language and Culture requirement, BA students must have competence through the 202 level (competence is not met by completion of the associate degree); BS students must have competence at the 102 level.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Six Hours of Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Communication Core

BS Core Courses

COMM 200S	Introduction to Human Communication	3
COMM 260	Understanding Media	3
COMM 301	Critical Methodologies	3
COMM 302	Communication Research Methods I	3
COMM writing intensive (W) course (see the major areas for appropriate selection)		3

BS Additional Core Requirements

Six hours of approved 300/400-level social science courses	6
Total Credit Hours	21

Professional Communication Major

General Education

Complete lower-division requirements	35-47
Complete upper-division requirements (met in the major through Professional Communication electives)	

Communication Core		
Complete communication core requirements		21
Communication Foundations		
Select two of the following:		6
COMM 305	Work-Life Communication	
COMM 326	Foundations of Group Communication	
COMM 351	Interpersonal Communication in Organizations	
COMM 372T	Introduction to New Media Technologies	
Applied Theories		
Select five from the following:		15
COMM 303	Introduction to Strategic Communications	
COMM 304	Advanced Public Speaking	
COMM 305	Work-Life Communication	
COMM 308W	Effective Media Writing	
COMM 310	Strategic Communications Campaigns	
COMM 314	Nonverbal Communication	
COMM 315W	Sex, Gender, and Communication	
COMM 323	Leadership and Events Management	
COMM 333	Persuasion	
COMM 355	Organizational Communication	
COMM 335W	Rhetorical Criticism	
COMM 368	Internship	
COMM 400W	Intercultural Communication	
COMM 401	Communication Theory	
COMM 403	Public Information and Crisis Communications	
COMM 412W	Interpersonal Communication Theory and Research	
COMM 421	Communication and Conflict Management	
COMM 433	Capstone	
COMM 447W	Electronic Media Law and Policy	
COMM 456	Organizations and Social Influence	
COMM 478	Media Marketing and Promotion	
Organizational Foundations *		
Select four from the following:		12
CS 300T	Computers in Society	
FIN 331	Legal Environment of Business	
MGMT 325	Contemporary Organizations and Management	
MGMT 330	Organizational Behavior	
MGMT 340	Human Resource Management	
MGMT 350	Employee Relations Problems and Practices	
MKTG 311	Marketing Principles and Problems	
MKTG 316	Professional Selling	
MKTG 402	Consumer Behavior	
MKTG 403	Advertising Strategy	
MKTG 411	Multi-National Marketing	
MKTG 455	Social Media Marketing	
PHIL 303E	Business Ethics	
PSYC 303	Industrial/Organizational Psychology	
PSYC 304	Social Psychology	
PSYC 343	Personnel Psychology	
PSYC 344	Human Factors	
PSYC 345	Organizational Psychology	
PSYC 408	Theories of Personality	
Total Credit Hours		89-101

* Meets the upper-division general education requirement

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity (May not use COMM 270A / THEA 270A)		3
Human Behavior (COMM 200S may not be used)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
COMM 101R	Public Speaking	3
Credit Hours		15
Spring		
Interpreting the Past		3
Mathematical Skills: STAT 130M Required		3
Information Literacy and Research (can be met by COMM 272G)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
COMM 260	Understanding Media	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Philosophy and Ethics		3
COMM Elective		3
COMM 200S	Introduction to Human Communication	3
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
Impact of Technology (Can be met with COMM 280T or Comm 372T)		3
Foundation Course in Major Area		3
COMM 302	Communication Research Methods I	3
Credit Hours		16
Junior		
Fall		
Foundation course in Major Area		3

Applied Theories or Foundations course in Major Area (depending on major selected)	3
300/400-level Social Science course	3
COMM 301 Critical Methodologies	3
Upper-Division General Education Course or Minor	3
Credit Hours	15
Spring	
Applied Theories course in Major Area	3
Applied Theories course in Major Area	3
Applied Theories course in Major Area	3
300/400-level Social Science course	3
Upper-Division General Education Course or Minor	3
Credit Hours	15
Senior	
Fall	
Applied Theories course in Major Area	3
Applied Theories course in Major Area	3
Senior Experience Course ¹	3
COMM Writing Intensive Course	3
Elective course (or Professional Communication elective course if choose Professional Communication major)	3
Credit Hours	15
Spring	
Elective courses (or Professional Communication elective courses if choose Professional Communication major)	9
Applied Theories course in Major Area	3
Elective course	1
Credit Hours	13
Total Credit Hours	120

¹ Please consult list of Senior Experience options relevant to each major.

Linked BA/BS in Communication and MA in Lifespan and Digital Communication

The linked bachelor's/master's degree in communication/lifespan and digital communication is administered by the Communication and Theatre Arts Department. The purpose of this option is to allow exceptional majors in communication to count up to 12 hours of 500-level graduate coursework towards both the BA or BS in communication and, if accepted, the MA in lifespan and digital communication. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credits for the undergraduate degree and 30 discrete credits for the graduate degree). For more information, please contact Dr. Gary Beck.

Linked BA/BS in Communication and MA in Humanities

Please refer to the Humanities section of this Catalog for information on the linked program leading to a BA or BS in communication and an MA in humanities.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program

prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Communication with a Major in Strategic Communication and Journalism (BA)

Starting with freshman admitted students in Fall 2025, the Department of Communication & Theatre Arts is introducing a combined Strategic Communication and Journalism major. The new major will feature two specializations: **Strategic Communication** and **Journalism & Public Information**. While not official designations, these specializations help students tailor their academic experience to align with internships and future career paths.

Students who declared a Strategic Communication major prior to Fall 2025 will complete their degree from the previous catalog but will be permitted to take any classes introduced as part of the Strategic Communication and Journalism major as part of their major requirements. For questions about the Strategic Communication and Journalism program and either specialization, please contact program director Brendan O'Hallam at bhallar@odu.edu.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3

Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

COMM 101R is required to fulfill the Oral Communication requirement.

STAT 130M is required to fulfill the Mathematics requirement (BS only).

COMM 270A/THEA 270A may not be used to satisfy the Human Creativity requirement.

COMM 200S may not be used to satisfy the Human Behavior requirement.

The Information Literacy and Research requirement may be met in the major with COMM 272G.

The Impact of Technology requirement may be met in the major with COMM 280T.

For the Language and Culture requirement, BA students must have competence through the 202 level (competence is not met by completion of the associate degree); BS students must have competence at the 102 level.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Six Hours of Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Communication Core

BA Core Courses

COMM 200S	Introduction to Human Communication	3
COMM 260	Understanding Media	3
COMM 301	Critical Methodologies	3
COMM writing intensive (W) course (see the major areas for appropriate selection)		3

BA Additional Core Course

COMM 335W	Rhetorical Criticism	3
or COMM 445	Communication Analysis and Criticism	

Total Credit Hours **15**

Strategic Communication and Journalism Major

Brendan O'Hallarn, Ph.D., Program Director

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements	6
Complete foreign language coursework through the 202 level	0-6

Communication Core

Complete communication core requirements	15

Foundations

COMM 308W	Effective Media Writing	3
Complete the prescribed Foundations courses from one of the following specialization areas:		6

Strategic Communication:

COMM 303	Introduction to Strategic Communications
COMM 478	Media Marketing and Promotion

Journalism & Public Information:

COMM 363	Introduction to Journalism
ENGL 486	Media Law and Ethics
or COMM 447W Electronic Media Law and Policy	

Complete a Senior Experience course: **3**

COMM 368	Internship
or COMM 433	Capstone
or COMM 490	ROAR Communications Agency

Complete two courses from one of the following specialization areas: **6**

Strategic Communication (select two):

COMM 309	Media Relations
COMM 310	Strategic Communications Campaigns (Strategic Communication)
COMM 437	Podcasting
COMM 438	The Advertising Industry
COMM 457	Market Research
COMM 460	Social Marketing
COMM 462	Sport Communication
COMM 484	Strategic Media Design and Production
MKTG 402	Consumer Behavior

Journalism & Public Information (select two):

COMM 309	Media Relations
COMM 387	TV News Production
COMM 403	Public Information and Crisis Communications
COMM 404	Emergency Management Communication
COMM 435	Arts Journalism
COMM 436	Multimedia Journalism
COMM 437	Podcasting

COMM 462	Sport Communication	
ENGL 385	The Press and Making of American Democracy	
Applied Theories *		
Select three of the following:		9
COMM 311	Strategic Communications Tactics	
COMM 323	Leadership and Events Management	
COMM 333	Persuasion	
COMM 454	Strategic Communications Case Studies	
COMM 455	Critical Analysis of Journalism	
COMM 456	Organizations and Social Influence	
COMM 472	New Media Topics: Theories and Practices	
COMM 491	Communication and Activism	
COMM 494	Entrepreneurship and Public Relations	
COMM 495	Topics in Communication	
ENGL 383	Digital Journalism	
COMM Elective		
Complete COMM Elective		3
Total Credit Hours		89-101

* With advisor approval, students may take discipline-specific classes for the other specialization to satisfy Applied Theories requirements.

Electives

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

ALL students majoring in programs in Communication, Dance, and Theatre are required to complete a **Senior Experience** as part of their degree. Senior Experiences are designed as stepping stones for students to apply knowledge and skills accrued throughout their coursework toward preparing for future careers. Senior Experience course options will vary by major but include options for an internship, a study abroad/away experience, a service-learning course, a senior capstone, or more specialized experiences within students' chosen majors. Please see descriptions included under each major for more options. Students become eligible for Senior Experience options once they reach 90 credits or with permission of the Senior Experience Coordinator. Students will be directed by their advisor to opportunities that are suited for their area of study and as other opportunities become available. For more information please reach out to the Senior Experience Coordinator, Alison Lietzenmayer.

Cinema & TV Production students need to complete COMM 271 Introduction to Filmmaking prior to enrollment in any Foundations course, and should not enroll in COMM 269.

Departmental Requirements

Majors must maintain a 2.0 GPA or better in the major in order to graduate.

Additional Communication Major Courses

Students pursuing either the BA or the BS degree are required to take 10 Communication classes beyond the core course requirements listed above (these courses include the Senior Experience requirement listed above). Nine of those 10 courses (27 credit hours) must be in the student's selected major (see major details below). One course (3 credit hours) may be 100-200 level and/or from any major area.

The Senior Experience requirement in the Communication program (which includes the Cinema & TV Production major, Communication Studies major, Media Studies major, Professional Communication major, and Strategic Communication and Journalism major) can be achieved by completing opportunities such as the following:

Internship

COMM 368	Internship	3,6

Study Abroad

COMM 300	International Sojourning	3
COMM 440	Documentary Filmmaking Study Abroad	3

Other study abroad/study away offerings offered within the Department

Service Learning

Approved Service Learning Courses (varies by semester)

Capstone

COMM 433	Capstone	3

Research Practicum

COMM 369	Research Practicum	3
or COMM 469	Communication Education Practicum	

ROAR

COMM 490	ROAR Communications Agency (available only for Strategic Communication and Journalism majors)	3

COMM Cinema & TV Production Majors may also choose from:

COMM 439	WHRO Production	
COMM 482	Screenwriting II	
COMM 483	Advanced Cinema Projects	
COMM 486	Advanced Filmmaking	
COMM 493	Feature Film Production	

Communication Electives

Select one COMM elective (3 credit hours), which may be any COMM class that is not in the student's major in addition to the following.

COMM 103R	Voice and Diction	3
COMM 112R	Introduction to Interpersonal Communication	3
COMM 195	Topics in Communication	1-3
COMM 225	Introduction to Production Technology	3
COMM 269	Visual Storytelling	3
COMM 270A	Film Appreciation	3
COMM 271	Introduction to Filmmaking	3
COMM 272G	Digital Literacy	3
COMM 280T	Entertainment Technologies	3
COMM 295	Topics in Communication	1-3
COMM 304	Advanced Public Speaking	3
COMM 307	Understanding European Film	3
COMM 321	Production Management for Television and Stage	3
COMM 325	Sound Design for Stage and Camera	3
COMM 341	Lighting Design for Stage and Film	3
COMM 349	Costume Design for Stage and Camera	3
COMM 354	Drafting and Rendering for Stage and Screen	3
COMM 356	3D Animation 1	3
COMM 357	3D Animation 2	3
COMM 359	Costume Crafts	3
COMM 367	Cooperative Education	1-3
COMM 369	Research Practicum	3
COMM 382	Reporting News for Television and Digital Media	3
COMM 453	Voice Over	3
COMM 469	Communication Education Practicum	3

Writing Intensive Requirement

Communication majors must complete at least one writing intensive course in the major from the following courses:

COMM 308W	Effective Media Writing	3
COMM 315W	Sex, Gender, and Communication	3
COMM 335W	Rhetorical Criticism	3
COMM 400W	Intercultural Communication	3
COMM 412W	Interpersonal Communication Theory and Research	3
COMM 447W	Electronic Media Law and Policy	3
COMM 471W	International Film History	3
COMM 479W	American Film History	3

Internships and Practicum courses

Students may apply three credit hours of COMM 368 Internship toward their major credit hours. Three additional credit hours may count as elective credits toward the overall total credit hour count for the degree. In addition, students may apply only six credits total from the following classes toward the major:

COMM 368	Internship	3-6
COMM 369	Research Practicum	3
COMM 469	Communication Education Practicum	3

Special Topics in Communication Courses and Communication Tutorials

Special Topics in Communication courses and Communication Tutorials courses may be included in a given major when and where appropriate and as approved by the student's communication advisor:

COMM 395	Topics in Communication	1-3
COMM 396	Topics in Communication	1-3
COMM 495	Topics in Communication	1-3
COMM 496	Topics in Communication	1-3
COMM 497	Tutorial Work in Special Topics in Communication	1-3

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity (May not use COMM 270A / THEA 270A)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
COMM 101R	Public Speaking	3
Credit Hours		15
Spring		
Human Behavior (May not use COMM 200S)		3
Interpreting the Past		3
Information Literacy and Research (Can be met by COMM 272G)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
COMM 260	Understanding Media	3
Credit Hours		15

Sophomore

Fall

ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Philosophy and Ethics		3
COMM 200S	Introduction to Human Communication	3
Credit Hours		16

Spring

COMM 308W	Effective Media Writing	3
Literature		3
Nature of Science II		4
Language and Culture IV		3
Impact of Technology (Can be met with COMM 280T)		3
Credit Hours		16

Junior

Fall

COMM 368 or COMM 433 or COMM 490	Internship or Capstone or ROAR Communications Agency	3
COMM 301	Critical Methodologies	3
COMM 335W or COMM 445	Rhetorical Criticism or Communication Analysis and Criticism	3
Applied Theories course		3
Upper-Division General Education or Minor course		3
Minor or Elective course		3
Credit Hours		18

Spring

Foundation course		3
Foundation course		3
Applied Theories course		3
COMM Elective		3
Upper-Division General Education or Minor course		3
Credit Hours		15

Senior

Fall

Major course		3
Applied Theories course		3
COMM Writing Intensive course		3
Senior Experience course (ROAR/Internship/Capstone) ¹		3
Credit Hours		12

Spring

Major course		3
Minor or Elective course		3
Elective course		3
Elective course		3

Elective course	1
Credit Hours	13
Total Credit Hours	120

- ¹ Please consult list of Senior Experience options relevant to each major.

Linked BA/BS in Communication and MA in Lifespan and Digital Communication

The linked bachelor's/master's degree in communication/lifespan and digital communication is administered by the Communication and Theatre Arts Department. The purpose of this option is to allow exceptional majors in communication to count up to 12 hours of 500-level graduate coursework towards both the BA or BS in communication and, if accepted, the MA in lifespan and digital communication. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credits for the undergraduate degree and 30 discrete credits for the graduate degree). For more information, please contact Dr. Gary Beck.

Linked BA/BS in Communication and MA in Humanities

Please refer to the Humanities section of this Catalog for information on the linked program leading to a BA or BS in communication and an MA in humanities.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://>

catalog.odu.edu/graduate/business/public-service/). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Communication with a Major in Strategic Communication and Journalism (BS)

Starting with freshman admitted students in Fall 2025, the Department of Communication & Theatre Arts is introducing a combined Strategic Communication and Journalism major. The new major will feature two specializations: **Strategic Communication** and **Journalism & Public Information**. While not official designations, these specializations help students tailor their academic experience to align with internships and future career paths.

Students who declared a Strategic Communication major prior to Fall 2025 will complete their degree from the previous catalog but will be permitted to take any classes introduced as part of the Strategic Communication and Journalism major as part of their major requirements. For questions about the Strategic Communication and Journalism program and either specialization, please contact program director Brendan O'Hallam at bohallam@odu.edu.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

COMM 101R is required to fulfill the Oral Communication requirement.

STAT 130M is required to fulfill the Mathematics requirement (BS only).

COMM 270A/THEA 270A may not be used to satisfy the Human Creativity requirement.

COMM 200S may not be used to satisfy the Human Behavior requirement.

The Information Literacy and Research requirement may be met in the major with COMM 272G.

The Impact of Technology requirement may be met in the major with COMM 280T.

For the Language and Culture requirement, BA students must have competence through the 202 level (competence is not met by completion of the associate degree); BS students must have competence at the 102 level.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Six Hours of Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Communication Core

BS Core Courses		
COMM 200S	Introduction to Human Communication	3
COMM 260	Understanding Media	3
COMM 301	Critical Methodologies	3
COMM 302	Communication Research Methods I	3
COMM writing intensive (W) course (see the major areas for appropriate selection)		3
BS Additional Core Requirements		
Six hours of approved 300/400-level social science courses		6
Total Credit Hours		21

Strategic Communication and Journalism Major

Brendan O'Hallarn, Ph.D., Program Director

General Education		
Complete lower-division requirements		38-44
Complete upper-division requirements		6
Communication Core		
Complete communication core requirements		21
Foundations		
COMM 308W	Effective Media Writing	3
Complete the prescribed Foundations courses from one of the following specialization areas:		6
Strategic Communication:		
COMM 303	Introduction to Strategic Communications	
COMM 478	Media Marketing and Promotion	
Journalism & Public Information:		
COMM 363	Introduction to Journalism	
ENGL 486	Media Law and Ethics	

or COMM 447W Electronic Media Law and Policy		
Complete a Senior Experience course:		3
COMM 368	Internship	
or COMM 433 Capstone		
or COMM 490 ROAR Communications Agency		
Complete two courses from one of the following specialization areas:		6
Strategic Communication (select two):		
COMM 309	Media Relations	
COMM 310	Strategic Communications Campaigns	
COMM 437	Podcasting	
COMM 438	The Advertising Industry	
COMM 457	Market Research	
COMM 460	Social Marketing	
COMM 462	Sport Communication	
COMM 484	Strategic Media Design and Production	
MKTG 402	Consumer Behavior	
Journalism & Public Information (select two):		
COMM 309	Media Relations	
COMM 387	TV News Production	
COMM 403	Public Information and Crisis Communications	
COMM 404	Emergency Management Communication	
COMM 435	Arts Journalism	
COMM 436	Multimedia Journalism	
COMM 437	Podcasting	
COMM 462	Sport Communication	
ENGL 385	The Press and Making of American Democracy	
Applied Theories *		
Select three of the following:		9
COMM 311	Strategic Communications Tactics	
COMM 323	Leadership and Events Management	
COMM 333	Persuasion	
COMM 454	Strategic Communications Case Studies	
COMM 455	Critical Analysis of Journalism	
COMM 456	Organizations and Social Influence	
COMM 472	New Media Topics: Theories and Practices	
COMM 491	Communication and Activism	
COMM 494	Entrepreneurship and Public Relations	
COMM 495	Topics in Communication	
ENGL 383	Digital Journalism	
COMM Elective		
Complete COMM Elective		3
Total Credit Hours		95-101

* With advisor approval, students may take discipline-specific classes for the other specialization to satisfy Applied Theories requirements.

Electives

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

ALL students majoring in programs in Communication, Dance, and Theatre are required to complete a **Senior Experience** as part of their degree. Senior Experiences are designed as stepping stones for students to apply knowledge and skills accrued throughout their coursework toward preparing for future careers. Senior Experience course options will vary by major but include

options for an internship, a study abroad/away experience, a service-learning course, a senior capstone, or more specialized experiences within students' chosen majors. Please see descriptions included under each major for more options. Students become eligible for Senior Experience options once they reach 90 credits or with permission of the Senior Experience Coordinator. Students will be directed by their advisor to opportunities that are suited for their area of study and as other opportunities become available. For more information please reach out to the Senior Experience Coordinator, Alison Lietzenmayer.

Cinema & TV Production students need to complete COMM 271 Introduction to Filmmaking prior to enrollment in any Foundations course, and should not enroll in COMM 269.

Departmental Requirements

Majors must maintain a 2.0 GPA or better in the major in order to graduate.

Additional Communication Major Courses

Students pursuing either the BA or the BS degree are required to take 10 Communication classes beyond the core course requirements listed above (these courses include the Senior Experience requirement listed above). Nine of those 10 courses (27 credit hours) must be in the student's selected major (see major details below). One course (3 credit hours) may be 100-200 level and/or from any major area.

The Senior Experience requirement in the Communication program (which includes the Cinema & TV Production major, Communication Studies major, Media Studies major, Professional Communication major, and Strategic Communication and Journalism major) can be achieved by completing opportunities such as the following:

Internship

COMM 368	Internship	3,6

Study Abroad

COMM 300	International Sojourning	3
COMM 440	Documentary Filmmaking Study Abroad	3

Other study abroad/study away offerings offered within the Department

Service Learning

Approved Service Learning Courses (varies by semester)

Capstone

COMM 433	Capstone	3

Research Practicum

COMM 369	Research Practicum	3
or COMM 469	Communication Education Practicum	

ROAR

COMM 490	ROAR Communications Agency (available only for Strategic Communication and Journalism majors)	3

COMM Cinema & TV Production Majors may also choose from:

COMM 439	WHRO Production	
COMM 482	Screenwriting II	
COMM 483	Advanced Cinema Projects	
COMM 486	Advanced Filmmaking	
COMM 493	Feature Film Production	

Communication Electives

Select one COMM elective (3 credit hours), which may be any COMM class that is not in the student's major in addition to the following.

COMM 103R	Voice and Diction	3
COMM 112R	Introduction to Interpersonal Communication	3
COMM 195	Topics in Communication	1-3
COMM 225	Introduction to Production Technology	3
COMM 269	Visual Storytelling	3
COMM 270A	Film Appreciation	3

COMM 271	Introduction to Filmmaking	3
COMM 272G	Digital Literacy	3
COMM 280T	Entertainment Technologies	3
COMM 295	Topics in Communication	1-3
COMM 304	Advanced Public Speaking	3
COMM 307	Understanding European Film	3
COMM 321	Production Management for Television and Stage	3
COMM 325	Sound Design for Stage and Camera	3
COMM 341	Lighting Design for Stage and Film	3
COMM 349	Costume Design for Stage and Camera	3
COMM 354	Drafting and Rendering for Stage and Screen	3
COMM 356	3D Animation 1	3
COMM 357	3D Animation 2	3
COMM 359	Costume Crafts	3
COMM 367	Cooperative Education	1-3
COMM 369	Research Practicum	3
COMM 382	Reporting News for Television and Digital Media	3
COMM 453	Voice Over	3
COMM 469	Communication Education Practicum	3

Writing Intensive Requirement

Communication majors must complete at least one writing intensive course in the major from the following courses:

COMM 308W	Effective Media Writing	3
COMM 315W	Sex, Gender, and Communication	3
COMM 335W	Rhetorical Criticism	3
COMM 400W	Intercultural Communication	3
COMM 412W	Interpersonal Communication Theory and Research	3
COMM 447W	Electronic Media Law and Policy	3
COMM 471W	International Film History	3
COMM 479W	American Film History	3

Internships and Practicum courses

Students may apply three credit hours of COMM 368 Internship toward their major credit hours. Three additional credit hours may count as elective credits toward the overall total credit hour count for the degree. In addition, students may apply only six credits total from the following classes toward the major:

COMM 368	Internship	3-6
COMM 369	Research Practicum	3
COMM 469	Communication Education Practicum	3

Special Topics in Communication Courses and Communication Tutorials

Special Topics in Communication courses and Communication Tutorials courses may be included in a given major when and where appropriate and as approved by the student's communication advisor:

COMM 395	Topics in Communication	1-3
COMM 396	Topics in Communication	1-3
COMM 495	Topics in Communication	1-3
COMM 496	Topics in Communication	1-3
COMM 497	Tutorial Work in Special Topics in Communication	1-3

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly

encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity (May not use COMM 270A / THEA 270A)		3
Human Behavior (COMM 200S may not be used)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
COMM 101R	Public Speaking	3
Credit Hours		15
Spring		
Interpreting the Past		3
Mathematical Skills: STAT 130M Required		3
Information Literacy and Research (can be met by COMM 272G)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
COMM 260	Understanding Media	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Philosophy and Ethics		3
COMM Elective		3
COMM 200S		3
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
Impact of Technology (Can be met with COMM 280T)		3
COMM 308W	Effective Media Writing	3
Credit Hours		13
Junior		
Fall		
COMM 368 or COMM 433 or COMM 490	Internship or Capstone or ROAR Communications Agency	3
COMM 301	Critical Methodologies	3
COMM 302	Communication Research Methods I	3
Applied Theories course		3
300/400-level Social Science course		3
Upper-Division General Education or Minor course		3
Credit Hours		18
Spring		
Foundations course		3
Foundations course		3

Major course	3
300/400-level Social Science course	3
Upper-Division General Education or Minor course	3
Credit Hours	15
Senior	
Fall	
Major course	3
Applied Theories course	3
Applied Theories course	3
COMM Writing Intensive course	3
Senior Experience course (ROAR/Internship/Capstone) ¹	3
Credit Hours	15
Spring	
Elective course	3
Elective course	3
Elective course	3
Elective course	3
Elective course	1
Credit Hours	13
Total Credit Hours	120

¹ Please consult list of Senior Experience options relevant to each major.

Linked BA/BS in Communication and MA in Lifespan and Digital Communication

The linked bachelor's/master's degree in communication/lifespan and digital communication is administered by the Communication and Theatre Arts Department. The purpose of this option is to allow exceptional majors in communication to count up to 12 hours of 500-level graduate coursework towards both the BA or BS in communication and, if accepted, the MA in lifespan and digital communication. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credits for the undergraduate degree and 30 discrete credits for the graduate degree). For more information, please contact Dr. Gary Beck.

Linked BA/BS in Communication and MA in Humanities

Please refer to the Humanities section of this Catalog for information on the linked program leading to a BA or BS in communication and an MA in humanities.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/>)

graduate/stromecollegeofbusiness/) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Communication Minor Requirements

COMM 101R or COMM 103R or COMM 112R and COMM 200S are prerequisite courses for the minor and are not included in the calculation of the GPA for the minor. The requirements for a minor in communication are twelve hours of communication courses at the 300- and 400-level excluding the following courses: COMM 367, COMM 375, and COMM 368.

For completion of a minor, a student must have an overall grade point average of C (2.00) or better in all 300- and 400-level courses specified as a requirement for the minor. Students must complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Students pursuing a major in Cinema and TV Production, Communication Studies, Media Studies, Professional Communication, or Strategic Communication and Journalism may not minor in Communication.

Minor Film Studies Minor Requirements

A minor in film studies consists of 15 hours of course work. COMM 270A is a prerequisite for the minor and is not included in the calculation of the grade point average for the minor. Requirements for the minor are as follows.

COMM 388	Motion Picture Aesthetics	3
Select four courses from the list below:		12
COMM 307	Understanding European Film	
COMM 330	The Short Script	
COMM 334	Narrative Adaptation	
COMM 346	Screenwriting I	
COMM 361	Editing Aesthetics	
COMM 380	Documentary Production I	
COMM 430	TV Screenwriting	

COMM 440	Documentary Filmmaking Study Abroad
COMM 471W	International Film History
COMM 479W	American Film History
COMM 482	Screenwriting II
COMM 485	Film and Television Genres
A maximum of two of the following courses may be selected:	
FR 469	A History of French Cinema
SPAN 469	Hispanic Film
GER 445	German Cinema I
Total Credit Hours	
15	

For completion of the minor, a student must have an overall grade point average of C (2.00) or better in all 300- and 400-level courses specified as a requirement for the minor exclusive of prerequisite courses. Students must complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Students pursuing a major in Cinema and TV Production, Communication Studies, Media Studies, Professional Communication, or Strategic Communication and Journalism may not minor in Film Studies.

Minor Media Studies Minor Requirements

The minor in Media Studies consists of 15 hours of course work taken from designated courses in the Department of Communication & Theatre Arts.

The minor requires COMM 260 and least 12 additional credits of designated course work at the 300-400 level. COMM 260 is a prerequisite for several of the course options and is not included in the calculation of the GPA for the minor. See below for course options:

Select from the following:		12
COMM 339	Entertainment Journalism	
COMM 340	Media and Popular Culture	
COMM 344	Introduction to Media Industries	
COMM 345	Media Audiences	
COMM 346	Screenwriting I	
COMM 372T	Introduction to New Media Technologies	
COMM 382	Reporting News for Television and Digital Media	
COMM 395	Topics in Communication	
COMM 441	The Music Industry and Communication	
COMM 442	Media Spaces	
COMM 447W	Electronic Media Law and Policy	
COMM 448	Global Media Industries	
COMM 455	Critical Analysis of Journalism	
COMM 471W	International Film History	
COMM 472	New Media Topics: Theories and Practices	
COMM 473	Television and Society	
COMM 474	Reality Television	
COMM 478	Media Marketing and Promotion	
COMM 485	Film and Television Genres	
COMM 488	Introduction to Critical Race and Media Studies	
COMM 491	Communication and Activism	
COMM 495	Topics in Communication	
Total Credit Hours		12

For completion of a minor, a student must have an overall grade point average of C (2.00) or better in all 300- and 400-level courses specified as a requirement for the minor. Students must complete a minimum of six hours

in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Students pursuing a major in Cinema and TV Production, Communication Studies, Media Studies, Professional Communication, or Strategic Communication and Journalism may not minor in Media Studies.

Bachelor of Arts

Theatre & Dance with a Major in Cinema Production (BA)

Carolina Conte, Chief Departmental Advisor for Cinema Production

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Oral Communication requirement is met in the major.

Language and Culture: Proficiency through 202 level; proficiency not met by completion of an associate degree.

Human Creativity: Design/technology majors, performance majors, theatre majors, and PreK-12 theatre education majors may not use THEA 241A; cinema production majors may not use COMM 270A/THEA 270A; dance and PreK-12 dance education majors may not use DANC 185A.

The Nature of Science: PreK-12 dance education majors must take BIOL 117N/BIOL 118N.

The Impact of Technology requirement is satisfied by TLED 430W for PreK-12 dance education and PreK-12 theatre education majors.

COMM 200S preferred for Human Behavior requirement.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure

- Option D. Six hours of elective upper-level course work from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Theatre and Dance Core

All students pursuing a BA degree in Theatre and Dance must complete the core requirements listed below.

THEA/DANC 152R	Acting One	3
THEA/DANC/COMM 271	Introduction to Filmmaking	3
THEA/DANC 390	Improvisation	3
THEA/DANC 373	Production/Performance Lab	1
THEA/DANC 374	Production/Performance Lab	1
THEA/DANC 473	Production/Performance Lab	1
THEA/DANC 474	Production/Performance Lab	1
Total Credit Hours		13

Cinema Production Major

David Mallin, Program Director

Carolina Conte, Chief Departmental Advisor for Cinema Production

Majors must have an overall grade point average of C or better in the major.

The Senior Experience can be fulfilled by studying abroad or by participation in one of the film program's departmental productions (THEA 486 or THEA 493).

If a film studies minor is elected, students may not use the same film courses to fulfill requirements for the major and minor.

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6
Complete foreign language coursework through the 202 level	0-6

Theatre and Dance Core

Complete theatre and dance core requirements	13

Cinema Production

THEA 225	Introduction to Production Technology	3
THEA 270A	Film Appreciation	3
THEA 330	The Short Script	3
THEA 346	Screenwriting I	3
THEA 383	Directing the Actor	3
THEA 385	Cinematography	3
THEA 386	Post-Production 2	3
THEA 388	Motion Picture Aesthetics	3
THEA 446 or THEA 483	Directing for the Camera Advanced Cinema Projects	3

THEA 471W or THEA 479W	International Film History American Film History	3
THEA 486	Advanced Filmmaking (meets Senior Experience requirement)	3
THEA/DANC Electives		6
Total Credit Hours		96-108

Elective Credit

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

Departmental Requirements for Bachelor of Arts in Theatre and Dance

ODU offers a Bachelor of Arts (B.A.) in Theatre and Dance with seven majors: Cinema Production, Dance, Dance Education, Design/Technology, Performance, Theatre, and Theatre Education. All students pursuing the BA in Theatre and Dance must fulfill the core requirements and the requirements of a particular major.

ALL students majoring in programs in Cinema Production, Dance, and Theatre are required to complete a **Senior Experience** as part of their degree. Senior Experiences are designed as stepping stones for students to apply knowledge and skills accrued throughout their coursework toward preparing for future careers. Senior Experience course options will vary by major but include options for an internship, a study abroad/away experience, a service-learning course, a senior capstone, or more specialized experiences within students' chosen majors. Please see descriptions included under each major for more options. Students become eligible for Senior Experience options once they reach 90 credits or with permission of the Senior Experience Coordinator. Students will be directed by their advisor to opportunities that are suited for the area of study and as other opportunities become available. For more information please reach out to the Senior Experience Coordinator, Alison Lietzenmayer.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity (May not use COMM 270A / THEA 270A)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
THEA/DANC 152R	Acting One (Satisfies Oral Communication)	3
Credit Hours		15
Spring		
Impact of Technology		3
Interpreting the Past		3
Information Literacy and Research (can be satisfied by COMM 272G)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
THEA 270A	Film Appreciation	3
Credit Hours		15

Sophomore

Fall

ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Philosophy and Ethics		3
THEA 225	Introduction to Production Technology	3
Credit Hours		16

Spring

Literature		3
Nature of Science II		4
Language and Culture IV		3
Human Behavior (COMM 200S preferred)		3
THEA 271	Introduction to Filmmaking	3
Credit Hours		16

Junior

Fall

THEA 346	Screenwriting I	3
THEA 385	Cinematography	3
THEA 388	Motion Picture Aesthetics	3
THEA/DANC 373	Production/Performance Lab	1
THEA/DANC 390	Improvisation	3
Upper-Division General Education Course or Minor		3
Credit Hours		16

Spring

THEA 330	The Short Script	3
THEA 383	Directing the Actor	3
THEA 386	Post-Production 2 (Prerequisite: THEA 342 or THEA 358)	3
THEA/DANC 374	Production/Performance Lab	1
Upper-Division General Education Course or Minor		3
Elective course		3
Credit Hours		16

Senior

Fall

THEA 446 or THEA 483	Directing for the Camera or Advanced Cinema Projects	3
THEA 471W or THEA 479W	International Film History or American Film History	3
THEA/DANC 473	Production/Performance Lab	1
THEA/DANC Elective course		3
Minor or Elective		3
Credit Hours		13

Spring

THEA 486	Advanced Filmmaking (Satisfies Senior Experience requirement)	3
THEA/DANC 474	Production/Performance Lab	1

THEA/DANC Elective course	3
Elective course	3
Minor or Elective	3
Credit Hours	13
Total Credit Hours	120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Theatre & Dance with a Major in Dance (BA)

James Morrow, Chief Departmental Advisor for Dance and PreK-12 Dance Education
Megan Thompson, Program Director

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3

Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Oral Communication requirement is met in the major.

Language and Culture: Proficiency through 202 level; proficiency not met by completion of an associate degree.

Human Creativity: Design/technology majors, performance majors, theatre majors, and PreK-12 theatre education majors may not use THEA 241A; cinema production majors may not use COMM 270A/THEA 270A; dance and PreK-12 dance education majors may not use DANC 185A.

The Nature of Science: PreK-12 dance education majors must take BIOL 117N/BIOL 118N.

The Impact of Technology requirement is satisfied by TLED 430W for PreK-12 dance education and PreK-12 theatre education majors.

COMM 200S preferred for Human Behavior requirement.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Six hours of elective upper-level course work from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.

- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Theatre and Dance Core

All students pursuing a BA degree in Theatre and Dance must complete the core requirements listed below.

THEA/DANC 152R	Acting One	3
THEA/DANC/COMM 271	Introduction to Filmmaking	3
THEA/DANC 390	Improvisation	3
THEA/DANC 373	Production/Performance Lab	1
THEA/DANC 374	Production/Performance Lab	1
THEA/DANC 473	Production/Performance Lab	1
THEA/DANC 474	Production/Performance Lab	1
Total Credit Hours		13

Dance Major

Megan Thompson, Program Director
James Morrow, Chief Departmental Advisor for Dance

Majors must maintain an overall grade point average of C or better in the major.

General Education		
Complete lower-division requirements		38-44
Complete upper-division requirements (minimum of 6 credit hours)		6
Complete foreign language coursework through the 202 level		0-6
Theatre and Dance Core		
Complete theatre and dance core requirements		13
Dance		
DANC 301	Ballet in Context	1
DANC 311	Modern Dance in Context	1
DANC 320	Jazz in Context	1
DANC 370	Dance Composition 1	2
DANC 389W	Dancing Power: Dance as Communication and Transformation	3
DANC 393	Functional Anatomy for Movement Practices	3
DANC 489	Principles of Teaching Dance (Meets Senior Experience Requirement)	2
Select 6 credits from the following:		6
DANC 201	Ballet Technique 1	
DANC 302	Ballet Technique 2	
DANC 303	Ballet Technique 3	
DANC 404	Ballet Technique 4	
DANC 405	Ballet Technique 5	
Select 8 credits from the following:		8
DANC 211	Modern Dance Technique 1	
DANC 312	Modern Dance Technique 2	
DANC 313	Modern Dance Technique 3	
DANC 414	Modern Dance Technique 4	
DANC 415	Modern Dance Technique 5	
Select 2 credits from the following:		2
DANC 341	Pilates Equipment Lab 1	
DANC 342	Pilates Equipment Lab 2	
Select 4 credits from the following:		4
DANC 361	Hip Hop Dance & Culture 1	
DANC 362	Hip Hop Dance & Culture 2	
DANC 463	Hip Hop Dance and Culture 3	
DANC 464	Hip Hop Dance and Culture 4	

Select 2 credits from the following:		2
DANC 321	Jazz Dance 1	
DANC 322	Jazz Dance 2	
DANC 423	Jazz Dance 3	
DANC 424	Jazz Dance 4	
DANC electives at the 200 level or above		4
Total Credit Hours		96-108

As a requirement to graduate, dance majors must achieve 400-level proficiency in ballet technique, hip hop technique or modern technique. (Specifically, dance majors must achieve a C or better in DANC 404 or higher or DANC 414 or higher or DANC 463 or higher.) The continued maintenance of technical proficiency is required.

A minimum cumulative grade point average of 2.0 or better in the major is required.

Elective Credit

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

Departmental Requirements for Bachelor of Arts in Theatre and Dance

ODU offers a Bachelor of Arts (B.A.) in Theatre and Dance with seven majors: Cinema Production, Dance, Dance Education, Design/Technology, Performance, Theatre, and Theatre Education. All students pursuing the BA in Theatre and Dance must fulfill the core requirements and the requirements of a particular major.

ALL students majoring in programs in Cinema Production, Dance, and Theatre are required to complete a **Senior Experience** as part of their degree. Senior Experiences are designed as stepping stones for students to apply knowledge and skills accrued throughout their coursework toward preparing for future careers. Senior Experience course options will vary by major but include options for an internship, a study abroad/away experience, a service-learning course, a senior capstone, or more specialized experiences within students' chosen majors. Please see descriptions included under each major for more options. Students become eligible for Senior Experience options once they reach 90 credits or with permission of the Senior Experience Coordinator. Students will be directed by their advisor to opportunities that are suited for the area of study and as other opportunities become available. For more information please reach out to the Senior Experience Coordinator, Alison Lietzenmayer.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
THEA/DANC 152R	Acting One (Satisfies Oral Communication)	3
Elective or Language and Culture I (May be waived; See requirement details)		3
Modern Technique Course		2
DANC 311	Modern Dance in Context	1
Credit Hours		15

Spring		
Impact of Technology		3
Human Creativity (May not use DANC 185A)		3
Information Literacy and Research (COMM 272G will satisfy this requirement)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
Ballet Technique course		2
DANC 301	Ballet in Context	1
Credit Hours		15

Sophomore

Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Ballet Technique course		2
Modern Technique course		2
Jazz Dance course		1
DANC 320	Jazz in Context	1
Credit Hours		16

Spring		
Nature of Science II		4
Language and Culture IV		3
DANC/THEA 373	Production/Performance Lab	1
DANC 341 or DANC 342	Pilates Equipment Lab 1 or Pilates Equipment Lab 2	2
Hip Hop Dance & Culture		2
DANC/THEA 390	Improvisation	3
Credit Hours		15

Junior

Fall		
Philosophy and Ethics		3
Human Behavior (COMM 200S preferred)		3
DANC/THEA/COMM 271	Introduction to Filmmaking	3
THEA/DANC 374	Production/Performance Lab	1
Modern Technique course		2
Jazz Dance course		1
Hip Hop Dance & Culture		2
Credit Hours		15

Spring		
Interpreting the Past		3
Literature		3
DANC 389W	Dancing Power: Dance as Communication and Transformation (Grade of C or better required)	3
DANC 370	Dance Composition 1	2
DANC/THEA 473	Production/Performance Lab	1
Ballet Technique course		2

DANC elective at 200 level or above		2
Credit Hours		16
Senior		
Fall		
DANC 393	Functional Anatomy for Movement Practices	3
THEA/DANC 474	Production/Performance Lab	1
Modern Technique Course *		2
Elective		2
Elective		2
Upper-Division General Education Course or Minor		3
Minor or Elective		3
Credit Hours		16
Spring		
DANC 489	Principles of Teaching Dance (Satisfies Senior Experience requirement)	2
Upper-Division General Education Course or Minor		3
DANC elective at 200 level or above		2
Minor or Elective		3
Elective		2
Credit Hours		12
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program

must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Theatre & Dance with a Major in Design Technology (BA)

Jim Lyden, Chief Departmental Advisor for Design/Technology, Performance, Theatre, and PreK-12 Theatre Education

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Oral Communication requirement is met in the major.

Language and Culture: Proficiency through 202 level; proficiency not met by completion of an associate degree.

Human Creativity: Design/technology majors, performance majors, theatre majors, and PreK-12 theatre education majors may not use THEA 241A; cinema production majors may not use COMM 270A/THEA 270A; dance and PreK-12 dance education majors may not use DANC 185A.

The Nature of Science: PreK-12 dance education majors must take BIOL 117N/BIOL 118N.

The Impact of Technology requirement is satisfied by TLED 430W for PreK-12 dance education and PreK-12 theatre education majors.

COMM 200S preferred for Human Behavior requirement.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major

- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Six hours of elective upper-level course work from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Theatre and Dance Core

All students pursuing a BA degree in Theatre and Dance must complete the core requirements listed below.

THEA/DANC 152R	Acting One	3
THEA/DANC/	Introduction to Filmmaking	3
COMM 271		
THEA/DANC 390	Improvisation	3
THEA/DANC 373	Production/Performance Lab	1
THEA/DANC 374	Production/Performance Lab	1
THEA/DANC 473	Production/Performance Lab	1
THEA/DANC 474	Production/Performance Lab	1
Total Credit Hours		13

Design/Technology Major

Chris Hanna, Program Director
Jim Lyden, Chief Departmental Advisor for Design/Technology

Admission

The design/technology major is intended for students who wish to pursue theatre design/technology as a career. Students will be admitted to the design/technology major through a portfolio review and interview process administered by the faculty in the spring. No student is guaranteed admittance or continuance in the design/technology major. Students may return to the theatre major at any time.

Continuance

Students must pass a screening portfolio review and interview administered by the faculty every spring. Additionally students must maintain a C average and abide by the theatre student handbook regulations for the design/technology major.

Requirements

Majors must have an overall grade point average of C or better in the major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6
Complete foreign language coursework through the 202 level	0-6

Theatre and Dance Core

Complete theatre and dance core requirements		13
Design/Technology		
THEA 225	Introduction to Production Technology	3
THEA 230	Drama for Production *	3
THEA 243H	Theatre Histories	3
THEA 244	Introduction to Production Design	3
THEA 442	Principles of Directing (Satisfies Senior Experience Requirement)	3
THEA 449W	Script and Performance Analysis	3
Twelve credit hours must be selected from following:		12
THEA 248	Introduction to Stage Makeup	
THEA 321	Production Management for Television and Stage	
THEA 325	Sound Design for Stage and Camera	
THEA 341	Lighting Design for Stage and Film	
THEA 345	Advanced Production Design	
THEA 349	Costume Design for Stage and Camera	
THEA 353	Animation	
THEA 356	3D Animation 1	
THEA 357	3D Animation 2	
THEA 368	Internship	
THEA 369	Internship at the Virginia Stage Company	
THEA 395	Topics in Theatre	
THEA 495	Topics in Theatre	
THEA 497	Tutorial Work in Special Topics in Theatre	
THEA 498	Tutorial Work in Special Topics in Theatre	
THEA/DANC Electives		9
Total Credit Hours		96-108

* Meets oral communication requirement.

As part of the Core Requirements, a minimum of 4 credits of practicum experience to include at least 3 credits of THEA/DANC Production/ Performance Lab as production (remaining 1 credit can be production or performance) required.

Elective Credit

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

Departmental Requirements for Bachelor of Arts in Theatre and Dance

ODU offers a Bachelor of Arts (B.A.) in Theatre and Dance with seven majors: Cinema Production, Dance, Dance Education, Design/Technology, Performance, Theatre, and Theatre Education. All students pursuing the BA in Theatre and Dance must fulfill the core requirements and the requirements of a particular major.

ALL students majoring in programs in Cinema Production, Dance, and Theatre are required to complete a **Senior Experience** as part of their degree. Senior Experiences are designed as stepping stones for students to apply knowledge and skills accrued throughout their coursework toward preparing for future careers. Senior Experience course options will vary by major but include options for an internship, a study abroad/away experience, a service-learning course, a senior capstone, or more specialized experiences within students' chosen majors. Please see descriptions included under each major for more options. Students become eligible for Senior Experience options once they reach 90 credits or with permission of the Senior Experience Coordinator. Students will be directed by their advisor to opportunities that are suited for the area of study and as other opportunities become available. For more information please reach out to the Senior Experience Coordinator, Alison Lietzenmayer.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity (May not use THEA 241A)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
THEA/DANC 152R	Acting One (Satisfies Oral Communication)	3
Credit Hours		15
Spring		
Interpreting the Past		3
Literature		3
Information Literacy and Research		3
Elective or Language and Culture II (May be waived; See requirement details)		3
THEA 225	Introduction to Production Technology	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Philosophy and Ethics		3
THEA 230	Drama for Production	3
Credit Hours		16
Spring		
Impact of Technology		3
Nature of Science II		4
Language and Culture IV		3
Human Behavior (COMM 200S preferred)		3
THEA 244	Introduction to Production Design	3
Credit Hours		16
Junior		
Fall		
DANC/THEA 373	Production/Performance Lab	1
DANC/COMM/THEA 271	Introduction to Filmmaking	3
THEA Elective course		3
THEA 243H	Theatre Histories	3
THEA Elective course		3

Upper-Division General Education Course or Minor		3
Credit Hours		16
Spring		
DANC/THEA 374	Production/Performance Lab	1
THEA Elective course		3
DANC/THEA 390	Improvisation	3
DANC/THEA course		3
DANC/THEA course		3
Upper-Division General Education Course or Minor		3
Credit Hours		16
Senior		
Fall		
THEA 449W	Script and Performance Analysis	3
DANC/THEA 473	Production/Performance Lab	1
DANC/THEA course		1
Elective course		3
Minor or Elective		3
Elective		2
Credit Hours		13
Spring		
THEA 442	Principles of Directing (Satisfies Senior Experience requirement)	3
DANC/THEA course		3
DANC/THEA 474	Production/Performance Lab	1
Elective course		3
Minor or Elective		3
Credit Hours		13
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking

to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Theatre & Dance with a Major in Performance (BA)

Jim Lyden, Chief Departmental Advisor for Design/Technology, Performance, Theatre, and PreK-12 Theatre Education

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Oral Communication requirement is met in the major.

Language and Culture: Proficiency through 202 level; proficiency not met by completion of an associate degree.

Human Creativity: Design/technology majors, performance majors, theatre majors, and PreK-12 theatre education majors may not use THEA 241A; cinema production majors may not use COMM 270A/THEA 270A; dance and PreK-12 dance education majors may not use DANC 185A.

The Nature of Science: PreK-12 dance education majors must take BIOL 117N/BIOL 118N.

The Impact of Technology requirement is satisfied by TLED 430W for PreK-12 dance education and PreK-12 theatre education majors.

COMM 200S preferred for Human Behavior requirement.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Six hours of elective upper-level course work from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Theatre and Dance Core

All students pursuing a BA degree in Theatre and Dance must complete the core requirements listed below.

THEA/DANC 152R	Acting One	3
THEA/DANC/ COMM 271	Introduction to Filmmaking	3
THEA/DANC 390	Improvisation	3
THEA/DANC 373	Production/Performance Lab	1
THEA/DANC 374	Production/Performance Lab	1
THEA/DANC 473	Production/Performance Lab	1
THEA/DANC 474	Production/Performance Lab	1
Total Credit Hours		13

Performance Major

Chris Hanna, Program Director

Jim Lyden, Chief Departmental Advisor for Performance

Admission

The performance major is intended for students who wish to pursue performance as a career. Students will be admitted to the performance major through an audition and interview process administered by the faculty each spring. No student is guaranteed admittance or continuance in the performance major. Students may return to the theatre major at any time.

Continuance

Students must pass a proficiency audition administered by the faculty every spring. Students must abide by the theatre student handbook regulations for the performance major.

Requirements

Majors must have an overall grade point average of C or better in the major

General Education

Complete lower-division requirements		38-44
Complete upper-division requirements (minimum of 6 credit hours)		6
Complete foreign language coursework through the 202 level		0-6
Theatre and Dance Core		
Complete theatre and dance core requirements		13
Performance		
THEA 225	Introduction to Production Technology	3
THEA 230	Drama for Production *	3
THEA 243H	Theatre Histories	3
THEA 248	Introduction to Stage Makeup	3
THEA 252	Acting Two	3
THEA 320	Auditioning Technique	3
THEA 347	Movement for the Actor	3
THEA 352	Acting Three	3
THEA 360	Voice for the Stage I	3
THEA 442	Principles of Directing (Satisfies Senior Experience Requirement)	3
THEA 449W	Script and Performance Analysis	3
THEA/DANC Electives		6
Total Credit Hours		96-108

* Meets oral communication requirement.

As part of the Core Requirements, a minimum of 4 credits of practicum experience to include at least 2 credits of THEA/DANC Production/ Performance Lab as production and 2 credits as performance required.

Elective Credit

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

Departmental Requirements for Bachelor of Arts in Theatre and Dance

ODU offers a Bachelor of Arts (B.A.) in Theatre and Dance with seven majors: Cinema Production, Dance, Dance Education, Design/Technology, Performance, Theatre, and Theatre Education. All students pursuing the BA in Theatre and Dance must fulfill the core requirements and the requirements of a particular major.

ALL students majoring in programs in Cinema Production, Dance, and Theatre are required to complete a **Senior Experience** as part of their degree. Senior Experiences are designed as stepping stones for students to apply knowledge and skills accrued throughout their coursework toward preparing for future careers. Senior Experience course options will vary by major but include options for an internship, a study abroad/away experience, a service-learning course, a senior capstone, or more specialized experiences within students' chosen majors. Please see descriptions included under each major for more options. Students become eligible for Senior Experience options once they reach 90 credits or with permission of the Senior Experience Coordinator. Students will be directed by their advisor to opportunities that are suited for the area of study and as other opportunities become available. For more information please reach out to the Senior Experience Coordinator, Alison Lietzenmayer.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity (May not use THEA 241A)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
THEA/DANC 152R	Acting One (Satisfies Oral Communication)	3
Credit Hours		15
Spring		
Interpreting the Past		3
Literature		3
Information Literacy and Research		3
Elective or Language and Culture II (May be waived; See requirement details)		3
THEA 225	Introduction to Production Technology	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Philosophy and Ethics		3
THEA 230	Drama for Production	3
Credit Hours		16
Spring		
Impact of Technology		3
Nature of Science II		4
Language and Culture IV		3
Human Behavior (COMM 200S preferred)		3
THEA 252	Acting Two	3
Credit Hours		16
Junior		
Fall		
DANC/THEA 373	Production/Performance Lab	1
DANC/COMM/THEA 271	Introduction to Filmmaking	3
THEA 243H	Theatre Histories	3
THEA 320	Auditioning Technique	3
THEA 347	Movement for the Actor	3
Upper-Division General Education Course or Minor		3
Credit Hours		16
Spring		
THEA 248	Introduction to Stage Makeup	3
THEA 352	Acting Three	3
THEA 360	Voice for the Stage I	3
DANC/THEA 374	Production/Performance Lab	1

DANC/THEA 390	Improvisation	3
Upper-Division General Education Course or Minor		3
Credit Hours		16
Senior		
Fall		
THEA 449W	Script and Performance Analysis	3
DANC/THEA 473	Production/Performance Lab	1
DANC/THEA course		1
Elective course		3
Minor or Elective		3
Elective		2
Credit Hours		13
Spring		
THEA 442	Principles of Directing (Satisfies Senior Experience requirement)	3
DANC/THEA course		3
DANC/THEA 474	Production/Performance Lab	1
Elective course		3
Minor or Elective		3
Credit Hours		13
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program

must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Theatre & Dance with a Major in PreK-12 Dance Education (BA)

James Morrow, Chief Departmental Advisor for Dance and PreK-12 Dance Education

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Oral Communication requirement is met in the major.

Language and Culture: Proficiency through 202 level; proficiency not met by completion of an associate degree.

Human Creativity: Design/technology majors, performance majors, theatre majors, and PreK-12 theatre education majors may not use THEA 241A; cinema production majors may not use COMM 270A/THEA 270A; dance and PreK-12 dance education majors may not use DANC 185A.

The Nature of Science: PreK-12 dance education majors must take BIOL 117N/BIOL 118N.

The Impact of Technology requirement is satisfied by TLED 430W for PreK-12 dance education and PreK-12 theatre education majors.

COMM 200S preferred for Human Behavior requirement.

Upper-Division General Education

Satisfied in the major through the professional education core.

Requirements for Graduation

Requirements for graduation include completion of ENGL 110C, ENGL 211C or ENGL 231C , and the writing intensive (W) course in the major with a grade of C or better; completion of the Senior Assessment; a minimum cumulative 2.75 GPA in the major area and in the professional education core with no grade less than a C in the major/content and with no grade less than a C- in the professional education core; successful completion of the Teacher Candidate Internship, and a minimum of 120 credit hours, which must include both 30 credits overall and a minimum of 12 credit hours of upper-level courses in the major program from Old Dominion University.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the teacher education programs in the College of Arts and Letters are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information from their advisors and from the Office of Clinical Experiences website at www.odu.edu/oce (<http://www.odu.edu/oce/>).

Theatre and Dance Core

All students pursuing a BA degree in Theatre and Dance must complete the core requirements listed below.

THEA/DANC 152R	Acting One	3
THEA/DANC/COMM 271	Introduction to Filmmaking	3
THEA/DANC 390	Improvisation	3
THEA/DANC 373	Production/Performance Lab	1
THEA/DANC 374	Production/Performance Lab	1
THEA/DANC 473	Production/Performance Lab	1
THEA/DANC 474	Production/Performance Lab	1
Total Credit Hours		13

Professional Education Core

TLED 301	Foundations and Introduction to Assessment of Education	3
TLED 360	Classroom Management and Discipline	2
TLED 408	Reading and Writing in Content Areas	3
TLED 430W	PK-12 Instructional Technology *	3
TLED 485	Teacher Candidate Internship **	12
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
Total Credit Hours		29

* Meets impact of technology requirement.

** Student teaching.

PreK-12 Dance Education Major

General Education

Complete lower-division requirements 35-41

Complete upper-division requirements (satisfied in the major through the professional education core)

Complete foreign language coursework through the 202 level 0-6

Theatre and Dance Core

Complete theatre and dance core requirements	13
Professional Education Core	
Complete professional education core requirements	29
Dance Education	
Select 6 credit hours from the following:	6
DANC 201 Ballet Technique 1	
DANC 302 Ballet Technique 2	
DANC 303 Ballet Technique 3	
DANC 404 Ballet Technique 4	
DANC 405 Ballet Technique 5	
Select 8 credit hours from the following:	8
DANC 211 Modern Dance Technique 1	
DANC 312 Modern Dance Technique 2	
DANC 313 Modern Dance Technique 3	
DANC 414 Modern Dance Technique 4	
DANC 415 Modern Dance Technique 5	
Select 2 credit hours from the following:	2
DANC 321 Jazz Dance 1	
DANC 322 Jazz Dance 2	
DANC 423 Jazz Dance 3	
DANC 424 Jazz Dance 4	
Select 4 credit hours from the following:	4
DANC 361 Hip Hop Dance & Culture 1	
DANC 362 Hip Hop Dance & Culture 2	
DANC 463 Hip Hop Dance and Culture 3	
DANC 464 Hip Hop Dance and Culture 4	
DANC 301 Ballet in Context	1
DANC 311 Modern Dance in Context	1
DANC 320 Jazz in Context	1
DANC 370 Dance Composition 1	2
DANC 389W Dancing Power: Dance as Communication and Transformation	3
DANC 393 Functional Anatomy for Movement Practices	3
DANC 490 Pedagogy for Dance Educators (Meets Senior Experience Requirement)	3
Total Credit Hours	111-123

As a requirement to graduate, dance majors must achieve 400-level proficiency in ballet technique, hip hop technique or modern technique. (Specifically, dance majors must achieve a C or better in DANC 404 or higher or DANC 414 or higher or DANC 463 or higher.) The continued maintenance of technical proficiency is required.

Additional Requirements and Information

Departmental Requirements for Bachelor of Arts in Theatre and Dance

ODU offers a Bachelor of Arts (B.A.) in Theatre and Dance with seven majors: Cinema Production, Dance, Dance Education, Design/Technology, Performance, Theatre, and Theatre Education. All students pursuing the BA in Theatre and Dance must fulfill the core requirements and the requirements of a particular major.

ALL students majoring in programs in Cinema Production, Dance, and Theatre are required to complete a **Senior Experience** as part of their degree. Senior Experiences are designed as stepping stones for students to apply knowledge and skills accrued throughout their coursework toward preparing for future careers. Senior Experience course options will vary by major but include options for an internship, a study abroad/away experience, a service-learning course, a senior capstone, or more specialized experiences within students' chosen majors. Please see descriptions included under each major for more options. Students become eligible for Senior Experience options once they reach 90 credits or with permission of the Senior Experience Coordinator. Students will be directed by their advisor to

opportunities that are suited for the area of study and as other opportunities become available. For more information please reach out to the Senior Experience Coordinator, Alison Lietzenmayer.

Admission

All students must apply for and be admitted into the approved dance education program. Students must meet the required criteria for admission by earning the minimum required grade point averages (GPA).

Prescribed Virginia Board of Education Assessment for Admission to an Approved Teacher Education Program

Old Dominion University students seeking admission to an approved teacher education program must satisfy the Virginia Board of Education required assessment for admission into an approved teacher education program.

For the most current information on the prescribed Virginia Board of Education admission assessment, visit the Virginia Department of Education at <https://www.doe.virginia.gov/>.

Required grade point averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required – all Dance courses must be passed with a grade of C or higher.
- A professional education GPA of 2.75 is required – all professional education courses must be passed with a grade of C- or higher.

Although students may enroll in a limited number of education courses, students must be admitted into the approved PreK-12 dance education program prior to enrolling in any instructional strategies practicum education course. Students must also meet with an education advisor in the Office of Clinical Experiences.

Continuance

Students must maintain a cumulative GPA of 2.75, a major/content GPA of 2.75 and a professional education GPA of 2.75. Dance courses must be passed with a grade of C or higher. The professional education core must be completed with a grade of C- or higher for continuance. A professional education GPA of 2.75 is required for continuance. There is not currently a Praxis Subject Assessment (formerly Praxis II) for Dance content knowledge. If a Dance Praxis Subject Assessment is established prior to the student applying for the teaching license, it will be required. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <http://www.odu.edu/success/academic/teacher-education/placement/background-checks> (<http://www.odu.edu/success/academic/teacher-education/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Virginia Board of Education Prescribed Assessments for Licensure

To review more information on the Virginia Board of Education prescribed assessments, visit the Office of Clinical Experiences website, www.odu.edu/oce (<http://www.odu.edu/oce/>).

PreK-12 Dance Education Post-Baccalaureate Endorsement Program

Candidates who have already earned an undergraduate degree in dance may seek a post-baccalaureate endorsement. Information on applying for this endorsement can be obtained from the Darden College of Education and Professional Studies or the PreK-12 dance education program advisor. Students must have completed or must complete equivalencies for all course work required for the dance major, as well as complete all professional education core classes required for undergraduate PreK-12 dance education majors. The dance advisor will determine which transferable courses will meet the cognate program requirements and which dance and professional courses must be completed for the endorsement. All content area courses must be completed with a grade of C or better, and all professional education courses must be completed with a grade of C- or better. A minimum cumulative grade point average of 2.75 overall, in the major and in the professional education core is required for continuance and endorsement. Although students may enroll in a limited number of education courses, passing the Virginia Board of Education prescribed assessment for admission must be completed and on file with the Office of Clinical Experiences prior to enrollment in any education practicum course or courses in developing instructional strategies. It is recommended that students take the Virginia Board of Education prescribed assessment for admission prior to, or during, enrollment in TLED 301.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Nature of Science I (BIOL 117N and BIOL 118N required)		4
Language and Culture I (May be waived; See requirement details)		0-3
Jazz Technique course		1
Modern Technique course		2
Credit Hours		13-16
Spring		
Human Creativity (May not use DANC 185A)		3
Literature		3
Nature of Science II		4
Elective or Language and Culture II (May be waived; See requirement details)		3
Ballet Technique course		2
DANC 373	Production/Performance Lab	1
Credit Hours		16
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Information Literacy and Research		3
Language and Culture III		3

THEA/DANC 152R	Acting One (Satisfies Oral Communication)	3
TLED 301	Foundations and Introduction to Assessment of Education	3
DANC 361	Hip Hop Dance & Culture 1	2
Credit Hours		17
Spring		
Interpreting the Past		3
Philosophy and Ethics		3
Language and Culture IV		3
TLED 360	Classroom Management and Discipline	2
DANC 374	Production/Performance Lab	1
DANC 390	Improvisation	3
Credit Hours		15
Junior		
Fall		
DANC 301	Ballet in Context	1
DANC 320	Jazz in Context	1
Human Behavior (COMM 200S preferred)		3
DANC 393	Functional Anatomy for Movement Practices	3
TLED 430W	PK-12 Instructional Technology (satisfies Impact of Technology)	3
Jazz Technique course		1
Ballet Technique course		2
Modern Technique course		2
Credit Hours		16
Spring		
DANC 271	Introduction to Filmmaking	3
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
DANC 370	Dance Composition 1	2
DANC 362	Hip Hop Dance & Culture 2	2
DANC 473	Production/Performance Lab	1
DANC 490	Pedagogy for Dance Educators	3
Modern Technique course		2
Credit Hours		16
Senior		
Fall		
DANC 389W	Dancing Power: Dance as Communication and Transformation	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
TLED 408	Reading and Writing in Content Areas	3
DANC 474	Production/Performance Lab	1
Modern Technique course		2
Ballet Technique course		2
Credit Hours		14

Spring		
DANC 311	Modern Dance in Context	1
TLED 485	Teacher Candidate Internship	12
Credit Hours		13
Total Credit Hours		120-123

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Theatre & Dance with a Major in PreK-12 Theatre Education (BA)

Jim Lyden, Chief Departmental Advisor for Design/Technology, Performance, Theatre, and PreK-12 Theatre Education

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3

Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Oral Communication requirement is met in the major.

Language and Culture: Proficiency through 202 level; proficiency not met by completion of an associate degree.

Human Creativity: Design/technology majors, performance majors, theatre majors, and PreK-12 theatre education majors may not use THEA 241A; cinema production majors may not use COMM 270A/THEA 270A; dance and PreK-12 dance education majors may not use DANC 185A.

The Nature of Science: PreK-12 dance education majors must take BIOL 117N/BIOL 118N.

The Impact of Technology requirement is satisfied by TLED 430W for PreK-12 dance education and PreK-12 theatre education majors.

COMM 200S preferred for Human Behavior requirement.

Upper-Division General Education

Satisfied in the major through the professional education core.

Requirements for Graduation

Requirements for graduation include completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better; completion of the Senior Assessment; a minimum cumulative 2.75 GPA in the major area and in the professional education core with no grade less than a C in the major/content and with no grade less than a C- in the professional education core; successful completion of the Teacher Candidate Internship, and a minimum of 120 credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the teacher education programs in the College of Arts and Letters are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information from their advisors and from the Office of Clinical Experiences website at www.odu.edu/oce (<http://www.odu.edu/oce/>).

Theatre and Dance Core

All students pursuing a BA degree in Theatre and Dance must complete the core requirements listed below.

THEA/DANC 152R	Acting One	3
THEA/DANC/COMM 271	Introduction to Filmmaking	3
THEA/DANC 390	Improvisation	3
THEA/DANC 373	Production/Performance Lab	1
THEA/DANC 374	Production/Performance Lab	1
THEA/DANC 473	Production/Performance Lab	1
THEA/DANC 474	Production/Performance Lab	1
Total Credit Hours		13

Professional Education Core

TLED 301	Foundations and Introduction to Assessment of Education	3
TLED 360	Classroom Management and Discipline	2
TLED 408	Reading and Writing in Content Areas	3
TLED 430W	PK-12 Instructional Technology *	3
TLED 485	Teacher Candidate Internship **	12
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
SPED 406	Students with Diverse Learning Needs in the General Education Classroom	3
Total Credit Hours		29

* Meets impact of technology requirement.

** Student teaching.

PreK-12 Theatre Education Major

Chris Hanna, Program Director

Jim Lyden, Chief Departmental Advisor for Theatre Education

General Education

Complete lower-division requirements 35-41

Complete upper-division requirements (satisfied in the major through the professional education core)

Complete foreign language coursework through the 202 level 0-6

Theatre and Dance Core

Complete theatre and dance core requirements 13

Professional Education Core

Complete professional education core 29

Theatre Education

THEA 225	Introduction to Production Technology	3
THEA 230	Drama for Production *	3
THEA 243H	Theatre Histories	3
THEA 244	Introduction to Production Design	3
THEA 442	Principles of Directing (Satisfies Senior Experience Requirement)	3
THEA 449W	Script and Performance Analysis	3
THEA 489	Methods of Teaching Theatre	3
THEA 490	Theatre Education Practicum	1
THEA/DANC Electives		5
Total Credit Hours		104-116

* Meets oral communication requirement.

As part of the Core Requirements, a minimum of 4 credits of practicum experience to include at least 2 credits of THEA/DANC Production/

Performance Lab as production (remaining credits can be production or performance) required.

Additional Requirements and Information

Departmental Requirements for Bachelor of Arts in Theatre and Dance

ODU offers a Bachelor of Arts (B.A.) in Theatre and Dance with seven majors: Cinema Production, Dance, Dance Education, Design/Technology, Performance, Theatre, and Theatre Education. All students pursuing the BA in Theatre and Dance must fulfill the core requirements and the requirements of a particular major.

ALL students majoring in programs in Cinema Production, Dance, and Theatre are required to complete a **Senior Experience** as part of their degree. Senior Experiences are designed as stepping stones for students to apply knowledge and skills accrued throughout their coursework toward preparing for future careers. Senior Experience course options will vary by major but include options for an internship, a study abroad/away experience, a service-learning course, a senior capstone, or more specialized experiences within students' chosen majors. Please see descriptions included under each major for more options. Students become eligible for Senior Experience options once they reach 90 credits or with permission of the Senior Experience Coordinator. Students will be directed by their advisor to opportunities that are suited for the area of study and as other opportunities become available. For more information please reach out to the Senior Experience Coordinator, Alison Lietzenmayer.

Admission

All students must apply for and be admitted into the approved teacher education program. Students must meet the required criteria for admission by earning the minimum required grade point averages (GPA).

Prescribed Virginia Board of Education Assessment for Admission to an Approved Teacher Education Program

Old Dominion University students seeking admission to an approved teacher education program must satisfy the Virginia Board of Education required assessment for admission into an approved teacher education program.

For the most current information on the prescribed Virginia Board of Education admission assessment, visit the Virginia Department of Education at <https://www.doe.virginia.gov/>.

Required grade point averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required – all Theatre courses must be passed with a grade of C or higher.
- A professional education GPA of 2.75 is required – all professional education courses must be passed with a grade of C- or higher.

Although students may enroll in a limited number of education courses, students must be admitted into the approved theatre education program prior to enrolling in any instructional strategies practicum education course. Students must also meet with an education advisor in the Office of Clinical Experiences.

Continuance

Students must maintain a cumulative GPA of 2.75, a major/content GPA of 2.75 and a professional education GPA of 2.75. Theatre courses must be passed with a grade of C or higher. The professional education core must be completed with a grade of C- or higher for continuance. A professional education GPA of 2.75 is required for continuance. There is not currently a Praxis Subject Assessment (formerly Praxis II) Theatre content knowledge. If a Theatre Praxis Subject Assessment is established prior to the student applying for the teaching license, it will be required. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs.

Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <http://www.odu.edu/success/academic/teacher-education/placement/background-checks> (<http://www.odu.edu/success/academic/teacher-education/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Virginia Board of Education Prescribed Assessments for Licensure

To review more information on the Virginia Board of Education prescribed assessments, visit the Office of Clinical Experiences website, www.odu.edu/oce (<http://www.odu.edu/oce/>).

Theatre Education Post-Baccalaureate Endorsement Program

Candidates who have already earned an undergraduate degree in theatre may seek licensure only. Information on applying for licensure can be obtained from the Darden College of Education and Professional Studies or the theatre education program advisor. Students must have completed or must complete equivalencies for all course work required for the theatre major, as well as complete all Professional Education core classes required for undergraduate theatre education majors. The theatre advisor will determine which transferable courses will meet the cognate program requirements and which theatre and professional courses must be completed for licensure. All content area courses must be completed with a grade of C or better, and all professional education courses must be completed with a grade of C- or better. A minimum cumulative grade point average of 2.75 overall, in the major and in the professional education core is required for continuance and licensure. Although students may enroll in a limited number of education courses, passing scores for the Virginia Board of Education prescribed assessment for admission must be on file with the Office of Clinical Experiences prior to enrollment in any education practicum course or courses in developing instructional strategies. It is recommended that students take the Virginia Board of Education prescribed assessment for admission prior to, or during, enrollment in TLED 301.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Interpreting the Past		3
Elective or Language and Culture I (May be waived; See requirement details)		3
DANC/THEA 152R	Acting One (Satisfies Oral Communication)	3
Credit Hours		15
Spring		
Human Creativity (May not use THEA 241A)		3
Information Literacy and Research		3

Literature		3
Elective or Language and Culture II (May be waived; See requirement details)		3
THEA 225	Introduction to Production Technology	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Philosophy and Ethics		3
Language and Culture III		3
The Nature of Science I		4
THEA 230	Drama for Production	3
Credit Hours		16
Spring		
Human Behavior (COMM 200S preferred)		3
Language and Culture IV		3
Nature of Science II		4
THEA 244	Introduction to Production Design	3
TLED 301	Foundations and Introduction to Assessment of Education	3
Credit Hours		16
Junior		
Fall		
DANC/THEA 390	Improvisation	3
THEA 243H	Theatre Histories	3
THEA 373	Production/Performance Lab	1
DANC/COMM/THEA 271	Introduction to Filmmaking	3
TLED 360	Classroom Management and Discipline	2
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
Credit Hours		15
Spring		
THEA 374	Production/Performance Lab	1
THEA 442	Principles of Directing (Satisfies Senior Experience requirement)	3
THEA/DANC course		3
THEA 490	Theatre Education Practicum	1
TLED 408	Reading and Writing in Content Areas	3
TLED 430W	PK-12 Instructional Technology (satisfies Impact of Technology)	3
Elective course		3
Credit Hours		17
Senior		
Fall		
THEA 489	Methods of Teaching Theatre	3

THEA 449W	Script and Performance Analysis	3
THEA 473	Production/Performance Lab	1
THEA 474	Production/Performance Lab	1
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
DANC/THEA course		2
Elective course		1
Credit Hours		14
Spring		
TLED 485	Teacher Candidate Internship	12
Credit Hours		12
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Theatre & Dance with a Major in Theatre (BA)

Jim Lyden, Chief Departmental Advisor for Design/Technology, Performance, Theatre, and PreK-12 Theatre Education

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Oral Communication requirement is met in the major.

Language and Culture: Proficiency through 202 level; proficiency not met by completion of an associate degree.

Human Creativity: Design/technology majors, performance majors, theatre majors, and PreK-12 theatre education majors may not use THEA 241A; cinema production majors may not use COMM 270A/THEA 270A; dance and PreK-12 dance education majors may not use DANC 185A.

The Nature of Science: PreK-12 dance education majors must take BIOL 117N/BIOL 118N.

The Impact of Technology requirement is satisfied by TLED 430W for PreK-12 dance education and PreK-12 theatre education majors.

COMM 200S preferred for Human Behavior requirement.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Six hours of elective upper-level course work from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Theatre and Dance Core

All students pursuing a BA degree in Theatre and Dance must complete the core requirements listed below.

THEA/DANC 152R	Acting One	3
THEA/DANC/ COMM 271	Introduction to Filmmaking	3
THEA/DANC 390	Improvisation	3
THEA/DANC 373	Production/Performance Lab	1
THEA/DANC 374	Production/Performance Lab	1
THEA/DANC 473	Production/Performance Lab	1
THEA/DANC 474	Production/Performance Lab	1
Total Credit Hours		13

Theatre Major

Chris Hanna, Program Director

Jim Lyden, Chief Departmental Advisor for Theatre

Majors must have an overall grade point average of C or better in the major.

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6
Complete foreign language coursework through the 202 level	0-6

Theatre and Dance Core

Complete theatre and dance core requirements	13

Theatre

THEA 225	Introduction to Production Technology	3
THEA 230	Drama for Production *	3
THEA 244	Introduction to Production Design	3
THEA 248	Introduction to Stage Makeup	3
THEA 252	Acting Two	3
THEA 442	Principles of Directing (Satisfies Senior Experience Requirement)	3
THEA 243H	Theatre Histories	3
THEA 449W	Script and Performance Analysis	3
THEA/DANC Electives		15
Total Credit Hours		96-108

* Meets oral communication requirement.

As part of the Core Requirements, a minimum of 4 credits of practicum experience to include at least 2 credits of THEA/DANC Production/Performance Lab as production (remaining credits can be production or performance) required.

Elective Credit

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

Departmental Requirements for Bachelor of Arts in Theatre and Dance

ODU offers a Bachelor of Arts (B.A.) in Theatre and Dance with seven majors: Cinema Production, Dance, Dance Education, Design/Technology, Performance, Theatre, and Theatre Education. All students pursuing the BA in Theatre and Dance must fulfill the core requirements and the requirements of a particular major.

ALL students majoring in programs in Cinema Production, Dance, and Theatre are required to complete a **Senior Experience** as part of their degree. Senior Experiences are designed as stepping stones for students to apply knowledge and skills accrued throughout their coursework toward preparing for future careers. Senior Experience course options will vary by major but include options for an internship, a study abroad/away experience, a service-learning course, a senior capstone, or more specialized experiences within students' chosen majors. Please see descriptions included under each major for more options. Students become eligible for Senior Experience options once they reach 90 credits or with permission of the Senior Experience Coordinator. Students will be directed by their advisor to opportunities that are suited for the area of study and as other opportunities become available. For more information please reach out to the Senior Experience Coordinator, Alison Lietzenmayer.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity (May not use THEA 241A)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
THEA/DANC 152R	Acting One (Satisfies Oral Communication)	3
Credit Hours		15
Spring		
Interpreting the Past		3
Literature		3
Information Literacy and Research		3
Elective or Language and Culture II (May be waived; See requirement details)		3
THEA 225	Introduction to Production Technology	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3

Nature of Science I		4
Language and Culture III		3
Philosophy and Ethics		3
THEA 230	Drama for Production	3
Credit Hours		16
Spring		
Impact of Technology		3
Nature of Science II		4
Language and Culture IV		3
Human Behavior (COMM 200S preferred)		3
THEA 244	Introduction to Production Design	3
Credit Hours		16
Junior		
Fall		
DANC/THEA 373	Production/Performance Lab	1
DANC/COMM/THEA 271	Introduction to Filmmaking	3
THEA 243H	Theatre Histories	3
THEA 248	Introduction to Stage Makeup	3
DANC/THEA course		3
Upper-Division General Education Course or Minor		3
Credit Hours		16
Spring		
THEA 252	Acting Two	3
DANC/THEA 374	Production/Performance Lab	1
DANC/THEA 390	Improvisation	3
DANC/THEA course		3
DANC/THEA course		3
Upper-Division General Education Course or Minor		3
Credit Hours		16
Senior		
Fall		
THEA 449W	Script and Performance Analysis	3
DANC/THEA 473	Production/Performance Lab	1
DANC/THEA course		3
Elective course		3
Minor or Elective		3
Credit Hours		13
Spring		
THEA 442	Principles of Directing (Satisfies Senior Experience requirement)	3
DANC/THEA 474	Production/Performance Lab	1
DANC/THEA course		3
Elective course		3
Minor or Elective		3
Credit Hours		13
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Dance Minor Requirements

For a minor in dance, the student must complete 15 DANC hours AND the prerequisite course DANC 185A (which must be completed with a grade of C or better before declaring the minor). Courses must include:

1. DANC 185A, which is a prerequisite course for the minor and is not included in the calculation of the GPA for the minor.
2. Minimum of 12 hours at the 300 and 400 levels, with prior agreement by the department.
3. Three additional DANC hours at any level; 100/200-level courses selected will not be included in the calculation of the GPA for the minor.

Students must have an overall grade point average of C (2.00) or better in all courses specified as a requirement for the minor, including the prerequisite course DANC 185A, and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Minor

Theatre Minor

Requirements

For a minor in theatre, the student must complete 15 THEA credit hours AND the prerequisite course THEA 225 (which must be completed with a grade of C or better before declaring the minor). Courses must include:

1. THEA 225 is a prerequisite course for the minor and is not included in the calculation of the GPA for the minor.
2. Minimum of 12 hours at the 300 and 400 levels, with prior agreement by the department.
3. Three additional THEA credit hours at any level; 100/200 level courses selected will not be included in the calculation of the GPA for the minor.
4. At least one credit hour must be obtained by completing a Production/Performance Lab.

Students must have an overall grade point average of C (2.00) or better in all courses specified as a requirement for the minor, including the prerequisite course THEA 225, and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

English

Web Site: <http://odu.edu/englishdept> (<http://odu.edu/englishdept/>)

Veronica Watson, Chair

Kristi Costello, Associate Chair of Writing Studies (General Education)
kcstell@odu.edu

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Heather Weddington, Chief Departmental Advisor
hwedding@odu.edu (<http://catalog.odu.edu/mialto:hwedding@odu.edu>)

The Bachelor of Arts in English requires a minimum of 39 hours in English, in addition to English courses taken to satisfy General Education requirements: ENGL 110C, ENGL 211C or ENGL 231C, and ENGL 112L or ENGL 114L.

Upon completion of ENGL 110C, intended majors should apply to the Chief Departmental Advisor for English in order to declare the major. Once admitted to the program, students take five courses in the core, two literature electives, and six courses in the major. The department offers five majors (applied linguistics, creative writing, literature, technical writing, and secondary English education) within the overall Bachelor of Arts program and allows the student to pursue that area in depth. Because requirements sometimes change, students should consult the latest course requirement lists available in the department office. All majors must take an English writing-intensive (W) course and maintain a grade point average of 2.0 in the major to graduate (2.75 in the secondary English education major).

The department offers graduate degrees in applied linguistics, creative writing, and several other areas within English (including technical writing and literature). Please refer to the Graduate Catalog for more information.

Programs

Bachelor of Arts Programs

- English with a Major in Applied Linguistics (BA) (p. 185)
- English with a Major in Creative Writing (BA) (p. 188)
- English with a Major in Literature (BA) (p. 191)

- English with a Major in Secondary English Education (6-12) (BA) (p. 195)
- English with a Major in Technical and Professional Writing (BA) (p. 198)

Certificate Programs

- Professional Writing Certificate (p. 202)
- Teaching English as a Second Language (TESL) Certificate (p. 202)

Minor Program

- English Minor (p. 201)

Bachelor of Science Degree in Interdisciplinary Studies - Professional Writing Major

Please refer to the Interdisciplinary Studies section of this Catalog for information on the IDS professional writing program.

Linked Bachelor of Arts in English/Master of Arts in Applied Linguistics

The linked BA in English with a major in Applied Linguistics and MA in Applied Linguistics makes it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 for the undergraduate degree and 30 for the graduate degree).

Admission Requirements

To be admitted to the program, students must have completed at least 60 undergraduate hours, including at least nine hours in English applied linguistics courses at the 300 level or above. At the time of admission, they must have an overall GPA of 3.00 or better, and a GPA of 3.30 or better in all English applied linguistics courses.

Admission Procedures

Interested students who meet the admission requirements should apply to the graduate program director as soon as possible after completing the required 60 undergraduate hours. In consultation with the graduate program director, students will:

1. Officially declare themselves an undergraduate Applied Linguistics major to the English Department's undergraduate chief departmental advisor.
2. Draft a schedule of graduate courses to be taken as an undergraduate, which will be placed in the student's undergraduate and graduate advising files.
3. Apply to the Office of Graduate Admissions for admission to the MA in Applied Linguistics program during their senior year.

Students will be admitted to the linked program for the semester after they make their application. Once students have been awarded their BA degrees and have fulfilled all regular admission requirements for the MA in applied linguistics, they will be officially admitted into the MA program.

Program Requirements

Students in the program will fulfill all normal admission and curricular requirements for both a BA in English with an Applied Linguistics major and an MA in Applied Linguistics, with the following exceptions:

1. Students in the program may count up to 12 hours of graduate courses taken as an undergraduate for which they have earned a grade of B (3.0) or better toward both the BA in English and MA in Applied Linguistics degrees.
2. Students in the program may substitute English linguistics graduate courses for undergraduate courses according to the following schema. All students must complete an undergraduate writing intensive course in the major.

- a. Any 500-level linguistics course that is cross listed with a 400-level course may be substituted for the 400-level course.
- b. Students may substitute 600-level courses for undergraduate courses according to the following list:

ENGL 672	Language Structure Analysis	3
for		
ENGL 350	Aspects of the English Language	3
ENGL 677	Language and Communication Across Cultures	3
for		
ENGL 371W	Language and Culture	3
ENGL 695	Topics	1-3
for		
ENGL 495	Topics in English	1-3

- c. Students in the program may make a written petition for other substitutions to the graduate program director (GPD) for electives in fields such as Asian studies, education, or professional writing. The GPD will consider substitutions in consultation with the chief departmental advisor and the instructor(s) of the courses involved. Students should consult the Graduate Catalog for requirements for the MA in Applied Linguistics.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional

information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts English with a Major in Applied Linguistics (BA)

Heather Weddington, Chief Departmental Advisor

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Language and Culture: BA students must have competence through the 202 level; competence is not met by completion of the associate degree.

Impact of Technology: met in the major with ENGL 307T.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

English Core

ENGL 307T	Digital Writing	3
ENGL 490	Professionalization in English	3

Theory & Analytics

Select two of the following:		6
ENGL 325	Introduction to Rhetorical Studies	
ENGL 333	Introduction to Critical Theory	
ENGL 370	English Linguistics	

Writing *

Select one of the following:		3
ENGL 300W	Introduction to Creative Writing	
ENGL 327W	Advanced Composition	
ENGL 334W	Technical Writing	
ENGL 427W	Writing in the Disciplines	

Required Literature and Cultural Studies Electives

Select two of the following:		6
ENGL 301	Introduction to British Literature I	
ENGL 302	Introduction to British Literature II	
ENGL 303	Shakespeare's Histories and Comedies	
ENGL 304	Shakespeare's Tragedies and Poetry	
ENGL 336	The Short Story	
ENGL 340	American Drama	
ENGL 342	Southern Literature	
ENGL 345	American Literature to 1860	
ENGL 346	American Literature Since 1860	
ENGL 360	World Literature I	
ENGL 363	World Literature II	
ENGL 407	Chaucer's Canterbury Tales	
ENGL 416	English Renaissance Drama	
ENGL 418W	Jewish Writers	
ENGL 419	The Harlem Renaissance	
ENGL 421	British Literature 1660-1800	
ENGL 423	The Romantic Movement in Britain	
ENGL 432	Origins and Early Development of the British Novel to 1800	
ENGL 433	Victorian Literature	
ENGL 438	The Twentieth-Century British Novel	
ENGL 441	American Travel Literature	
ENGL 447	The American Novel to 1920	
ENGL 448	The American Novel 1920 to Present	
ENGL 459W	New Literatures in English	
ENGL 461	American Poetry of the Early Twentieth Century	
ENGL 463W	Women Writers	
ENGL 464W	Native American Literature	
ENGL 465W	African American Literature	
ENGL 466W	Asian American Literature	
ENGL 492	Modern World Drama	
ENGL 493	Contemporary World Literature	

Total Credit Hours		21

* Grade of C or better required

Note: Applied Linguistics majors must take ENGL 370 in the Theory & Analytics portion of the core.

Applied Linguistics Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credits)	6
Complete foreign language coursework through the 202 level	0-6

English Core

Complete English core requirements	21

Applied Linguistics

ENGL 350	Aspects of the English Language	3
ENGL 371W	Language and Culture	3
Select four of the following:		12

ENGL 390	TESL Methods, Materials, & Assessment	
ENGL 440	General Linguistics	
ENGL 442	English Grammar	
ENGL 443	Southern and African American English	
ENGL 444	History of the English Language	
ENGL 445	Forensic Linguistics	
ENGL 450	American English	
ENGL 477	Language, Gender and Power	
ENGL 495	Topics in English (linguistics-related)	

Total Credit Hours	83-95

Elective Credit

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

Advising

To declare an English major or minor, students must see the English chief departmental advisor (CDA). The CDA will assign each major to a faculty advisor. Students in the Secondary Education Endorsement Program will also have an advisor in the Darden College of Education and Professional Studies. All English majors are required to have a conference with their English advisor before each semester (preferably during preregistration). The CDA will hold periodic group meetings with English majors to keep them fully informed.

Research Practicum

Students who wish to combine research and real-world experience can take ENGL 369 Research Practicum.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity		3
Interpreting the Past		3

Elective or Language and Culture I (May be waived; See requirement details)		3
Credit Hours		15
Spring		
Oral Communication		3
Literature		3
Information Literacy and Research		3
Human Behavior		3
Elective or Language and Culture II (May be waived; See requirement details)		3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Philosophy and Ethics		3
Elective		3
Credit Hours		16
Spring		
ENGL 307T	Digital Writing (Meets Impact of Technology)	3
Nature of Science II		4
Language and Culture IV		3
Elective		3
Elective		3
Credit Hours		16
Junior		
Fall		
Select one of the following (Grade of C or better required):		3
ENGL 300W	Introduction to Creative Writing	
ENGL 327W	Advanced Composition	
ENGL 334W	Technical Writing	
ENGL 427W	Writing in the Disciplines	
Select one of the following:		3
ENGL 325	Introduction to Rhetorical Studies	
ENGL 333	Introduction to Critical Theory	
ENGL 370	English Linguistics	
Major course		3
Major course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
Literature and Cultural Studies Course		3
Select one of the following:		3
ENGL 325	Introduction to Rhetorical Studies	
ENGL 333	Introduction to Critical Theory	

ENGL 370	English Linguistics	
Major course		3
Major course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
Major course		3
Minor or Elective		3
Elective		3
Elective		3
Elective		3
Credit Hours		15
Spring		
ENGL 490	Professionalization in English	3
Literature and Cultural Studies Course		3
Major course		3
Minor or Elective		3
Elective		1
Credit Hours		13
Total Credit Hours		120

Linked Bachelor of Arts in English/Master of Arts in Applied Linguistics

The linked BA in English with a major in Applied Linguistics and MA in Applied Linguistics makes it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 for the undergraduate degree and 30 for the graduate degree).

Admission Requirements

To be admitted to the program, students must have completed at least 60 undergraduate hours, including at least nine hours in English applied linguistics courses at the 300 level or above. At the time of admission, they must have an overall GPA of 3.00 or better, and a GPA of 3.30 or better in all English applied linguistics courses.

Admission Procedures

Interested students who meet the admission requirements should apply to the graduate program director as soon as possible after completing the required 60 undergraduate hours. In consultation with the graduate program director, students will:

1. Officially declare themselves an undergraduate Applied Linguistics major to the English Department's undergraduate chief departmental advisor.
2. Draft a schedule of graduate courses to be taken as an undergraduate, which will be placed in the student's undergraduate and graduate advising files.
3. Apply to the Office of Graduate Admissions for admission to the MA in Applied Linguistics program during their senior year.

Students will be admitted to the linked program for the semester after they make their application. Once students have been awarded their BA degrees and have fulfilled all regular admission requirements for the MA in applied linguistics, they will be officially admitted into the MA program.

Program Requirements

Students in the program will fulfill all normal admission and curricular requirements for both a BA in English with an Applied Linguistics major and an MA in Applied Linguistics, with the following exceptions:

- 1. Students in the program may count up to 12 hours of graduate courses taken as an undergraduate for which they have earned a grade of B (3.0) or better toward both the BA in English and MA in Applied Linguistics degrees.
- 2. Students in the program may substitute English linguistics graduate courses for undergraduate courses according to the following schema. All students must complete an undergraduate writing intensive course in the major.
 - a. Any 500-level linguistics course that is cross listed with a 400-level course may be substituted for the 400-level course.
 - b. Students may substitute 600-level courses for undergraduate courses according to the following list:

ENGL 672	Language Structure Analysis	3
for		
ENGL 350	Aspects of the English Language	3
ENGL 677	Language and Communication Across Cultures	3
for		
ENGL 371W	Language and Culture	3
ENGL 695	Topics	1-3
for		
ENGL 495	Topics in English	1-3

- c. Students in the program may make a written petition for other substitutions to the graduate program director (GPD) for electives in fields such as Asian studies, education, or professional writing. The GPD will consider substitutions in consultation with the chief departmental advisor and the instructor(s) of the courses involved. Students should consult the Graduate Catalog for requirements for the MA in Applied Linguistics.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is

suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts English with a Major in Creative Writing (BA)

Heather Weddington, Chief Departmental Advisor

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Language and Culture: BA students must have competence through the 202 level; competence is not met by completion of the associate degree.

Impact of Technology: met in the major with ENGL 307T.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure

- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

English Core

ENGL 307T	Digital Writing	3
ENGL 490	Professionalization in English	3
Theory & Analytics		
Select two of the following:		6
ENGL 325	Introduction to Rhetorical Studies	
ENGL 333	Introduction to Critical Theory	
ENGL 370	English Linguistics	
Writing *		
Select one of the following:		3
ENGL 300W	Introduction to Creative Writing	
ENGL 327W	Advanced Composition	
ENGL 334W	Technical Writing	
ENGL 427W	Writing in the Disciplines	
Required Literature and Cultural Studies Electives		
Select two of the following:		6
ENGL 301	Introduction to British Literature I	
ENGL 302	Introduction to British Literature II	
ENGL 303	Shakespeare's Histories and Comedies	
ENGL 304	Shakespeare's Tragedies and Poetry	
ENGL 336	The Short Story	
ENGL 340	American Drama	
ENGL 342	Southern Literature	
ENGL 345	American Literature to 1860	
ENGL 346	American Literature Since 1860	
ENGL 360	World Literature I	
ENGL 363	World Literature II	
ENGL 407	Chaucer's Canterbury Tales	
ENGL 416	English Renaissance Drama	
ENGL 418W	Jewish Writers	
ENGL 419	The Harlem Renaissance	
ENGL 421	British Literature 1660-1800	
ENGL 423	The Romantic Movement in Britain	
ENGL 432	Origins and Early Development of the British Novel to 1800	
ENGL 433	Victorian Literature	
ENGL 438	The Twentieth-Century British Novel	
ENGL 441	American Travel Literature	
ENGL 447	The American Novel to 1920	
ENGL 448	The American Novel 1920 to Present	

ENGL 459W	New Literatures in English	
ENGL 461	American Poetry of the Early Twentieth Century	
ENGL 463W	Women Writers	
ENGL 464W	Native American Literature	
ENGL 465W	African American Literature	
ENGL 466W	Asian American Literature	
ENGL 492	Modern World Drama	
ENGL 493	Contemporary World Literature	
Total Credit Hours		21

* Grade of C or better required

Creative Writing Major

General Education		
Complete lower-division requirements		38-44
Complete upper-division requirements (minimum of 6 credits)		6
Complete foreign language coursework through the 202 level		0-6
English Core		
Complete English core requirements		21
Creative Writing		
ENGL 300W	Introduction to Creative Writing	3
Select two of the following:		6
ENGL 449	Craft of Literary Nonfiction	
ENGL 456	The Craft of Fiction	
ENGL 457	The Craft of Poetry	
Select two of the following:		6
ENGL 351	Fiction Workshop	
ENGL 352	Poetry Workshop	
ENGL 451	Advanced Fiction Workshop	
ENGL 452	Advanced Poetry Workshop	
ENGL 454	Creative Nonfiction	
Select one W literature course not taken as literature elective for the major:		3
ENGL 418W	Jewish Writers	
ENGL 459W	New Literatures in English	
ENGL 463W	Women Writers	
ENGL 464W	Native American Literature	
ENGL 465W	African American Literature	
ENGL 466W	Asian American Literature	
Total Credit Hours		83-95

Note: If ENGL 300W is taken in the core, an additional creative writing craft or workshop course will be required to meet the major requirement of six courses.

Elective Credit

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

Advising

To declare an English major or minor, students must see the English chief departmental advisor (CDA). The CDA will assign each major to a faculty advisor. Students in the Secondary Education Endorsement Program will also have an advisor in the Darden College of Education and Professional Studies. All English majors are required to have a conference with their English advisor before each semester (preferably during preregistration). The CDA will hold periodic group meetings with English majors to keep them fully informed.

Research Practicum

Students who wish to combine research and real-world experience can take ENGL 369 Research Practicum.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity		3
Interpreting the Past		3
Elective or Language and Culture I (May be waived; See requirement details)		3
Credit Hours		15
Spring		
Oral Communication		3
Literature		3
Information Literacy and Research		3
Human Behavior		3
Elective or Language and Culture II (May be waived; See requirement details)		3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Philosophy and Ethics		3
Elective		3
Credit Hours		16
Spring		
ENGL 307T	Digital Writing (Meets Impact of Technology)	3
Nature of Science II		4
Language and Culture IV		3
Elective		3
Elective		3
Credit Hours		16
Junior		
Fall		
Select one of the following (Grade of C or better required):		3
ENGL 300W	Introduction to Creative Writing	
ENGL 327W	Advanced Composition	
ENGL 334W	Technical Writing	

ENGL 427W	Writing in the Disciplines	
Select one of the following:		3
ENGL 325	Introduction to Rhetorical Studies	
ENGL 333	Introduction to Critical Theory	
ENGL 370	English Linguistics	
Major course		3
Major course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
Literature and Cultural Studies Course		3
Select one of the following:		3
ENGL 325	Introduction to Rhetorical Studies	
ENGL 333	Introduction to Critical Theory	
ENGL 370	English Linguistics	
Major course		3
Major course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
Major course		3
Minor or Elective		3
Elective		3
Elective		3
Elective		3
Credit Hours		15
Spring		
ENGL 490	Professionalization in English	3
Literature and Cultural Studies Course		3
Major course		3
Minor or Elective		3
Elective		1
Credit Hours		13
Total Credit Hours		120

Linked Bachelor of Arts in English/Master of Arts in Applied Linguistics

The linked BA in English with a major in Applied Linguistics and MA in Applied Linguistics makes it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 for the undergraduate degree and 30 for the graduate degree).

Admission Requirements

To be admitted to the program, students must have completed at least 60 undergraduate hours, including at least nine hours in English applied linguistics courses at the 300 level or above. At the time of admission, they must have an overall GPA of 3.00 or better, and a GPA of 3.30 or better in all English applied linguistics courses.

Admission Procedures

Interested students who meet the admission requirements should apply to the graduate program director as soon as possible after completing the required 60 undergraduate hours. In consultation with the graduate program director, students will:

- 1. Officially declare themselves an undergraduate Applied Linguistics major to the English Department's undergraduate chief departmental advisor.
- 2. Draft a schedule of graduate courses to be taken as an undergraduate, which will be placed in the student's undergraduate and graduate advising files.
- 3. Apply to the Office of Graduate Admissions for admission to the MA in Applied Linguistics program during their senior year.

Students will be admitted to the linked program for the semester after they make their application. Once students have been awarded their BA degrees and have fulfilled all regular admission requirements for the MA in applied linguistics, they will be officially admitted into the MA program.

Program Requirements

Students in the program will fulfill all normal admission and curricular requirements for both a BA in English with an Applied Linguistics major and an MA in Applied Linguistics, with the following exceptions:

- 1. Students in the program may count up to 12 hours of graduate courses taken as an undergraduate for which they have earned a grade of B (3.0) or better toward both the BA in English and MA in Applied Linguistics degrees.
- 2. Students in the program may substitute English linguistics graduate courses for undergraduate courses according to the following schema. All students must complete an undergraduate writing intensive course in the major.
 - a. Any 500-level linguistics course that is cross listed with a 400-level course may be substituted for the 400-level course.
 - b. Students may substitute 600-level courses for undergraduate courses according to the following list:

ENGL 672	Language Structure Analysis	3
for		
ENGL 350	Aspects of the English Language	3
ENGL 677	Language and Communication Across Cultures	3
for		
ENGL 371W	Language and Culture	3
ENGL 695	Topics	1-3
for		
ENGL 495	Topics in English	1-3

- c. Students in the program may make a written petition for other substitutions to the graduate program director (GPD) for electives in fields such as Asian studies, education, or professional writing. The GPD will consider substitutions in consultation with the chief departmental advisor and the instructor(s) of the courses involved. Students should consult the Graduate Catalog for requirements for the MA in Applied Linguistics.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits

toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts English with a Major in Literature (BA)

Heather Weddington, Chief Departmental Advisor

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3

The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Language and Culture: BA students must have competence through the 202 level; competence is not met by completion of the associate degree.

Impact of Technology: met in the major with ENGL 307T.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

English Core

ENGL 307T	Digital Writing	3
ENGL 490	Professionalization in English	3

Theory & Analytics

Select two of the following:	6
ENGL 325	Introduction to Rhetorical Studies
ENGL 333	Introduction to Critical Theory
ENGL 370	English Linguistics

Writing *

Select one of the following:	3
ENGL 300W	Introduction to Creative Writing
ENGL 327W	Advanced Composition
ENGL 334W	Technical Writing
ENGL 427W	Writing in the Disciplines

Required Literature and Cultural Studies Electives

Select two of the following:	6
ENGL 301	Introduction to British Literature I
ENGL 302	Introduction to British Literature II
ENGL 303	Shakespeare's Histories and Comedies
ENGL 304	Shakespeare's Tragedies and Poetry
ENGL 336	The Short Story
ENGL 340	American Drama
ENGL 342	Southern Literature

ENGL 345	American Literature to 1860
ENGL 346	American Literature Since 1860
ENGL 360	World Literature I
ENGL 363	World Literature II
ENGL 407	Chaucer's Canterbury Tales
ENGL 416	English Renaissance Drama
ENGL 418W	Jewish Writers
ENGL 419	The Harlem Renaissance
ENGL 421	British Literature 1660-1800
ENGL 423	The Romantic Movement in Britain
ENGL 432	Origins and Early Development of the British Novel to 1800
ENGL 433	Victorian Literature
ENGL 438	The Twentieth-Century British Novel
ENGL 441	American Travel Literature
ENGL 447	The American Novel to 1920
ENGL 448	The American Novel 1920 to Present
ENGL 459W	New Literatures in English
ENGL 461	American Poetry of the Early Twentieth Century
ENGL 463W	Women Writers
ENGL 464W	Native American Literature
ENGL 465W	African American Literature
ENGL 466W	Asian American Literature
ENGL 492	Modern World Drama
ENGL 493	Contemporary World Literature

Total Credit Hours **21**

* Grade of C or better required

Literature Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credits)	6
Complete foreign language coursework through the 202 level	0-6

English Core

Complete English core requirements	21

Literature

Select one not taken to fulfill the literature elective for the major:	3
ENGL 301	Introduction to British Literature I
ENGL 302	Introduction to British Literature II

Select one not taken to fulfill the literature elective for the major:	3
ENGL 340	American Drama
ENGL 342	Southern Literature
ENGL 345	American Literature to 1860
ENGL 346	American Literature Since 1860

Select one at the 400 level in British literature from the following, or a class approved by the literature major coordinator:

ENGL 407	Chaucer's Canterbury Tales
ENGL 416	English Renaissance Drama
ENGL 421	British Literature 1660-1800
ENGL 423	The Romantic Movement in Britain
ENGL 432	Origins and Early Development of the British Novel to 1800
ENGL 433	Victorian Literature
ENGL 438	The Twentieth-Century British Novel

Select one at the 400 level in American literature from the following, or a class approved by the literature major coordinator:

ENGL 419	The Harlem Renaissance

ENGL 441	American Travel Literature	
ENGL 447	The American Novel to 1920	
ENGL 448	The American Novel 1920 to Present	
Select one focus class from the following:		3
ENGL 418W	Jewish Writers	
ENGL 459W	New Literatures in English	
ENGL 463W	Women Writers	
ENGL 464W	Native American Literature	
ENGL 465W	African American Literature	
ENGL 466W	Asian American Literature	
Select one additional 400-level literature elective.		3
Total Credit Hours		83-95

Notes:

1. Literature major students must take ENGL 333 in the Theory & Analytics portion of the core.
2. Literature major students must take one British literature class from ENGL 301 or ENGL 302 and one American literature course from ENGL 340, ENGL 342, ENGL 345, or ENGL 346 to fulfill the Literature and Cultural Studies elective for the major.
3. Literature major students must take a Shakespeare course, ENGL 303 or ENGL 304, as one of their electives for the major.

Elective Credit

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

Advising

To declare an English major or minor, students must see the English chief departmental advisor (CDA). The CDA will assign each major to a faculty advisor. Students in the Secondary Education Endorsement Program will also have an advisor in the Darden College of Education and Professional Studies. All English majors are required to have a conference with their English advisor before each semester (preferably during preregistration). The CDA will hold periodic group meetings with English majors to keep them fully informed.

Research Practicum

Students who wish to combine research and real-world experience can take ENGL 369 Research Practicum.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity		3
Interpreting the Past		3
Elective or Language and Culture I (May be waived; See requirement details)		3
Credit Hours		15

Spring		
Oral Communication		3
Literature		3
Information Literacy and Research		3
Human Behavior		3
Elective or Language and Culture II (May be waived; See requirement details)		3
Credit Hours		15

Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Philosophy and Ethics		3
Elective		3
Credit Hours		16

Spring		
ENGL 307T	Digital Writing (Meets Impact of Technology)	3
Nature of Science II		4
Language and Culture IV		3
Elective		3
Elective		3
Credit Hours		16

Junior		
Fall		
Select one of the following (Grade of C or better required):		3
ENGL 300W	Introduction to Creative Writing	
ENGL 327W	Advanced Composition	
ENGL 334W	Technical Writing	
ENGL 427W	Writing in the Disciplines	
Select one of the following:		3
ENGL 325	Introduction to Rhetorical Studies	
ENGL 333	Introduction to Critical Theory	
ENGL 370	English Linguistics	
Major course		3
Major course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15

Spring		
Literature and Cultural Studies Course		3
Select one of the following:		3
ENGL 325	Introduction to Rhetorical Studies	
ENGL 333	Introduction to Critical Theory	
ENGL 370	English Linguistics	
Major course		3
Major course		3

Upper-Division General Education Course or Minor	3
Credit Hours	15
Senior	
Fall	
Major course	3
Minor or Elective	3
Elective	3
Elective	3
Elective	3
Credit Hours	15
Spring	
ENGL 490 Professionalization in English	3
Literature and Cultural Studies Course	3
Major course	3
Minor or Elective	3
Elective	1
Credit Hours	13
Total Credit Hours	120

Linked Bachelor of Arts in English/Master of Arts in Applied Linguistics

The linked BA in English with a major in Applied Linguistics and MA in Applied Linguistics makes it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 for the undergraduate degree and 30 for the graduate degree).

Admission Requirements

To be admitted to the program, students must have completed at least 60 undergraduate hours, including at least nine hours in English applied linguistics courses at the 300 level or above. At the time of admission, they must have an overall GPA of 3.00 or better, and a GPA of 3.30 or better in all English applied linguistics courses.

Admission Procedures

Interested students who meet the admission requirements should apply to the graduate program director as soon as possible after completing the required 60 undergraduate hours. In consultation with the graduate program director, students will:

1. Officially declare themselves an undergraduate Applied Linguistics major to the English Department's undergraduate chief departmental advisor.
2. Draft a schedule of graduate courses to be taken as an undergraduate, which will be placed in the student's undergraduate and graduate advising files.
3. Apply to the Office of Graduate Admissions for admission to the MA in Applied Linguistics program during their senior year.

Students will be admitted to the linked program for the semester after they make their application. Once students have been awarded their BA degrees and have fulfilled all regular admission requirements for the MA in applied linguistics, they will be officially admitted into the MA program.

Program Requirements

Students in the program will fulfill all normal admission and curricular requirements for both a BA in English with an Applied Linguistics major and an MA in Applied Linguistics, with the following exceptions:

1. Students in the program may count up to 12 hours of graduate courses taken as an undergraduate for which they have earned a grade of B (3.0)

or better toward both the BA in English and MA in Applied Linguistics degrees.

2. Students in the program may substitute English linguistics graduate courses for undergraduate courses according to the following schema. All students must complete an undergraduate writing intensive course in the major.

- a. Any 500-level linguistics course that is cross listed with a 400-level course may be substituted for the 400-level course.
- b. Students may substitute 600-level courses for undergraduate courses according to the following list:

ENGL 672	Language Structure Analysis	3
for		
ENGL 350	Aspects of the English Language	3
ENGL 677	Language and Communication Across Cultures	3
for		
ENGL 371W	Language and Culture	3
ENGL 695	Topics	1-3
for		
ENGL 495	Topics in English	1-3

- c. Students in the program may make a written petition for other substitutions to the graduate program director (GPD) for electives in fields such as Asian studies, education, or professional writing. The GPD will consider substitutions in consultation with the chief departmental advisor and the instructor(s) of the courses involved. Students should consult the Graduate Catalog for requirements for the MA in Applied Linguistics.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program

must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts

English with a Major in Secondary English Education (6-12) (BA)

Heather Weddington, Chief Departmental Advisor

Michelle Fowler-Amato, Director of English Teacher Education

This program leads to eligibility for teacher licensure in Virginia. Licensure in English prepares students for a full range of secondary school teaching assignments. The program is accredited by the State of Virginia; in addition, Virginia has licensure reciprocity agreements with thirty other states, should the student leave Virginia.

The program combines the usual requirements of a college major. Students take courses in Old Dominion University's College of Arts and Letters and Darden College of Education and Professional Studies.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Language and Culture: BA students must have competence through the 202 level; competence is not met by completion of the associate degree.

Impact of Technology: met in the major with ENGL 307T.

Upper-Division General Education

Satisfied through the professional education sequence.

Requirements for Graduation

Requirements for graduation include completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W)

course in the major with a grade of C or better, completion of the Senior Assessment; a minimum cumulative 2.75 GPA in the major area and in the professional education core with no grade less than a C in the major/content and with no grade less than a C- in the professional education core; successful completion of the Teacher Candidate Internship; and a minimum of 120 credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the teacher education programs in the College of Arts and Letters are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information from their advisors and from the Office of Clinical Experiences website at www.odu.edu/oce (<http://www.odu.edu/tes/>).

Secondary English Education (6-12) Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (met in the major through professional education coursework)	
Complete foreign language coursework through the 202 level	0-6

Secondary English Education (6-12)

ENGL 307T	Digital Writing	3
ENGL 327W	Advanced Composition *	3
ENGL 333	Introduction to Critical Theory	3
Select one of the following:		3
ENGL 325	Introduction to Rhetorical Studies	
ENGL 370	English Linguistics	

Required Literature Electives

Select one of the following:		3
ENGL 301	Introduction to British Literature I	
ENGL 303	Shakespeare's Histories and Comedies	
ENGL 304	Shakespeare's Tragedies and Poetry	
Select one of the following:		3
ENGL 360	World Literature I	
ENGL 363	World Literature II	
ENGL 493	Contemporary World Literature	
Select one of the following:		3
ENGL 418W	Jewish Writers	
ENGL 459W	New Literatures in English	
ENGL 463W	Women Writers	
ENGL 464W	Native American Literature	
ENGL 465W	African American Literature	
ENGL 466W	Asian American Literature	

Additional Requirements for the Major:

ENGL 302	Introduction to British Literature II	3
ENGL 345	American Literature to 1860	3
ENGL 346	American Literature Since 1860	3
ENGL 350	Aspects of the English Language	3
ENGL 406	The Teaching of Literature	3
ENGL 455	The Teaching of Composition, Grades 6-12	3

Professional Education Courses

TLED 301	Foundations and Introduction to Assessment of Education	3

TLED 360	Classroom Management and Discipline	2
TLED 408	Reading and Writing in Content Areas	3
TLED 430W	PK-12 Instructional Technology	3
TLED 451	Developing Instructional Strategies for Teaching in the Middle/High School: English	3
TLED 483	Seminar in Teacher Education	1
TLED 485	Teacher Candidate Internship	12
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
Total Credit Hours		110-122

* Grade of C or better required

Additional Requirements and Information

Admission

All students must apply for and be admitted into the approved secondary English education program. Students must meet the required criteria for admission as described below.

Prescribed Virginia Board of Education Assessment for Admission to an Approved Teacher Education Program

Old Dominion University students seeking admission to an approved teacher education program must satisfy the Virginia Board of Education required assessment for admission into an approved teacher education program.

For the most current information on the prescribed Virginia Board of Education admission assessment, visit the Virginia Department of Education at <https://www.doe.virginia.gov/>.

Required grade point averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required – all upper-division English courses must be passed with a grade of C- or higher. Lower-division and English W courses must be passed with a grade of C or higher.
- A professional education GPA of 2.75 is required – all professional education courses must be passed with a grade of C- or higher.

Although students may enroll in a limited number of education courses, students must be admitted into the approved secondary English education program prior to enrolling in any instructional strategies practicum education course. Students must also meet with an education advisor in the Career and Advising Resource Center in the Darden College of Education and Professional Studies (1107 Education Building).

Continuance

Students must maintain the required GPA and grades once they are accepted into the Darden College of Education and Professional Studies. Students must take and pass the Praxis Subject Assessment, English Language Arts content knowledge (test code #5038) prior to or while enrolled in the instructional strategies course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session. Students are encouraged to obtain information regarding the recommended timeline to complete the required assessments from the Office of Clinical Experiences website at www.odu.edu/oce.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check

is located at: <http://www.odu.edu/success/academic/teacher-education/placement/background-checks> (<http://www.odu.edu/success/academic/teacher-education/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Virginia Board of Education Prescribed Assessments for Licensure

- Praxis Subject Assessment, English Language Arts content knowledge (test code #5038)--passing score of 167 required.

To review more information on the Virginia Board of Education prescribed assessments, visit the Office of Clinical Experiences website, www.odu.edu/oce (<http://www.odu.edu/tes/>).

Advising

To declare an English major or minor, students must see the English chief departmental advisor (CDA). The CDA will assign each major to a faculty advisor. Students in the Secondary Education Endorsement Program will also have an advisor in the Darden College of Education and Professional Studies. All English majors are required to have a conference with their English advisor before each semester (preferably during preregistration). The CDA will hold periodic group meetings with English majors to keep them fully informed.

Research Practicum

Students who wish to combine research and real-world experience can take ENGL 369 Research Practicum.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity		3
Interpreting the Past		3
Elective or Language and Culture I (May be waived; See requirement details)		3
Credit Hours		15
Spring		
Oral Communication		3
Literature		3
Information Literacy and Research		3
Human Behavior		3
Elective or Language and Culture II (May be waived; See requirement details)		1-3
Credit Hours		13-15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3

Nature of Science I		4
Language and Culture III		3
Philosophy and Ethics		3
TLED 301	Foundations and Introduction to Assessment of Education	3
Credit Hours		16
Spring		
Nature of Science II		4
Language and Culture IV		3
ENGL 327W	Advanced Composition	3
ENGL 302	Introduction to British Literature II	3
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
Credit Hours		16
Junior		
Fall		
ENGL 301 or ENGL 303	Introduction to British Literature I or Shakespeare's Histories and Comedies	3
ENGL 333	Introduction to Critical Theory	3
ENGL 345	American Literature to 1860	3
ENGL 325 or ENGL 370		3
TLED 430W	PK-12 Instructional Technology	3
Credit Hours		15
Spring		
Select one of the following (Grade of C or better in at least one W course required):		3
ENGL 418W	Jewish Writers	
ENGL 459W	New Literatures in English	
ENGL 463W	Women Writers	
ENGL 464W	Native American Literature	
ENGL 465W	African American Literature	
ENGL 466W	Asian American Literature	
ENGL 307T	Digital Writing	3
ENGL 346	American Literature Since 1860	3
ENGL 350	Aspects of the English Language	3
ENGL 455	The Teaching of Composition, Grades 6-12	3
TLED 360	Classroom Management and Discipline	2
Credit Hours		17
Senior		
Fall		
Select one of the following:		3
ENGL 360	World Literature I	
ENGL 363	World Literature II	
ENGL 493	Contemporary World Literature	
ENGL 406	The Teaching of Literature	3

SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
TLED 408	Reading and Writing in Content Areas	3
TLED 451	Developing Instructional Strategies for Teaching in the Middle/High School: English	3
TLED 483	Seminar in Teacher Education	1
Credit Hours		16
Spring		
TLED 485	Teacher Candidate Internship	12
Credit Hours		12
Total Credit Hours		120-122

Linked Bachelor of Arts in English/Master of Arts in Applied Linguistics

The linked BA in English with a major in Applied Linguistics and MA in Applied Linguistics makes it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 for the undergraduate degree and 30 for the graduate degree).

Admission Requirements

To be admitted to the program, students must have completed at least 60 undergraduate hours, including at least nine hours in English applied linguistics courses at the 300 level or above. At the time of admission, they must have an overall GPA of 3.00 or better, and a GPA of 3.30 or better in all English applied linguistics courses.

Admission Procedures

Interested students who meet the admission requirements should apply to the graduate program director as soon as possible after completing the required 60 undergraduate hours. In consultation with the graduate program director, students will:

1. Officially declare themselves an undergraduate Applied Linguistics major to the English Department's undergraduate chief departmental advisor.
2. Draft a schedule of graduate courses to be taken as an undergraduate, which will be placed in the student's undergraduate and graduate advising files.
3. Apply to the Office of Graduate Admissions for admission to the MA in Applied Linguistics program during their senior year.

Students will be admitted to the linked program for the semester after they make their application. Once students have been awarded their BA degrees and have fulfilled all regular admission requirements for the MA in applied linguistics, they will be officially admitted into the MA program.

Program Requirements

Students in the program will fulfill all normal admission and curricular requirements for both a BA in English with an Applied Linguistics major and an MA in Applied Linguistics, with the following exceptions:

1. Students in the program may count up to 12 hours of graduate courses taken as an undergraduate for which they have earned a grade of B (3.0) or better toward both the BA in English and MA in Applied Linguistics degrees.
2. Students in the program may substitute English linguistics graduate courses for undergraduate courses according to the following schema. All students must complete an undergraduate writing intensive course in the major.

- a. Any 500-level linguistics course that is cross listed with a 400-level course may be substituted for the 400-level course.
- b. Students may substitute 600-level courses for undergraduate courses according to the following list:

ENGL 672	Language Structure Analysis	3
for		
ENGL 350	Aspects of the English Language	3
ENGL 677	Language and Communication Across Cultures	3
for		
ENGL 371W	Language and Culture	3
ENGL 695	Topics	1-3
for		
ENGL 495	Topics in English	1-3

- c. Students in the program may make a written petition for other substitutions to the graduate program director (GPD) for electives in fields such as Asian studies, education, or professional writing. The GPD will consider substitutions in consultation with the chief departmental advisor and the instructor(s) of the courses involved. Students should consult the Graduate Catalog for requirements for the MA in Applied Linguistics.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional

information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts English with a Major in Technical and Professional Writing (BA)

Heather Weddington, Chief Departmental Advisor (hwedding@odu.edu)
Daniel P. Richards, Technical and Professional Writing Advisor (dprichar@odu.edu)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Language and Culture: BA students must have competence through the 202 level; competence is not met by completion of the associate degree.

Impact of Technology: met in the major with ENGL 307T.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

English Core

ENGL 307T	Digital Writing	3
ENGL 490	Professionalization in English	3

Theory & Analytics

Select two of the following:	6
ENGL 325	Introduction to Rhetorical Studies
ENGL 333	Introduction to Critical Theory
ENGL 370	English Linguistics

Writing *

Select one of the following:	3
ENGL 300W	Introduction to Creative Writing
ENGL 327W	Advanced Composition
ENGL 334W	Technical Writing
ENGL 427W	Writing in the Disciplines

Required Literature and Cultural Studies Electives

Select two of the following:	6
ENGL 301	Introduction to British Literature I
ENGL 302	Introduction to British Literature II
ENGL 303	Shakespeare's Histories and Comedies
ENGL 304	Shakespeare's Tragedies and Poetry
ENGL 336	The Short Story
ENGL 340	American Drama
ENGL 342	Southern Literature
ENGL 345	American Literature to 1860
ENGL 346	American Literature Since 1860
ENGL 360	World Literature I
ENGL 363	World Literature II
ENGL 407	Chaucer's Canterbury Tales
ENGL 416	English Renaissance Drama
ENGL 418W	Jewish Writers
ENGL 419	The Harlem Renaissance
ENGL 421	British Literature 1660-1800
ENGL 423	The Romantic Movement in Britain
ENGL 432	Origins and Early Development of the British Novel to 1800
ENGL 433	Victorian Literature
ENGL 438	The Twentieth-Century British Novel
ENGL 441	American Travel Literature
ENGL 447	The American Novel to 1920
ENGL 448	The American Novel 1920 to Present
ENGL 459W	New Literatures in English
ENGL 461	American Poetry of the Early Twentieth Century
ENGL 463W	Women Writers
ENGL 464W	Native American Literature
ENGL 465W	African American Literature
ENGL 466W	Asian American Literature
ENGL 492	Modern World Drama
ENGL 493	Contemporary World Literature

Total Credit Hours	21

* Grade of C or better required

Technical and Professional Writing Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credits)	6
Complete foreign language coursework through the 202 level	0-6

English Core

Complete English core requirements	21

Technical and Professional Writing

ENGL 334W	Technical Writing	3
ENGL 335	Editing and Document Design	3
ENGL 368	English Internship	3
ENGL 435W	Management Writing	3

Select two of the following not taken in the core:	6

ENGL 327W	Advanced Composition
ENGL 427W	Writing in the Disciplines
ENGL 436	Writing for the Government
ENGL 439	Writing in Digital Spaces
ENGL 468	Advanced English Internship
ENGL 495	Topics in English *

Students can select a writing intensive (W) course (e.g., ENVH 402W, OEAS 466W) in another department if the topic is relevant to technical and professional writing. Advisor approval required.

Total Credit Hours	83-95

* When the topic is relevant to technical and professional writing and approved by the chief departmental advisor.

Note: Technical and Professional Writing major students must take ENGL 325 in the Theory & Analytics portion of the core.

Elective Credit

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

Advising

To declare an English major or minor, students must see the English chief departmental advisor (CDA). The CDA will assign each major to a faculty advisor. Students in the Secondary Education Endorsement Program will also have an advisor in the Darden College of Education and Professional Studies. All English majors are required to have a conference with their English advisor before each semester (preferably during preregistration). The CDA will hold periodic group meetings with English majors to keep them fully informed.

Research Practicum

Students who wish to combine research and real-world experience can take ENGL 369 Research Practicum.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity		3
Interpreting the Past		3
Elective or Language and Culture I (May be waived; See requirement details)		3
Credit Hours		15
Spring		
Oral Communication		3
Literature		3
Information Literacy and Research		3
Human Behavior		3
Elective or Language and Culture II (May be waived; See requirement details)		3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Philosophy and Ethics		3
Elective		3
Credit Hours		16
Spring		
ENGL 307T	Digital Writing (Meets Impact of Technology)	3
Nature of Science II		4
Language and Culture IV		3
Elective		3
Elective		3
Credit Hours		16
Junior		
Fall		
Select one of the following (Grade of C or better required):		3
ENGL 300W	Introduction to Creative Writing	
ENGL 327W	Advanced Composition	
ENGL 427W	Writing in the Disciplines	
Select one of the following:		3
ENGL 325	Introduction to Rhetorical Studies	
ENGL 333	Introduction to Critical Theory	
ENGL 370	English Linguistics	
ENGL 335	Editing and Document Design	3
Major course		3

Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
Literature and Cultural Studies Course		3
Select one of the following:		3
ENGL 325	Introduction to Rhetorical Studies	
ENGL 333	Introduction to Critical Theory	
ENGL 370	English Linguistics	
Major course		3
Major course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
ENGL 368	English Internship	3
Minor or Elective		3
Elective		3
Elective		3
Elective		3
Credit Hours		15
Spring		
ENGL 435W	Management Writing	3
ENGL 490	Professionalization in English	3
Literature and Cultural Studies Course		3
Minor or Elective		3
Elective		1
Credit Hours		13
Total Credit Hours		120

Linked Bachelor of Arts in English/Master of Arts in Applied Linguistics

The linked BA in English with a major in Applied Linguistics and MA in Applied Linguistics makes it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 for the undergraduate degree and 30 for the graduate degree).

Admission Requirements

To be admitted to the program, students must have completed at least 60 undergraduate hours, including at least nine hours in English applied linguistics courses at the 300 level or above. At the time of admission, they must have an overall GPA of 3.00 or better, and a GPA of 3.30 or better in all English applied linguistics courses.

Admission Procedures

Interested students who meet the admission requirements should apply to the graduate program director as soon as possible after completing the required 60 undergraduate hours. In consultation with the graduate program director, students will:

1. Officially declare themselves an undergraduate Applied Linguistics major to the English Department's undergraduate chief departmental advisor.
2. Draft a schedule of graduate courses to be taken as an undergraduate, which will be placed in the student's undergraduate and graduate advising files.

3. Apply to the Office of Graduate Admissions for admission to the MA in Applied Linguistics program during their senior year.

Students will be admitted to the linked program for the semester after they make their application. Once students have been awarded their BA degrees and have fulfilled all regular admission requirements for the MA in applied linguistics, they will be officially admitted into the MA program.

Program Requirements

Students in the program will fulfill all normal admission and curricular requirements for both a BA in English with an Applied Linguistics major and an MA in Applied Linguistics, with the following exceptions:

1. Students in the program may count up to 12 hours of graduate courses taken as an undergraduate for which they have earned a grade of B (3.0) or better toward both the BA in English and MA in Applied Linguistics degrees.
2. Students in the program may substitute English linguistics graduate courses for undergraduate courses according to the following schema. All students must complete an undergraduate writing intensive course in the major.
 - a. Any 500-level linguistics course that is cross listed with a 400-level course may be substituted for the 400-level course.
 - b. Students may substitute 600-level courses for undergraduate courses according to the following list:

ENGL 672	Language Structure Analysis	3
for		
ENGL 350	Aspects of the English Language	3
ENGL 677	Language and Communication Across Cultures	3
for		
ENGL 371W	Language and Culture	3
ENGL 695	Topics	1-3
for		
ENGL 495	Topics in English	1-3

- c. Students in the program may make a written petition for other substitutions to the graduate program director (GPD) for electives in fields such as Asian studies, education, or professional writing. The GPD will consider substitutions in consultation with the chief departmental advisor and the instructor(s) of the courses involved. Students should consult the Graduate Catalog for requirements for the MA in Applied Linguistics.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor English Minor Requirements

The English minor consists of 15 credit hours of 300- and 400-level courses, three hours of which must be at the 400 level. A general minor and five minors in areas related to the English majors are offered, with the general minor and some areas also available online. Regardless of emphasis or delivery method, the curriculum is still called a minor in English.

English

Select 15 credit hours from 300 and 400-level English courses	15
Total Credit Hours	15

Creative Writing

Select 15 credit hours from the following:	15
ENGL 300W	Introduction to Creative Writing
ENGL 351	Fiction Workshop
ENGL 352	Poetry Workshop
ENGL 449	Craft of Literary Nonfiction
ENGL 451	Advanced Fiction Workshop
ENGL 452	Advanced Poetry Workshop
ENGL 454	Creative Nonfiction
ENGL 456	The Craft of Fiction
ENGL 457	The Craft of Poetry
Total Credit Hours	15

Journalism

Select 15 credit hours from the following:	15
ENGL 335	Editing and Document Design
ENGL 368	English Internship
ENGL 380	Introduction to Journalism
ENGL 381	Public Relations
ENGL 382	Reporting News for Television and Digital Media
ENGL 383	Digital Journalism
ENGL 384	Business and Science Journalism

ENGL 385	The Press and Making of American Democracy	
ENGL 454	Creative Nonfiction	
ENGL 482	Sports Journalism	
ENGL 483W	Reporting and News Writing II	
ENGL 484	Feature Story Writing	
ENGL 485W	Editorial and Persuasive Writing	
ENGL 486	Media Law and Ethics	
Total Credit Hours		15

Applied Language Studies

Select 15 credit hours from the following:		15
ENGL 350	Aspects of the English Language	
ENGL 370	English Linguistics	
ENGL 371W	Language and Culture	
ENGL 390	TESL Methods, Materials, & Assessment	
ENGL 440	General Linguistics	
ENGL 442	English Grammar	
ENGL 443	Southern and African American English	
ENGL 444	History of the English Language	
ENGL 445	Forensic Linguistics	
ENGL 450	American English	
ENGL 477	Language, Gender and Power	
Total Credit Hours		15

Literature

Select 15 credit hours from the following:		15
ENGL 301	Introduction to British Literature I	
ENGL 302	Introduction to British Literature II	
ENGL 303	Shakespeare's Histories and Comedies	
ENGL 304	Shakespeare's Tragedies and Poetry	
ENGL 333	Introduction to Critical Theory	
ENGL 336	The Short Story	
ENGL 340	American Drama	
ENGL 342	Southern Literature	
ENGL 345	American Literature to 1860	
ENGL 346	American Literature Since 1860	
ENGL 349	The Contemporary American Novel	
ENGL 360	World Literature I	
ENGL 363	World Literature II	
ENGL 407	Chaucer's Canterbury Tales	
ENGL 416	English Renaissance Drama	
ENGL 418W	Jewish Writers	
ENGL 421	British Literature 1660-1800	
ENGL 423	The Romantic Movement in Britain	
ENGL 432	Origins and Early Development of the British Novel to 1800	
ENGL 433	Victorian Literature	
ENGL 438	The Twentieth-Century British Novel	
ENGL 447	The American Novel to 1920	
ENGL 448	The American Novel 1920 to Present	
ENGL 459W	New Literatures in English	
ENGL 461	American Poetry of the Early Twentieth Century	
ENGL 463W	Women Writers	
ENGL 465W	African American Literature	
ENGL 466W	Asian American Literature	
ENGL 492	Modern World Drama	

ENGL 493	Contemporary World Literature
Total Credit Hours	15

Technical Writing

Select 15 credit hours from the following:		15
ENGL 307T	Digital Writing	
ENGL 325	Introduction to Rhetorical Studies	
ENGL 327W	Advanced Composition	
ENGL 334W	Technical Writing	
ENGL 354	Client-Based Research Writing	
ENGL 368	English Internship	
ENGL 381	Public Relations	
ENGL 427W	Writing in the Disciplines	
ENGL 435W	Management Writing	
ENGL 436	Writing for the Government	
ENGL 439	Writing in Digital Spaces	
ENGL 473	Writing with Video	
ENGL 484	Feature Story Writing	
Total Credit Hours		15

For completion of a minor, a student must have a minimum grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Certificate

Professional Writing Certificate

Requirements

This certificate requires 12 credit hours of professional writing courses selected from the following:

Select four of the following:		12
ENGL/IDS 307T	Digital Writing	
ENGL 325	Introduction to Rhetorical Studies	
ENGL 327W	Advanced Composition	
ENGL 334W	Technical Writing	
ENGL 368	English Internship	
ENGL 427W	Writing in the Disciplines	
ENGL 435W	Management Writing	
ENGL 436	Writing for the Government	
ENGL 439	Writing in Digital Spaces	
ENGL 468	Advanced English Internship	
Total Credit Hours		12

For completion of the certificate, students must have a minimum grade point average of 2.00 in each course specified as a requirement for the certificate. A minimum of three of the four required courses must be completed at Old Dominion University.

To apply for the certificate, contact Daniel Richards (dprichar@odu.edu).

Certificate

Teaching English as a Second Language (TESL) Certificate

The Teaching English as a Second Language (TESL) certificate provides candidates with specialized knowledge of English language fundamentals and emphasizes the relationship between language and culture, communication across cultures, and how to approach the teaching and assessment of English as a second language (ESL). It is designed for candidates who are pursuing or who hold a teaching license and wish to

prepare for adding an ESL endorsement to it or who wish to teach English abroad, work for private businesses and schools, or teach ESL to immigrant populations in the USA. In such contexts, candidates will benefit from a solid knowledge of language fundamentals coupled with cross-cultural communication and practical pedagogical training.

The TESL certificate is available to undergraduate students and non-degree seeking professionals who meet the requirements. It can be completed in two modalities: online and face-to-face.

Requirements

This certificate requires 12 credit hours of coursework from the following courses:

ENGL 350	Aspects of the English Language	3
or ENGL 442	English Grammar	
ENGL 370	English Linguistics	3
or ENGL 440	General Linguistics	
ENGL 371W	Language and Culture	3
ENGL 390	TESL Methods, Materials, & Assessment	3
Total Credit Hours		12

For completion of the certificate, students must have a minimum grade point average of 2.00 in each course specified as a requirement for the certificate. A minimum of three of the four required courses must be completed at Old Dominion University.

To apply for the certificate, contact Staci Defibaugh (sdefibau@odu.edu).

F. Ludwig Diehn School of Music

Web Site: <https://www.odu.edu/music> (<https://www.odu.edu/music/>)

Emily Ondracek-Peterson, Executive Director
Nancy K. Klein, Director and Chair
Bianca Hall, Chief Departmental Advisor
Douglas T. Owens, Graduate Program Director

<https://www.odu.edu/music> (<https://www.odu.edu/music/>)

Old Dominion University is a fully accredited member of the National Association of Schools of Music and offers applied music instruction and coursework leading to the following degrees:

- the Bachelor of Music with a major in Performance (interest areas in Orchestral Instruments, Voice, and Piano, Organ, Harpsichord or Guitar);
- the Bachelor of Music with a major in Composition;
- the Bachelor of Music with an emphasis in Sound Recording Technology;
- the Bachelor of Music with a major in Jazz Studies;
- the Bachelor of Arts with a major in Music (interest areas in Music History and Music Theory); and
- the Bachelor of Music with majors in PreK-12 Instrumental Music Education and PreK-12 Vocal Music Education.

For admittance to the Diehn School of Music, prospective students seeking a Bachelor of Music degree or the Bachelor of Arts in Music degree must pass a music audition process. Students with prior experience in music theory/aural skills are encouraged to take a placement assessment. See the Diehn School of Music Undergraduate Auditions page (<https://www.odu.edu/music/admission/auditions/undergraduate/>) for more information.

In addition to full degrees in music, the minor in music is available, with emphases in Composition, Performance, Music History, and Music Production. Additional offerings include courses in history, methods, appreciation, and literature of music; participation in the Concert Choir, Madrigal Choir, Diehn Chorale, Wind Ensemble, Symphony Orchestra, Jazz Orchestra, Symphonic Band, Marching Band, and other ensembles; and individual instruction in piano, organ, voice, guitar, harpsichord, and the

orchestral and band instruments. See the School's ensembles page (<https://www.odu.edu/music/ensembles/>) for more information.

The F. Ludwig Diehn School of Music offers the Master of Music Education (MME) degree. Please refer to the Diehn School of Music Graduate pages for more information (<https://www.odu.edu/music/programs/graduate/>).

Auditions and Placement Assessments in Music

All applicants for the Bachelor of Music degrees (except the Bachelor of Music with a major in Composition) and the Bachelor of Arts degrees are required to successfully pass an audition in their major performance area prior to approval for admission to these degree programs. All applicants for the Bachelor of Music with a major in Composition must be accepted into the composition program area by the Director of Composition and Program Advisor through a separate evaluative audition process.

Students transferring into the F. Ludwig Diehn School of Music are required to take placement assessments in music theory/aural skills and in any applied area, including voice or piano class, in which they wish to transfer credit.

For details regarding auditions, placement assessments, and ensemble auditions, please visit the F. Ludwig Diehn School of Music (<https://www.odu.edu/music/>) website.

Student Handbook

All music majors and minors are strongly encouraged to consult the Music Student Handbook (<https://www.odu.edu/music/students/undergraduate/handbook/>) for further information regarding juries, recital attendance policies, Student Performance Hour, general Student Recital performance requirements, and other information.

Financial Aid

Scholarship funds for incoming students are available based on merit and ensemble needs. Additional scholarship funds are available for continuing students providing significant contributions within the F. Ludwig Diehn School of Music. Refer to the Scholarships section of this Catalog (p. 24) for more information.

Community Music Division

The Community Music Division in the College of Arts and Letters offers the finest level of private music instruction, classes, and ensembles to people of all ages and abilities. Faculty members hold degrees in music and specialize in the instruments that they teach. Most are active performers or teachers in the Hampton Roads community and beyond, and all are encouraged to join and participate in national music organizations. The Community Music Division (<https://www1.odu.edu/music/community-music/>) offers private and group instruction in most instruments and voice.

Programs

Bachelor of Arts Program

- Music (BA) (p. 204)

Bachelor of Music Programs

- Music with a Major in Composition (BM) (p. 208)
- Music with a Major in Jazz Studies (BM) (p. 212)
- Music with a Major in Performance (BM) (p. 215)
- Music with a Major in PreK-12 Instrumental Music Education (BM) (p. 222)
- Music with a Major in PreK-12 Vocal Music Education (BM) (p. 227)
- Music with an Emphasis in Sound Recording Technology (BM) (p. 232)

Minors

- Music Composition Minor (p. 212)
- Music History Minor (p. 208)
- Music Performance Minor (p. 222)
- Music Production Minor (p. 235)

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Music (BA)

Dr. Bianca Hall, Program Advisor for Music History and Music Theory

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6

Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C required in both courses and in ENGL 110C before declaring major

Language and Culture: Proficiency in French or German through the 202 level preferred; proficiency is not met by completion of an associate degree.

Human Creativity: Cannot be met by MUSC 126A or MUSC 264A

Impact of Technology requirement is satisfied in the major with MUSC 335T

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Music Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6
Complete foreign language coursework through the 202 level	0-6

Departmental Requirements

MUSC 150	Freshman Seminar for Music Students	1
MUSC 160	Music and Ideas	1
MUSC 221	Music Theory 1 *	2
MUSC 222	Music Theory 2 *	2
MUSC 223	Aural Skills 1 *	1

MUSC 224	Aural Skills 2 *	1
MUSC 266	Music in World Cultures	1
MUSC 309	Principles of Conducting	1
MUSC 321	Music Theory 3 *	2
MUSC 323	Aural Skills 3 *	1
Music Theory Electives **		
Choose 3-4 credits from the following:		3-4
MUSC 316	Popular Songwriting Techniques	
MUSC 322	Advanced Music Theory and Post-Tonal Compositional Techniques	
MUSC 324	Advanced Aural Skills - Tonal and Beyond (If selected, choose a 2-credit Music Theory Elective to meet the requirements)	
MUSC 337	Jazz Improvisation I (Can be taken as a Music Theory elective if not used as an Upper-Level Music course. MUSC 337 can only be counted in one elective area.)	
MUSC 416	Arranging for the Contemporary Musician and Producer	
MUSC 421	Counterpoint	
MUSC 422	Form and Analysis	
MUSC 424	Orchestration	
MUSC 425	Vocal Arranging	
MUSC 440	Scoring for Film	
MUSC 335T	Music Technology Survey (meets impact of technology requirement)	3
MUSC 361	History of Western Art Music from Ancient through Baroque **	3
MUSC 362W	History of Western Art Music from Classical through Modern *	3
Ensemble ***		2
Applied Music (student must perform on an SPH in the final semester of applied)		4
Recital Attendance Credit required +		
Music Electives (upper-level) ****		4-8
Music		
Select one of the following:		18
Upper-Level Music Courses		
Music History Area		
Music Theory Area		
Total Credit Hours		97-114

*	Students must earn a grade of C or better in these courses to advance to the next level.
**	Students must earn a grade of C- or better in these courses.
***	Students are required to earn credits through participating in ensembles appropriate to their specialties. Instrumental and voice and keyboard majors will be required to participate in two ensembles, large or small. Additional credits for participation in ensembles can be used as elective credit. Large ensembles include: symphonic band, wind ensemble, symphony orchestra, concert choir, and guitar ensemble. Small ensembles include: Madrigal Singers, Collegium Musicum, Opera and Musical Theater Production and Performance, brass choir, clarinet choir, flute choir, jazz choir, jazz orchestra, and brass, woodwind, percussion, guitar, string, or piano ensembles. Small ensemble offerings are updated on occasion; check the class schedule for the latest ensemble availability.
****	Students may choose an ensemble or applied music as an elective in their instrumental or vocal area.

+ PLEASE NOTE: All Bachelor of Arts in Music majors are required to enroll in and pass MUSC 311+, the zero credit Recital Attendance class, for a total of six semesters in order to be eligible for graduation. Refer to the MUSC 311+ syllabus and the Music Student Handbook (<https://www.odu.edu/music/students/undergraduate/handbook/section-three/>) for complete information.

Elective Credit

Additional elective credit may be needed to meet the minimum requirement of 120 credit hours in the degree. Each student must have a minimum of 120 credit hours to graduate. 300-level French or German courses are recommended to fulfill remaining credit hour requirements needed to reach 120 credits.

Upper-Level Music Courses

Students in the BA in music program may choose from the following upper-level (300-400) music courses (18 hours required) or may choose one of the following areas: Music History or Music Theory.

Choose from the Following Upper-Level Music Options 18

Exploring Music		
MUSC 333	Music Business and Entrepreneurship	
MUSC 337	Jazz Improvisation I (Can be taken as an Upper-Level Music Option if not used as a Music Theory Elective. MUSC 337 can only be counted in one elective area.)	
MUSC 338	Jazz Improvisation II	
MUSC 410	Psychology of Music	
MUSC 413	Advanced Choral Conducting	
MUSC 414	Advanced Instrumental Conducting	
MUSC 471	Musicians' Health: Music and Medicine	
Theory and Composition		
MUSC 316	Popular Songwriting Techniques	
MUSC 322	Advanced Music Theory and Post-Tonal Compositional Techniques	
MUSC 336	Electronic Music	
MUSC 344	Introduction to Film Music	
MUSC 421	Counterpoint	
MUSC 422	Form and Analysis	
MUSC 424	Orchestration	
MUSC 425	Vocal Arranging	
MUSC 440	Scoring for Film	
Music History		
MUSC 460	History of Jazz	
MUSC 461	History of Recorded Music	
MUSC 462	Hip-Hop Music and Culture	
MUSC 466	Music of the 20th Century to the Present	
MUSC 491	Music History from the Ancient to Baroque Era	
MUSC 492	Music History from the Classical through Modern Era	
MUSC 495	Topics in Music	
MUSC 496	Topics in Music	

Recital Attendance Credit required **

** PLEASE NOTE: All Bachelor of Arts in Music majors are required to enroll in and pass MUSC 311+, the zero credit Recital Attendance class, for a total of six semesters in order to be eligible for graduation. Refer to the MUSC 311+ syllabus and the Music Student Handbook (<https://www.odu.edu/music/students/undergraduate/handbook/section-three/>) for complete information.

Music History Area

Choose from the following:	15
MUSC 460	History of Jazz
MUSC 461	History of Recorded Music
MUSC 462	Hip-Hop Music and Culture
MUSC 466	Music of the 20th Century to the Present
MUSC 491	Music History from the Ancient to Baroque Era
MUSC 492	Music History from the Classical through Modern Era
MUSC 495	Topics in Music
MUSC 496	Topics in Music
Music Elective (upper level) *	3
Recital Attendance Credit required **	
Total Credit Hours	18

- * Students may choose an ensemble or applied music as an elective in the emphasis areas.
- ** PLEASE NOTE: All Bachelor of Arts in Music majors are required to enroll in and pass MUSC 311+, the zero credit Recital Attendance class, for a total of six semesters in order to be eligible for graduation. Refer to the MUSC 311+ syllabus and the Music Student Handbook (<https://www.odu.edu/music/students/undergraduate/handbook/section-three/>) for complete information.

Music Theory Area

MUSC 337	Jazz Improvisation I	2
MUSC 466	Music of the 20th Century to the Present	3
Choose from the following:		9
MUSC 316	Popular Songwriting Techniques	
MUSC 322	Advanced Music Theory and Post-Tonal Compositional Techniques	
MUSC 324	Advanced Aural Skills - Tonal and Beyond	
MUSC 344	Introduction to Film Music	
MUSC 416	Arranging for the Contemporary Musician and Producer	
MUSC 421	Counterpoint	
MUSC 422	Form and Analysis	
MUSC 424	Orchestration	
MUSC 425	Vocal Arranging	
MUSC 440	Scoring for Film	
Music Elective (upper level) *		4
Recital Attendance Credit required **		0
Total Credit Hours		18

- * Students may choose an ensemble or applied music as an elective in the emphasis areas.
- ** PLEASE NOTE: All Bachelor of Arts in Music majors are required to enroll in and pass MUSC 311+, the zero credit Recital Attendance class, for a total of six semesters in order to be eligible for graduation. Refer to the MUSC 311+ syllabus and the Music Student Handbook (<https://www.odu.edu/music/students/undergraduate/handbook/section-three/>) for complete information.

Additional Requirements and Information

Ensemble Options for Bachelor of Music and Music BA Majors

Each degree program has specific ensemble requirements, which are listed under the course requirements above.

For the purposes of fulfilling large Choral or Instrumental ensemble requirements, students may use only Wind Ensemble, Symphony Orchestra, Guitar Ensemble, Concert Choir, or Symphonic Band (based on general wind/brass/percussion ensemble audition).

For the purposes of fulfilling small ensemble requirements, students may use a variety of ensembles including, but not limited to: Madrigal Singers, Opera and Musical Theater Production and Performance, New Music Ensemble, Diehn Chorale, Brass Choir, Contemporary Music Ensemble, Clarinet Choir, Flute Choir, Jazz Choir, Jazz Orchestra, Jazz Combo, Chamber Music groups of varied sizes and instrumentation (brass, woodwind, percussion, guitar, string, piano, mixed ensembles, etc.), Saxophone Quartet, Collegium Musicum, and more.

Students in the Jazz Studies major must select eight semesters of a jazz or jazz-related ensemble. This includes Jazz Choir, Jazz Orchestra, Jazz Combo or other jazz -related ensemble of varied sizes and instrumentation.

Ensemble offerings may vary each semester; check the class schedule for the latest ensemble availability. Ensemble participation should be made in consultation with the appropriate Area Director/s, Applied Instructors, and Program Advisors.

Other ensembles are offered for credit, such as and including Athletic Bands. Some ensembles are also open to non-music majors with enrollment based on an audition and instrumentation needs.

All of these ensembles are led by and/or coached by a DSoM faculty member.

Students should be aware of the necessity for ensemble diversity, and are encouraged to participate in as many different ensembles as their schedules and advisors will allow.

Applied Lesson Continuance Policy

If a student fails two semesters of applied lessons, he or she will be required to re-audition for applied lesson placement and may be advised to choose another degree program that does not require applied lessons. If a student has five or more unexcused absences in one semester, he or she will fail applied music for that semester. An audition is required to re-enter applied music after an absence of two consecutive semesters or more.

Jury Examinations

Applied music students taking hour lessons at the MUSA 141, MUSA 151, MUSA 161 level or higher must play a jury examination each semester. Failure to perform a required jury will result in a final applied grade of F. The jury grade counts as 50% of the final applied grade. The remaining 50% is based on progress in lessons and is determined by the student's teacher. Students auditing Applied Music take juries in the first semester in which they are enrolled for credit. Audit status is normally allowed for one semester only and is granted on the auditioning committee's recommendation that the student will likely be ready for credit study after one semester of audit study. A student with audit status will audition for credit study during the jury examination period at the close of the audit semester.

Accompanying

All keyboard students are expected to accompany at least once a semester on a General Student Recital, Performance Session, or Applied Music Jury Examination after they have attained the Applied Music numbering of 241 and above or 251 and above, and after they have studied keyboard at Old Dominion University for a minimum of one semester.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematics		3
FR 101F or GER 101F		3
Applied Music		1
MUSC 150	Freshman Seminar for Music Students	1
MUSC 160	Music and Ideas	1
MUSC 221	Music Theory 1 (Grade of C or better required)	2
MUSC 223	Aural Skills 1 (Grade of C or better required)	1
MUSC 311+	Recital Attendance	0
Credit Hours		15
Spring		
Literature		3
Human Creativity (May not use MUSC 264A or MUSC 126A)		3
FR 102F or GER 102F		3
Applied Music		1
MUSC 222	Music Theory 2 (Grade of C or better required)	2
MUSC 224	Aural Skills 2 (Grade of C or better required)	1
MUSC 266	Music in World Cultures	1
MUSC 311+	Recital Attendance	0
Credit Hours		14
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Philosophy & Ethics		3
FR 201 or GER 201		3
Applied Music		1
MUSC 321	Music Theory 3 (Grade of C or better required)	2
MUSC 323	Aural Skills 3 (Grade of C or better required)	1
MUSC 311+	Recital Attendance	0
Credit Hours		17
Spring		
Information Literacy and Research		3
Nature of Science II		4
Human Behavior		3
FR 202 or GER 202		3
Applied Music		1
Music Theory Elective(s) - Choose from the following (Grade of C- or better required):		3-4
MUSC 316	Popular Songwriting Techniques	

MUSC 322	Advanced Music Theory and Post-Tonal Compositional Techniques	
MUSC 324	Advanced Aural Skills - Tonal and Beyond	
MUSC 337	Jazz Improvisation I	
MUSC 416	Arranging for the Contemporary Musician and Producer	
MUSC 421	Counterpoint	
MUSC 422	Form and Analysis	
MUSC 424	Orchestration	
MUSC 425	Vocal Arranging	
MUSC 440	Scoring for Film	
MUSC 311+	Recital Attendance	0
Credit Hours		17-18
Junior		
Fall		
Interpreting the Past		3
MUSC 361	History of Western Art Music from Ancient through Baroque (Grade of C- or better required)	3
Emphasis Area course		3
Emphasis Area course		3
Upper-Division General Education course or Minor		3
MUSC 311+	Recital Attendance	0
Credit Hours		15
Spring		
Oral Communication		3
MUSC 309	Principles of Conducting	1
MUSC 335T	Music Technology Survey (Satisfies Impact of Technology)	3
MUSC 362W	History of Western Art Music from Classical through Modern (Grade of C or better required)	3
Emphasis Area course		3
Upper-Division General Education course or Minor		3
MUSC 311+	Recital Attendance	0
Credit Hours		16
Senior		
Fall		
Upper-Level Music Electives		4
Emphasis Area course		3
Emphasis Area course		3
Ensemble		1
Minor or Elective		3
Credit Hours		14
Spring		
Emphasis Area course		3
Ensemble		1
Upper-Level Music Electives or General Electives		4

Minor or General Electives (as needed)	4
Credit Hours	12
Total Credit Hours	120-121

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Music History Minor Requirements

For a minor in music history, the student must complete 12 hours at the 300/400 level. Prerequisites for the minor (not included in the grade point average) are MUSC 221, MUSC 222, MUSC 264A or MUSC 160, and MUSC 266. Requirements for the minor are

MUSC 361	History of Western Art Music from Ancient through Baroque	3
MUSC 362W	History of Western Art Music from Classical through Modern	3
400-level music history (select from the following):		6
MUSC 460	History of Jazz	
MUSC 461	History of Recorded Music	
MUSC 462	Hip-Hop Music and Culture	

MUSC 466	Music of the 20th Century to the Present
MUSC 491	Music History from the Ancient to Baroque Era
MUSC 492	Music History from the Classical through Modern Era
MUSC 495	Topics in Music
MUSC 496	Topics in Music

All music minors are required to enroll in and pass MUSC 311+, the zero credit Recital Attendance class, for a total of four semesters in order to be eligible for graduation. Should their graduation be projected in under four semesters, music minors may receive accelerated credit by doubling attendance totals in any given semester. Refer to the MUSC 311+ syllabus and Music Student Handbook (<https://www.odu.edu/music/students/undergraduate/handbook/section-three/>) for complete information.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Bachelor of Music Music with a Major in Composition (BM)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major

Oral Communication requirement is satisfied in the major

Language and Culture: French, German, or Italian is strongly recommended.

Human Creativity: Cannot be met by MUSC 126A or MUSC 264A

The Impact of Technology requirement is satisfied in the major with MUSC 335T

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Composition Major

Andrey Kasparov, Program Advisor

General Education

Complete lower-division requirements	35-41
Complete upper-division requirements (minimum of 6 credit hours)	6

Departmental Requirements

MUSC 150	Freshman Seminar for Music Students	1
MUSC 160	Music and Ideas	1
MUSC 221	Music Theory 1 *	2
MUSC 222	Music Theory 2 *	2
MUSC 223	Aural Skills 1 *	1
MUSC 224	Aural Skills 2 *	1
MUSC 266	Music in World Cultures	1
MUSC 309	Principles of Conducting	1
MUSC 321	Music Theory 3 *	2
MUSC 323	Aural Skills 3 *	1
MUSC 335T	Music Technology Survey (satisfies impact of technology requirement)	3
MUSC 336	Electronic Music	3
MUSC 361	History of Western Art Music from Ancient through Baroque **	3
MUSC 362W	History of Western Art Music from Classical through Modern *	3
MUSC 414	Advanced Instrumental Conducting	2
MUSC 421	Counterpoint	2
MUSC 422	Form and Analysis	2
MUSC 424	Orchestration	2

Music Theory Electives **

Choose 2-3 credits from the following:		2-3
MUSC 316	Popular Songwriting Techniques	
MUSC 322	Advanced Music Theory and Post-Tonal Compositional Techniques	
MUSC 324	Advanced Aural Skills - Tonal and Beyond (If selected, choose a 2-credit Music Theory Elective to meet the requirements)	

MUSC 337	Jazz Improvisation I (Can only be taken if not used as a Music elective course. MUSC 337 can only be counted in one elective area.)	
MUSC 416	Arranging for the Contemporary Musician and Producer	
MUSC 425	Vocal Arranging	
MUSC 440	Scoring for Film	
MUSC 466	Music of the 20th Century to the Present	3
MUSA 240	Half-Hour Lesson (Applied Composition)	1
MUSA 232	Hour Lesson - Applied Composition	3
MUSA 331	Hour Lesson - Applied Composition	3
MUSA 332	Hour Lesson - Applied Composition	3
MUSA 431	Hour Lesson - Applied Composition	3
MUSA 432	Hour Lesson - Applied Composition	3

Music History Electives

Select two music history courses from the list below. At least one of the two must be MUSC 491 or MUSC 492.		6
MUSC 460	History of Jazz	
MUSC 461	History of Recorded Music	
MUSC 462	Hip-Hop Music and Culture	
MUSC 491	Music History from the Ancient to Baroque Era	
MUSC 492	Music History from the Classical through Modern Era	
MUSC 495	Topics in Music	
MUSC 496	Topics in Music	

Large Ensemble ***		3
Small Ensemble ****		2
MUSC 101	Beginning Piano Class	1
MUSC 102	Beginning Piano Class	1
MUSA 139	Half-Hour Lesson (Piano)	1
MUSA 140	Half-Hour Lesson (Piano)	1
Piano Proficiency +		0
MUSA 130	Half-Hour Applied Secondary Instrument/ Voice Lesson	1
MUSA 131	Half-Hour Applied Secondary Instrument/ Voice Lesson	1
MUSA 230	Half-Hour Applied Secondary Instrument/ Voice Lesson	1

Recital Attendance Credit required ++

Music Electives (Suggested)

MUSC 333	Music Business and Entrepreneurship	
MUSC 337	Jazz Improvisation I (Can be taken if not used as a Music Theory Elective course. MUSC 337 can only be counted in one elective area.)	
MUSC 397	Tutorial Work in Special Topics in Music	
MUSC 410	Psychology of Music	
MUSC 471	Musicians' Health: Music and Medicine	

Total Credit Hours 113-120

- *

**

- Students must earn a C or better in these courses.

Students must earn a grade of C- or better in these courses.

Students are required to earn credits through participating in ensembles appropriate to their specialties. Large ensembles include: symphonic band, wind ensemble, symphony orchestra, concert choir, and guitar ensemble.

Small ensembles may include: Madrigal Singers, Collegium Musicum, Opera and Musical Theater Production and Performance, brass choir, clarinet choir, flute choir, jazz choir, jazz orchestra, and chamber

	music groups of varied sizes and instrumentation (brass, woodwind, percussion, guitar, string, piano, mixed ensembles, etc.). Small ensemble offerings may vary each semester; check the class schedule for the latest ensemble availability.
+	Piano proficiency is an expectation for composition majors and will be assessed accordingly. Students for whom piano is their primary instrument may elect to test out of certain levels of piano courses by taking a proficiency evaluation.
++	PLEASE NOTE: All Bachelor of Music, Composition majors are required to enroll in and pass MUSC 311+, the zero credit Recital Attendance class, for a total of six semesters in order to be eligible for graduation. Refer to the MUSC 311+ syllabus and the Music Student Handbook (https://www.odu.edu/music/students/undergraduate/handbook/section-three/) for complete information.

Composition majors are required to present a lecture–recital containing 30 minutes of original music.

Elective Credit

Elective credit may be needed to meet the minimum of 120 credits required for the degree.

Additional Requirements and Information

Ensemble Options for Bachelor of Music and Music BA Majors

Each degree program has specific ensemble requirements, which are listed under the course requirements above.

For the purposes of fulfilling large Choral or Instrumental ensemble requirements, students may use only Wind Ensemble, Symphony Orchestra, Guitar Ensemble, Concert Choir, or Symphonic Band (based on general wind/brass/percussion ensemble audition).

For the purposes of fulfilling small ensemble requirements, students may use a variety of ensembles including, but not limited to: Madrigal Singers, Opera and Musical Theater Production and Performance, New Music Ensemble, Diehn Chorale, Brass Choir, Contemporary Music Ensemble, Clarinet Choir, Flute Choir, Jazz Choir, Jazz Orchestra, Jazz Combo, Chamber Music groups of varied sizes and instrumentation (brass, woodwind, percussion, guitar, string, piano, mixed ensembles, etc.), Saxophone Quartet, Collegium Musicum, and more.

Students in the Jazz Studies major must select eight semesters of a jazz or jazz-related ensemble. This includes Jazz Choir, Jazz Orchestra, Jazz Combo or other jazz -related ensemble of varied sizes and instrumentation.

Ensemble offerings may vary each semester; check the class schedule for the latest ensemble availability. Ensemble participation should be made in consultation with the appropriate Area Director/s, Applied Instructors, and Program Advisors.

Other ensembles are offered for credit, such as and including Athletic Bands. Some ensembles are also open to non-music majors with enrollment based on an audition and instrumentation needs.

All of these ensembles are led by and/or coached by a DSoM faculty member.

Students should be aware of the necessity for ensemble diversity, and are encouraged to participate in as many different ensembles as their schedules and advisors will allow.

Applied Lesson Continuance Policy

If a student fails two semesters of applied lessons, he or she will be required to re-audition for applied lesson placement and may be advised to choose another degree program that does not require applied lessons. If a student has five or more unexcused absences in one semester, he or she will fail applied music for that semester. An audition is required to re-enter applied music after an absence of two consecutive semesters or more.

Jury Examinations

Applied music students taking hour lessons at the MUSA 141, MUSA 151, MUSA 161 level or higher must play a jury examination each semester. Failure to perform a required jury will result in a final applied grade of F. The jury grade counts as 50% of the final applied grade. The remaining 50% is based on progress in lessons and is determined by the student's teacher. Students auditing Applied Music take juries in the first semester in which they are enrolled for credit. Audit status is normally allowed for one semester only and is granted on the auditioning committee's recommendation that the student will likely be ready for credit study after one semester of audit study. A student with audit status will audition for credit study during the jury examination period at the close of the audit semester.

Accompanying

All keyboard students are expected to accompany at least once a semester on a General Student Recital, Performance Session, or Applied Music Jury Examination after they have attained the Applied Music numbering of 241 and above or 251 and above, and after they have studied keyboard at Old Dominion University for a minimum of one semester.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematics		3
Language and Culture I (French, German or Italian is strongly recommended. May be waived; See requirement details)		0-3
MUSC 101	Beginning Piano Class	1
MUSC 150	Freshman Seminar for Music Students	1
MUSC 160	Music and Ideas	1
MUSC 221	Music Theory 1 (Grade of C or better required)	2
MUSC 223	Aural Skills 1 (Grade of C or better required)	1
Large Ensemble		1
MUSC 311+	Recital Attendance	0
Credit Hours		13-16
Spring		
Literature		3
Human Creativity (May not use MUSC 264A or MUSC 126A)		3
Elective or Language and Culture II (French, German or Italian is strongly recommended. May be waived; See requirement details)		3
MUSC 102	Beginning Piano Class	1
MUSC 222	Music Theory 2 (Grade of C or better required)	2
MUSC 224	Aural Skills 2 (Grade of C or better required)	1
MUSC 266	Music in World Cultures	1
Large Ensemble		1
MUSC 311+	Recital Attendance	0
Credit Hours		15

Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Philosophy & Ethics		3
MUSA 139	Half-Hour Lesson (Piano)	1
MUSA 240	Half-Hour Lesson (Applied Composition)	1
MUSC 321	Music Theory 3 (Grade of C or better required)	2
MUSC 323	Aural Skills 3 (Grade of C or better required)	1
Large Ensemble		1
MUSC 311+	Recital Attendance	0
Credit Hours		16
Spring		
Information Literacy and Research		3
Nature of Science II		4
Human Behavior		3
MUSA 140	Half-Hour Lesson (Piano)	1
MUSA 232	Hour Lesson - Applied Composition	3
MUSC 335T	Music Technology Survey (Satisfies Impact of Technology)	3
MUSC 362W	History of Western Art Music from Classical through Modern (Grade of C or better required)	3
MUSC 311+	Recital Attendance	0
Credit Hours		20
Junior		
Fall		
Interpreting the Past		3
MUSA 130	Half-Hour Applied Secondary Instrument/Voice Lesson	1
MUSA 331	Hour Lesson - Applied Composition	3
MUSC 361	History of Western Art Music from Ancient through Baroque (Grade of C- or better required)	3
MUSC 421	Counterpoint	2
Music History Elective - Choose one of the following:		3
MUSC 460 or MUSC 461 or MUSC 462 or MUSC 491 or MUSC 492 or MUSC 495 or MUSC 496		
Small Ensemble		1
MUSC 311+	Recital Attendance	0
Credit Hours		16
Spring		
MUSA 131	Half-Hour Applied Secondary Instrument/Voice Lesson	1
MUSA 332	Hour Lesson - Applied Composition	3
MUSC 309	Principles of Conducting	1
MUSC 336	Electronic Music	3

MUSC 422	Form and Analysis	2
MUSC 424	Orchestration	2
MUSC 311+	Recital Attendance	0
Music Theory Elective(s) - Choose from the following (Grade of C- or better required):		2-3
MUSC 316 or MUSC 322 or MUSC 324 or MUSC 337 or MUSC 416 or MUSC 425 or MUSC 440		
Credit Hours		14-15
Senior		
Fall		
MUSA 230	Half-Hour Applied Secondary Instrument/Voice Lesson	1
MUSA 431	Hour Lesson - Applied Composition	3
MUSC 414	Advanced Instrumental Conducting	2
MUSC 466	Music of the 20th Century to the Present	3
Upper-Division General Education course (Option D)		3
Credit Hours		12
Spring		
MUSA 432	Hour Lesson - Applied Composition	3
Music History Elective - Choose one of the following:		3
MUSC 460 or MUSC 461 or MUSC 462 or MUSC 491 or MUSC 492 or MUSC 495 or MUSC 496		
Small Ensemble		1
Upper-Division General Education course (Option D)		3
Electives (if needed) *		4
Credit Hours		14
Total Credit Hours		120-124

* Suggested Music Electives: MUSC 333, MUSC 337 (if not already taken as a Music Theory Elective), MUSC 397, MUSC 410, or MUSC 471.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as

an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Music Composition Minor Requirements

For a minor in composition, the student must complete 12 hours at the 300/400 level. Prerequisites for the minor (not included in the grade point average) are MUSC 221 and MUSC 222. Requirements for the minor are

MUSC 335T	Music Technology Survey	3
Applied Composition Lessons:		8
MUSA 310	Hour Lesson - Music Minor	
MUSA 311	Hour Lesson - Music Minor	
MUSA 410	Hour Lesson - Music Minor	
MUSA 411	Hour Lesson - Music Minor	
Additional Upper-Division music courses		1-3
Total Credit Hours		12-14

All music minors are required to enroll in and pass MUSC 311+, the zero credit Recital Attendance class, for a total of four semesters in order to be eligible for graduation. Should their graduation be projected in under four semesters, music minors may receive accelerated credit by doubling attendance totals in any given semester. Refer to the MUSC 311+ syllabus and Music Student Handbook (<https://www.odu.edu/music/students/undergraduate/handbook/section-three/>) for complete information.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Bachelor of Music Music with a Major in Jazz Studies (BM)

John Toomey (jtoomey@odu.edu) and Douglas T. Owens (dtowens@odu.edu), Program Advisors

The Bachelor of Music in Jazz Studies major serves students on an advanced level and provides a comprehensive approach to prepare contemporary jazz musicians. The Jazz Studies major features studies to enhance creative performance, improvisation, and expression through jazz and jazz-related genres.

Students in the ODU Jazz Studies program benefit from the existing music and jazz-specific connections in the Hampton Roads community. The partnership with the Virginia Arts Festival presents several participatory jazz clinics at the Diehn School of Music with renowned jazz musicians.

During regular workshops presented at ODU, the jazz musicians work directly with Diehn School of Music students by modeling their practice routines, performance skills and sharing their experiences as professional musicians. ODU has hosted the following jazz artists in partnership with the Virginia Arts Festival: Walter Blanding, Howard Curtis, Ryan Keberle, Alex McArthur, Steve Nelson, Janis Siegel, Gary Thomas, Bobby Watson, Steve Wilson, and more.

The annual ODU Jazz Residency is part of the F. Ludwig Diehn Concert Series. Jazz Studies majors will participate in the various workshops, clinics and performances in the five-day residency. Past Jazz Residency artists include Chris Whiteman, Dr. Lisanne Lyons, John Fedchock, Lori Williams, Houston Person, Katie Thiroux, Dick Oatts, Kenny Washington, John D'earth, Glenn Wilson, Nicki Parrott, Darmon Meader, Randy Brecker, Terrell Stafford, Bob Mintzer, Clark Terry, and John Abercrombie.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major

Language and Culture: French, German, or Italian is strongly recommended.

Human Creativity: Cannot be met by MUSC 126A or MUSC 264A

The Impact of Technology requirement is satisfied in the major with MUSC 335T

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Jazz Studies Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6

Departmental Requirements

MUSC 150	Freshman Seminar for Music Students	1
MUSC 160	Music and Ideas	1
MUSC 221	Music Theory 1 *	2
MUSC 222	Music Theory 2 *	2
MUSC 223	Aural Skills 1 *	1
MUSC 224	Aural Skills 2 *	1
MUSC 266	Music in World Cultures	1
MUSC 309	Principles of Conducting	1
MUSC 321	Music Theory 3 *	2
MUSC 323	Aural Skills 3 *	1
MUSC 335T	Music Technology Survey (Satisfies Impact of Technology)	3
MUSC 361	History of Western Art Music from Ancient through Baroque **	3
MUSC 362W	History of Western Art Music from Classical through Modern *	3

Applied Hour Lessons

MUSA 141	Hour Lesson	
MUSA 142	Hour Lesson	
MUSA 241	Hour Lesson	
MUSA 242	Hour Lesson	
MUSA 341	Hour Lesson	
MUSA 342	Hour Lesson	
MUSA 441	Hour Lesson	
MUSA 442	Hour Lesson	

Additional Requirements

MUSC 101	Beginning Piano Class	1
MUSC 102	Beginning Piano Class	1
MUSA 139	Half-Hour Lesson	1
MUSA 140	Half-Hour Lesson	1
MUSC 230	Jazz Keyboard Techniques	2
MUSC 326	Jazz Theory and Aural Skills	3
MUSC 333	Music Business and Entrepreneurship	3
MUSC 337	Jazz Improvisation I	2
MUSC 338	Jazz Improvisation II	2
MUSC 417	Jazz Pedagogy and Conducting	2
MUSC 418	Jazz Arranging	2
MUSC 419	Jazz Performance Practice Workshop	2
MUSC 460	History of Jazz	3
Choral/Instrumental Ensemble		2
Selected Jazz Ensemble		8

MUSC Elective 3

Recital Attendance Required ++

Total Credit Hours 120-126

- * Students must earn a C or better in these courses.
- ** Students must earn a grade of C- or better in these courses.
- ++ All Bachelor of Music Jazz Studies majors are required to enroll in and pass MUSC 311+, the zero credit Recital Attendance class, for a total of six semesters in order to be eligible for graduation. Refer to the MUSC 311+ syllabus and the Music Student Handbook (<https://www.odu.edu/music/students/undergraduate/handbook/section-three/>) for complete information.

Elective Credit

Elective credit may be needed to meet the minimum of 120 credits required for the degree.

Additional Requirements and Information

Ensemble Options for Bachelor of Music and Music BA Majors

Each degree program has specific ensemble requirements, which are listed under the course requirements above.

For the purposes of fulfilling large Choral or Instrumental ensemble requirements, students may use only Wind Ensemble, Symphony Orchestra, Guitar Ensemble, Concert Choir, or Symphonic Band (based on general wind/brass/percussion ensemble audition).

For the purposes of fulfilling small ensemble requirements, students may use a variety of ensembles including, but not limited to: Madrigal Singers, Opera and Musical Theater Production and Performance, New Music Ensemble, Diehn Chorale, Brass Choir, Contemporary Music Ensemble, Clarinet Choir, Flute Choir, Jazz Choir, Jazz Orchestra, Jazz Combo, Chamber Music groups of varied sizes and instrumentation (brass, woodwind, percussion, guitar, string, piano, mixed ensembles, etc.), Saxophone Quartet, Collegium Musicum, and more.

Students in the Jazz Studies major must select eight semesters of a jazz or jazz-related ensemble. This includes Jazz Choir, Jazz Orchestra, Jazz Combo or other jazz -related ensemble of varied sizes and instrumentation.

Ensemble offerings may vary each semester; check the class schedule for the latest ensemble availability. Ensemble participation should be made in consultation with the appropriate Area Director/s, Applied Instructors, and Program Advisors.

Other ensembles are offered for credit, such as and including Athletic Bands. Some ensembles are also open to non-music majors with enrollment based on an audition and instrumentation needs.

All of these ensembles are led by and/or coached by a DSOM faculty member.

Students should be aware of the necessity for ensemble diversity, and are encouraged to participate in as many different ensembles as their schedules and advisors will allow.

Applied Lesson Continuance Policy

If a student fails two semesters of applied lessons, he or she will be required to re-audition for applied lesson placement and may be advised to choose another degree program that does not require applied lessons. If a student has five or more unexcused absences in one semester, he or she will fail applied music for that semester. An audition is required to re-enter applied music after an absence of two consecutive semesters or more.

Jury Examinations

Applied music students taking hour lessons at the MUSA 141, MUSA 151, MUSA 161 level or higher must play a jury examination each semester. Failure to perform a required jury will result in a final applied grade of F. The jury grade counts as 50% of the final applied grade. The remaining 50% is based on progress in lessons and is determined by the student's

teacher. Students auditing Applied Music take juries in the first semester in which they are enrolled for credit. Audit status is normally allowed for one semester only and is granted on the auditioning committee's recommendation that the student will likely be ready for credit study after one semester of audit study. A student with audit status will audition for credit study during the jury examination period at the close of the audit semester.

Accompanying

All keyboard students are expected to accompany at least once a semester on a General Student Recital, Performance Session, or Applied Music Jury Examination after they have attained the Applied Music numbering of 241 and above or 251 and above, and after they have studied keyboard at Old Dominion University for a minimum of one semester.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MUSA 139	Half-Hour Lesson (Classical)	1
MUSA 141	Hour Lesson (Jazz)	2
MUSC 150	Freshman Seminar for Music Students	1
MUSC 101	Beginning Piano Class	1
MUSC 160	Music and Ideas	1
MUSC 221	Music Theory 1 *	2
MUSC 223	Aural Skills 1 *	1
MUSC 337	Jazz Improvisation I	2
Selected Jazz Ensemble **		1
Choral or Instrumental Ensemble ***		1
MUSC 311+	Recital Attendance	0
Credit Hours		16
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MUSA 140	Half-Hour Lesson (Classical)	1
MUSA 142	Hour Lesson (Jazz)	2
MUSC 102	Beginning Piano Class	1
MUSC 222	Music Theory 2 *	2
MUSC 224	Aural Skills 2 *	1
MUSC 266	Music in World Cultures	1
MUSC 338	Jazz Improvisation II	2
Selected Jazz Ensemble **		1
Selected Choral or Instrumental Ensemble ***		1
MUSC 311+	Recital Attendance	0
Credit Hours		15
Sophomore		
Fall		
MUSA 241	Hour Lesson (Jazz)	2

MUSC 230	Jazz Keyboard Techniques	2
MUSC 321	Music Theory 3 *	2
MUSC 323	Aural Skills 3 *	1
MUSC 361	History of Western Art Music from Ancient through Baroque (Grade of C- or better required)	3
Mathematics		3
Selected Jazz Ensemble **		1
MUSC 311+	Recital Attendance	0
Credit Hours		14
Spring		
MUSA 242	Hour Lesson (Jazz)	2
MUSC 326	Jazz Theory and Aural Skills *	3
MUSC 362W	History of Western Art Music from Classical through Modern *	3
MUSC 419	Jazz Performance Practice Workshop	2
Interpreting the Past		3
Selected Jazz Ensemble **		1
MUSC 311+	Recital Attendance	0
Credit Hours		14
Junior		
Fall		
MUSA 341	Hour Lesson (Jazz)	2
MUSC 309	Principles of Conducting	1
MUSC 335T	Music Technology Survey (Satisfies Impact of Technology)	3
Nature of Science I		4
Information Literacy and Research		3
Oral Communication		3
Selected Jazz Ensemble **		1
MUSC 311+	Recital Attendance	0
Credit Hours		17
Spring		
MUSA 342	Hour Lesson (Jazz)	2
MUSC 417	Jazz Pedagogy and Conducting	2
MUSC 460	History of Jazz	3
Nature of Science II		4
Literature		3
Selected Jazz Ensemble **		1
MUSC 311+	Recital Attendance	0
Credit Hours		15
Senior		
Fall		
MUSA 441	Hour Lesson (Jazz)	2
MUSC 418	Jazz Arranging	2
Music Elective	Select from MUSC 336, MUSC 416, MUSC 461, MUSC 462 or other advisor-approved three-credit course	3
Philosophy and Ethics		3
Human Creativity		3
Option D Required Course		3

Selected Jazz Ensemble **		1
Credit Hours		17
Spring		
MUSA 442	Hour Lesson (Jazz)	2
MUSC 333	Music Business and Entrepreneurship	3
Human Behavior (May not use MUSC 264A or MUSC 126A)		3
Option D Required Course		3
Selected Jazz Ensemble **		1
Music Performance Recital		0
Credit Hours		12
Total Credit Hours		120

- * Students must earn a C or better in these courses to advance to the next level.
- ** Select one faculty-approved jazz ensemble via audition (Jazz Choir, Jazz Orchestra, Jazz Combo, etc.).
- *** Select one ensemble in the Choral or Instrumental area (Concert Choir, Wind Ensemble, Symphony Orchestra, etc.).

The Language and Culture requirement (0-6 credits) is not included in this degree program guide. Please see the requirements section or consult with your advisor for details.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Music Music with a Major in Performance (BM)

Web Site: <https://ww1.odu.edu/music.html>

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major

Language and Culture: See additional requirements for students in voice

Human Creativity: Cannot be met by MUSC 126A or MUSC 264A

Impact of Technology requirement satisfied in the major with MUSC 335T

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Performance Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6

Departmental Requirements

MUSC 150	Freshman Seminar for Music Students	1
MUSC 160	Music and Ideas	1
MUSC 221	Music Theory 1 *	2
MUSC 222	Music Theory 2 *	2
MUSC 223	Aural Skills 1 *	1
MUSC 224	Aural Skills 2 *	1
MUSC 266	Music in World Cultures	1
MUSC 309	Principles of Conducting	1
MUSC 321	Music Theory 3 *	2
MUSC 323	Aural Skills 3 *	1
MUSC 335T	Music Technology Survey (satisfies Impact of Technology requirement)	3
MUSC 361	History of Western Art Music from Ancient through Baroque **	3
MUSC 362W	History of Western Art Music from Classical through Modern *	3
MUSC 413	Advanced Choral Conducting	2
or MUSC 414	Advanced Instrumental Conducting	

Music Theory Electives **

Choose 2-3 credits from the following:	2-3

MUSC 316	Popular Songwriting Techniques	
MUSC 322	Advanced Music Theory and Post-Tonal Compositional Techniques	
MUSC 324	Advanced Aural Skills - Tonal and Beyond (If selected, choose a 2-credit Music Theory Elective to meet the requirements)	
MUSC 337	Jazz Improvisation I (Can only be taken if not used as a Music elective course. MUSC 337 can only be counted in one elective area.)	
MUSC 416	Arranging for the Contemporary Musician and Producer	
MUSC 421	Counterpoint	
MUSC 422	Form and Analysis	
MUSC 424	Orchestration	
MUSC 425	Vocal Arranging	
MUSC 440	Scoring for Film	
MUSC 445	Applied Music Pedagogy	1
MUSC 446	Applied Music Literature	1

24 credit hours must be taken in the student's chosen instrument including the following 6 credits

MUSA 451	Hour Lesson - Performance Major	
MUSA 452	Hour Lesson - Performance Major	

Recital Attendance required **

Interest Areas

Complete coursework in an interest area (orchestral instruments; piano, organ, harpsichord, or guitar; or voice)	39-52

Total Credit Hours	111-131

- * Students must earn a C or better in these courses to advance to the next level.
- ** Students must earn a grade of C- or better in these courses. PLEASE NOTE: All Bachelor of Music, Performance majors are required to enroll in and pass MUSC 311+, the zero credit Recital Attendance class, for a total of six semesters in order to be eligible for graduation. Refer to the MUSC 311+ syllabus and the Music Student Handbook (<https://www.odu.edu/music/students/undergraduate/handbook/section-three/>) for complete information.
- ++

Successful completion of a half-hour 200-level recital and a full-hour 400-level recital is also required. Vocal students will complete their half hour recital in the MUSA 351 semester.

Orchestral Instruments Area

Mike Hall, Program Advisor for the Orchestral Instruments Area

Students in the orchestral instruments area must complete the following courses.

MUSA 151-MUSA 352 Applied Lessons		18
MUSA 451	Hour Lesson - Performance Major	3
MUSA 452	Hour Lesson - Performance Major	3
MUSC 101	Beginning Piano Class	1
MUSC 102	Beginning Piano Class	1
MUSA 139	Half-Hour Lesson (Piano)	1
MUSA 140	Half-Hour Lesson (Piano)	1

Select two Music History elective courses from the list below. At least one of the two must be MUSC 466, MUSC 491, or MUSC 492:

MUSC 460	History of Jazz	
MUSC 461	History of Recorded Music	
MUSC 462	Hip-Hop Music and Culture	
MUSC 466	Music of the 20th Century to the Present	
MUSC 491	Music History from the Ancient to Baroque Era	
MUSC 492	Music History from the Classical through Modern Era	
MUSC 495	Topics in Music	
MUSC 496	Topics in Music	

MUSC Band or Orchestra (Large Ensemble) +	7

Small Instrumental Ensemble +	4

Optional Music Electives (2-3 Credits Recommended)	0-3

MUSC 333	Music Business and Entrepreneurship	
MUSC 337	Jazz Improvisation I	
MUSC 397	Tutorial Work in Special Topics in Music	
MUSC 410	Psychology of Music	
MUSC 471	Musicians' Health: Music and Medicine	

Total Credit Hours	45-48

- + Students are required to earn credits through participating in ensembles appropriate to their specialties. Instrumental and voice majors will be required to participate in seven semesters of large ensemble and four semesters of small ensemble. Keyboard, harpsichord, organ, and guitar majors will have a seven-semester requirement, of which at least two should be in a large ensemble. Large ensembles include: wind ensemble, symphony orchestra, concert choir, and guitar ensemble.

Small ensembles may include, but are not limited to: madrigal singers, collegium musicum, Opera and Musical Theater Production and Performance, new music ensemble, brass choir, contemporary music ensemble, clarinet choir, flute choir, jazz choir, jazz orchestra, jazz combo, and chamber music groups of varied sizes and instrumentation (brass, woodwind, percussion, guitar, string, piano, mixed ensembles, etc.). Small ensemble offerings may vary each semester; check the class schedule for the latest ensemble availability.

Keyboard Studies Area (Piano, Organ, Harpsichord) or Guitar Interest Area

Zachary Deak, Program Advisor for the Keyboard Studies Area

Students in the Keyboard Studies Area or Guitar Area must complete the following courses.

Piano, Organ, Harpsichord, or Guitar		
MUSA 151-MUSA 352 Applied Lessons		18
MUSA 451	Hour Lesson - Performance Major	3
MUSA 452	Hour Lesson - Performance Major	3
Select two Music History elective courses from the list below. At least one of the two must be MUSC 466, MUSC 491, or MUSC 492:		6
MUSC 460	History of Jazz	
MUSC 461	History of Recorded Music	
MUSC 462	Hip-Hop Music and Culture	
MUSC 466	Music of the 20th Century to the Present	
MUSC 491	Music History from the Ancient to Baroque Era	
MUSC 492	Music History from the Classical through Modern Era	
MUSC 495	Topics in Music	
MUSC 496	Topics in Music	
Ensemble (Large and/or Small, instrument dependent) ⁺		7-11
Music Electives		2-3
MUSC 333	Music Business and Entrepreneurship	
MUSC 337	Jazz Improvisation I	
MUSC 397	Tutorial Work in Special Topics in Music	
MUSC 410	Psychology of Music	
MUSC 471	Musicians' Health: Music and Medicine	
Total Credit Hours		39-44

⁺ Students are required to earn credits through participating in ensembles appropriate to their specialties. Instrumental and voice majors will be required to participate in seven semesters of large ensemble and four semesters of small ensemble. Keyboard, harpsichord, organ, and guitar majors will have a seven-semester requirement, of which at least two should be in a large ensemble. Large ensembles include: wind ensemble, symphony orchestra, concert choir, and guitar ensemble. Small ensembles may include, but are not limited to: Madrigal Singers, Collegium Musicum, Opera and Musical Theater Production and Performance, new music ensemble, brass choir, contemporary music ensemble, clarinet choir, flute choir, jazz choir, jazz orchestra, jazz combo, and chamber music groups of varied sizes and instrumentation (brass, woodwind, percussion, guitar, string, piano, mixed ensembles, etc.). Small ensemble offerings may vary each semester; check the class schedule for the latest ensemble availability.

Voice Interest Area

Brian Nedvin, Program Advisor for the Voice Interest Area

Students in the Voice Interest Area must complete the following courses.

Voice		
101F-102F Foreign Language [*]		6
MUSA 151-MUSA 352 Applied Lessons		18
MUSA 451	Hour Lesson - Performance Major	3
MUSA 452	Hour Lesson - Performance Major	3
MUSC 101	Beginning Piano Class	1
MUSC 102	Beginning Piano Class	1
MUSA 139	Half-Hour Lesson (Piano)	1
MUSA 140	Half-Hour Lesson (Piano)	1
MUSA 239	Half-Hour Lesson (Piano)	1
MUSA 240	Half-Hour Lesson (Piano)	1
Select one Music History elective courses from the list below. MUSC 466, MUSC 491, or MUSC 492 are recommended:		3
MUSC 460	History of Jazz	
MUSC 461	History of Recorded Music	
MUSC 462	Hip-Hop Music and Culture	
MUSC 466	Music of the 20th Century to the Present	
MUSC 491	Music History from the Ancient to Baroque Era	
MUSC 492	Music History from the Classical through Modern Era	
MUSC 495	Topics in Music	
MUSC 496	Topics in Music	
MUSC 345	Diction for Singers	1
MUSC 346	Diction for Singers	1
Piano Proficiency Exam		0
Concert Choir ⁺		7
Opera Workshop ⁺		1
Small Vocal Ensemble ⁺		3
Optional Music Electives (2-3 Credits Recommended)		0-3
MUSC 333	Music Business and Entrepreneurship	
MUSC 337	Jazz Improvisation I	
MUSC 397	Tutorial Work in Special Topics in Music	
MUSC 410	Psychology of Music	
MUSC 471	Musicians' Health: Music and Medicine	
Total Credit Hours		52-55

^{*} World Language other than that used to satisfy lower division General Education (French, German or Italian strongly recommended).

⁺ Students are required to earn credits through participating in ensembles appropriate to their specialties. Instrumental and voice majors will be required to participate in seven semesters of large ensemble and four semesters of small ensemble. Keyboard, harpsichord, organ, and guitar majors will have a seven-semester requirement, of which at least two should be in a large ensemble. Large ensembles include: wind ensemble, symphony orchestra, concert choir, and guitar ensemble. Small ensembles may include, but are not limited to: Madrigal Singers, Collegium Musicum, Opera and Musical Theater Production and Performance, new music ensemble, brass choir, contemporary music ensemble, clarinet choir, flute choir, jazz choir, jazz orchestra, jazz combo, and chamber music groups of varied sizes and instrumentation (brass, woodwind, percussion, guitar, string, piano, mixed ensembles, etc.). Small ensemble

offerings may vary each semester; check the class schedule for the latest ensemble availability.

Additional Requirements and Information

Ensemble Options for Bachelor of Music and Music BA Majors

Each degree program has specific ensemble requirements, which are listed under the course requirements above.

For the purposes of fulfilling large Choral or Instrumental ensemble requirements, students may use only Wind Ensemble, Symphony Orchestra, Guitar Ensemble, Concert Choir, or Symphonic Band (based on general wind/brass/percussion ensemble audition).

For the purposes of fulfilling small ensemble requirements, students may use a variety of ensembles including, but not limited to: Madrigal Singers, Opera and Musical Theater Production and Performance, New Music Ensemble, Diehn Chorale, Brass Choir, Contemporary Music Ensemble, Clarinet Choir, Flute Choir, Jazz Choir, Jazz Orchestra, Jazz Combo, Chamber Music groups of varied sizes and instrumentation (brass, woodwind, percussion, guitar, string, piano, mixed ensembles, etc.), Saxophone Quartet, Collegium Musicum, and more.

Students in the Jazz Studies major must select eight semesters of a jazz or jazz-related ensemble. This includes Jazz Choir, Jazz Orchestra, Jazz Combo or other jazz -related ensemble of varied sizes and instrumentation.

Ensemble offerings may vary each semester; check the class schedule for the latest ensemble availability. Ensemble participation should be made in consultation with the appropriate Area Director/s, Applied Instructors, and Program Advisors.

Other ensembles are offered for credit, such as and including Athletic Bands. Some ensembles are also open to non-music majors with enrollment based on an audition and instrumentation needs.

All of these ensembles are led by and/or coached by a DSOM faculty member.

Students should be aware of the necessity for ensemble diversity, and are encouraged to participate in as many different ensembles as their schedules and advisors will allow.

Applied Lesson Continuance Policy

If a student fails two semesters of applied lessons, he or she will be required to re-audition for applied lesson placement and may be advised to choose another degree program that does not require applied lessons. If a student has five or more unexcused absences in one semester, he or she will fail applied music for that semester. An audition is required to re-enter applied music after an absence of two consecutive semesters or more.

Jury Examinations

Applied music students taking hour lessons at the MUSA 141, MUSA 151, MUSA 161 level or higher must play a jury examination each semester. Failure to perform a required jury will result in a final applied grade of F. The jury grade counts as 50% of the final applied grade. The remaining 50% is based on progress in lessons and is determined by the student's teacher. Students auditing Applied Music take juries in the first semester in which they are enrolled for credit. Audit status is normally allowed for one semester only and is granted on the auditioning committee's recommendation that the student will likely be ready for credit study after one semester of audit study. A student with audit status will audition for credit study during the jury examination period at the close of the audit semester.

Accompanying

All keyboard students are expected to accompany at least once a semester on a General Student Recital, Performance Session, or Applied Music Jury Examination after they have attained the Applied Music numbering of 241 and above or 251 and above, and after they have studied keyboard at Old Dominion University for a minimum of one semester.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Music Performance-Orchestral Interest Area

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Language and Culture I (May be waived; See requirement details)		0-3
MUSA 151	Hour Lesson - Performance Major	3
MUSC 101	Beginning Piano Class	1
MUSC 150	Freshman Seminar for Music Students	1
MUSC 160	Music and Ideas	1
MUSC 221	Music Theory 1 (Grade of C or better required)	2
MUSC 223	Aural Skills 1 (Grade of C or better required)	1
Large Ensemble		1
MUSC 311+	Recital Attendance	0
Credit Hours		13-16
Spring		
Human Creativity (May not use MUSC 264A or MUSC 126A)		3
Language and Culture II (May be waived; See requirement details)		0-3
Mathematics		3
MUSA 152	Hour Lesson - Performance Major	3
MUSC 102	Beginning Piano Class	1
MUSC 222	Music Theory 2 (Grade of C or better required)	2
MUSC 224	Aural Skills 2 (Grade of C or better required)	1
MUSC 266	Music in World Cultures	1
Large Ensemble		1
MUSC 311+	Recital Attendance	0
Credit Hours		15-18
Sophomore		
Fall		
Interpreting the Past		3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MUSA 139	Half-Hour Lesson (Half-hour piano Lesson)	1
MUSA 251	Hour Lesson - Performance Major	3
MUSC 321	Music Theory 3 (Grade of C or better required)	2
MUSC 323	Aural Skills 3 (Grade of C or better required)	1

MUSC 361	History of Western Art Music from Ancient through Baroque (Grade of C- or better required)	3
Large Ensemble		1
MUSC 311+	Recital Attendance	0
Credit Hours		17
Spring		
Literature		3
MUSA 140	Half-Hour Lesson (Half-Hour Lesson (Piano))	1
MUSA 252	Hour Lesson - Performance Major	3
MUSC 362W	History of Western Art Music from Classical through Modern (Grade of C or better required)	3
Music Theory Elective(s) - Choose from the following (Grade of C- or better required):		2-3
MUSC 316 or MUSC 322 or MUSC 324 or MUSC 337 or MUSC 416 or MUSC 421 or MUSC 422 or MUSC 424 or MUSC 425 or MUSC 440		
MUSC 335T	Music Technology Survey (Satisfies Impact of Technology)	3
MUSC 311+	Recital Attendance	0
Large Ensemble		1
Credit Hours		16-17
Junior		
Fall		
Nature of Science I		4
Oral Communication		3
MUSA 351	Hour Lesson - Performance Major	3
Music History - Choose from the following: +		3
MUSC 460 or MUSC 461 or MUSC 462 or MUSC 466 or MUSC 491 or MUSC 492 or MUSC 495 or MUSC 496		
MUSC 311+	Recital Attendance	0
Large Ensemble		1
Small Ensemble		1
Credit Hours		15
Spring		
Nature of Science II		4
MUSA 352	Hour Lesson - Performance Major	3
MUSC 309	Principles of Conducting	1
Music History - Choose from the following: +		3
MUSC 460 or MUSC 461 or MUSC 462 or MUSC 466 or MUSC 491 or MUSC 492 or MUSC 495 or MUSC 496		
MUSC 311+	Recital Attendance	0
Large Ensemble		1
Small Ensemble		1
Credit Hours		13
Senior		
Fall		
Human Behavior		3
MUSA 451	Hour Lesson - Performance Major	3
MUSC 445	Applied Music Pedagogy	1

MUSC 446	Applied Music Literature	1
MUSC 413 or MUSC 414		2
Upper-Division General Education course (Option D)		3
Large Ensemble		1
Small Ensemble		1
Credit Hours		15
Spring		
Information Literacy and Research		3
Philosophy and Ethics		3
MUSA 452	Hour Lesson - Performance Major	3
Upper-Division General Education course (Option D)		3
Small Ensemble		1
Electives (as needed) *		3-4
Credit Hours		16-17
Total Credit Hours		120-128

* 2-3 credits in MUSC electives are recommended. Recommended options include: MUSC 333, MUSC 337, MUSC 397, MUSC 410, and MUSC 471. Please confer with your advisor for guidance.

+ At least one Music History elective must be MUSC 466, MUSC 491, or MUSC 492.

Music Performance-Keyboard Studies or Guitar Interest Area

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Language and Culture I (May be waived; See requirement details)		0-3
MUSA 151	Hour Lesson - Performance Major	3
MUSC 150	Freshman Seminar for Music Students	1
MUSC 160	Music and Ideas	1
MUSC 221	Music Theory 1 (Grade of C or better required)	2
MUSC 223	Aural Skills 1 (Grade of C or better required)	1
Large Ensemble (instrument dependent)		1
MUSC 311+	Recital Attendance	0
Credit Hours		12-15
Spring		
Human Creativity (May not use MUSC 264A or MUSC 126A)		3
Language and Culture II (May be waived; See requirement details)		0-3
Mathematics		3
MUSA 152	Hour Lesson - Performance Major	3
MUSC 222	Music Theory 2 (Grade of C or better required)	2
MUSC 224	Aural Skills 2 (Grade of C or better required)	1
MUSC 266	Music in World Cultures	1

Large Ensemble (instrument dependent)		1
MUSC 311+	Recital Attendance	0
Credit Hours		14-17
Sophomore		
Fall		
Interpreting the Past		3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MUSA 251	Hour Lesson - Performance Major	3
MUSC 321	Music Theory 3 (Grade of C or better required)	2
MUSC 323	Aural Skills 3 (Grade of C or better required)	1
MUSC 361	History of Western Art Music from Ancient through Baroque (Grade of C- or better required)	3
Large or Small Ensemble (instrument dependent)		1
MUSC 311+	Recital Attendance	0
Credit Hours		16
Spring		
Literature		3
MUSA 252	Hour Lesson - Performance Major	3
MUSC 362W	History of Western Art Music from Classical through Modern (Grade of C or better required)	3
Music Theory Elective(s) - Choose from the following (Grade of C- or better required):		2-3
MUSC 316 or MUSC 322 or MUSC 324 or MUSC 337 or MUSC 416 or MUSC 421 or MUSC 422 or MUSC 424 or MUSC 425 or MUSC 440		
MUSC 335T	Music Technology Survey (Satisfies Impact of Technology)	3
MUSC 311+	Recital Attendance	0
Large or Small Ensemble (instrument dependent)		1
Credit Hours		15-16

Junior		
Fall		
Nature of Science I		4
Oral Communication		3
MUSA 351	Hour Lesson - Performance Major	3
Music History - Choose from the following: ⁺		3
MUSC 460 or MUSC 461 or MUSC 462 or MUSC 466 or MUSC 491 or MUSC 492 or MUSC 495 or MUSC 496		
MUSC 311+	Recital Attendance	0
Large or Small Ensemble (instrument dependent)		1
Large or Small Ensemble (instrument dependent)		1
Credit Hours		15
Spring		
Nature of Science II		4
MUSA 352	Hour Lesson - Performance Major	3

MUSC 309	Principles of Conducting	1
Music History - Choose from the following: ⁺		3
MUSC 460 or MUSC 461 or MUSC 462 or MUSC 466 or MUSC 491 or MUSC 492 or MUSC 495 or MUSC 496		
MUSC 311+	Recital Attendance	0
Large or Small Ensemble (instrument dependent)		1
Music Electives (select from the following):		2-3
MUSC 333 or MUSC 337 or MUSC 397 or MUSC 410 or MUSC 471		
Credit Hours		14-15
Senior		
Fall		
Human Behavior		3
MUSA 451	Hour Lesson - Performance Major	3
MUSC 445	Applied Music Pedagogy	1
MUSC 446	Applied Music Literature	1
MUSC 413 or MUSC 414		2
Upper-Division General Education course (Option D)		3
Additional Large or Small Ensembles or Electives (as needed) [*]		4
Credit Hours		17
Spring		
Information Literacy and Research		3
Philosophy and Ethics		3
MUSA 452	Hour Lesson - Performance Major	3
Upper-Division General Education course (Option D)		3
Electives (as needed) [*]		5-6
Credit Hours		17-18
Total Credit Hours		120-129

^{*} Recommended MUSC elective options include:
MUSC 333, MUSC 337, MUSC 397, MUSC 410, and
MUSC 471. Please confer with your advisor for guidance.

⁺ At least one Music History elective must be MUSC 466,
MUSC 491, or MUSC 492.

Music Performance-Voice Interest Area

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Language and Culture I (May be waived; See requirement details)		0-3
^{**}		
MUSA 151	Hour Lesson - Performance Major	3
MUSC 101	Beginning Piano Class	1
MUSC 150	Freshman Seminar for Music Students	1
MUSC 160	Music and Ideas	1
MUSC 221	Music Theory 1 (Grade of C or better required)	2
MUSC 223	Aural Skills 1 (Grade of C or better required)	1
Large Ensemble		1

MUSC 311+	Recital Attendance	0
Credit Hours		13-16
Spring		
Human Creativity (May not use MUSC 264A or MUSC 126A)		3
Language and Culture II (May be waived; See requirement details) **		0-3
Mathematics		3
MUSA 152	Hour Lesson - Performance Major	3
MUSC 102	Beginning Piano Class	1
MUSC 222	Music Theory 2 (Grade of C or better required)	2
MUSC 224	Aural Skills 2 (Grade of C or better required)	1
MUSC 266	Music in World Cultures	1
Large Ensemble		1
MUSC 311+	Recital Attendance	0
Credit Hours		15-18
Sophomore		
Fall		
Interpreting the Past		3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MUSA 139	Half-Hour Lesson (Half-hour piano Lesson)	1
MUSA 251	Hour Lesson - Performance Major	3
MUSC 321	Music Theory 3 (Grade of C or better required)	2
MUSC 323	Aural Skills 3 (Grade of C or better required)	1
MUSC 361	History of Western Art Music from Ancient through Baroque (Grade of C- or better required)	3
Large Ensemble		1
MUSC 311+	Recital Attendance	0
Credit Hours		17
Spring		
Literature		3
MUSA 140	Half-Hour Lesson (Half-Hour Lesson (Piano))	1
MUSA 252	Hour Lesson - Performance Major	3
MUSC 362W	History of Western Art Music from Classical through Modern (Grade of C or better required)	3
Music Theory Elective(s) - Choose from the following (Grade of C- or better required):		2-3
MUSC 316 or MUSC 322 or MUSC 324 or MUSC 337 or MUSC 416 or MUSC 421 or MUSC 422 or MUSC 424 or MUSC 425 or MUSC 440		
MUSC 335T	Music Technology Survey (Satisfies Impact of Technology)	3
MUSC 311+	Recital Attendance	0
Large Ensemble		1
Credit Hours		16-17

Junior

Fall

Nature of Science I		4
Oral Communication		3
MUSA 239	Half-Hour Lesson	1
MUSA 351	Hour Lesson - Performance Major	3
MUSC 311+	Recital Attendance	0
Large Ensemble		1
Small Ensemble		1
Credit Hours		13

Spring

Nature of Science II		4
MUSA 240	Half-Hour Lesson	1
MUSA 352	Hour Lesson - Performance Major	3
MUSC 309	Principles of Conducting	1
Music History - Choose from the following: +		3
MUSC 460 or MUSC 461 or MUSC 462 or MUSC 466 or MUSC 491 or MUSC 492 or MUSC 495 or MUSC 496		
MUSC 311+	Recital Attendance	0
Large Ensemble		1
Small Ensemble		1
Credit Hours		14

Senior

Fall

Human Behavior		3
MUSC 345	Diction for Singers	1
MUSA 451	Hour Lesson - Performance Major	3
MUSC 445	Applied Music Pedagogy	1
MUSC 446	Applied Music Literature	1
MUSC 413 or MUSC 414		2
Upper-Division General Education course (Option D)		3
Large Ensemble		1
Small Ensemble		1
Credit Hours		16

Spring

Information Literacy and Research		3
Philosophy and Ethics		3
MUSC 346	Diction for Singers	1
MUSA 452	Hour Lesson - Performance Major	3
Upper-Division General Education course (Option D)		3
Small Ensemble		1
Electives (as needed) *		2-3
Credit Hours		16-17
Total Credit Hours		120-128

* Recommended MUSC elective options include: MUSC 333, MUSC 337, MUSC 397, MUSC 410, and MUSC 471. Please confer with your advisor for guidance.

** An additional World Language other than that used to satisfy lower division General Education (French, German

or Italian strongly recommended) may be required through the 102 level if not waived. Please confer with your academic advisor.

+ MUSC 466, MUSC 491, or MUSC 492 recommended.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Music Performance Minor Requirements

For a minor in one of the several areas of music performance, the student must complete 12 hours at the 300/400 level. An audition is required. Prerequisites for the minor (not included in the grade point average) are MUSA 210 and MUSA 211. Requirements for the minor are:

Applied Instrumental or Vocal Lessons:	8
MUSA 310	Hour Lesson - Music Minor
MUSA 311	Hour Lesson - Music Minor
MUSA 410	Hour Lesson - Music Minor
MUSA 411	Hour Lesson - Music Minor
Four additional hours of upper-division music courses	4

Vocal Performance minors must take the following:

MUSC 345	Diction for Singers
MUSC 346	Diction for Singers
Total Credit Hours	12

All music minors are required to enroll in and pass MUSC 311+, the zero credit Recital Attendance class, for a total of four semesters in order to be eligible for graduation. Should their graduation be projected in under four semesters, music minors may receive accelerated credit by doubling attendance totals in any given semester. Refer to the MUSC 311+ syllabus and Music Student Handbook (<https://www.odu.edu/music/students/undergraduate/handbook/section-three/>) for complete information.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Bachelor of Music Music with a Major in PreK-12 Instrumental Music Education (BM)

Douglas T. Owens (<https://www.odu.edu/directory/douglas-owens/>), Program Advisor

Students completing the Bachelor of Music, Music Education degree will be recommended for the appropriate license to teach music in the public schools. Majors are available in vocal or instrumental music for grades PreK-12. Music Education graduates that complete the approved teacher education program (including the Teacher Candidate Internship) are eligible for teaching licensure from the Virginia Department of Education, which is reciprocal in multiple states.

The ODU Bachelor of Music, Music Education degree program provides comprehensive preparation for the pre-service music educator. Multiple observation, practicum and internship field experiences allow the student to build upon the superb pedagogical, applied and ensemble performance foundation required throughout the curriculum.

Contact Dr. Douglas Owens (dtowens@odu.edu), Music Education Undergraduate Program Advisor, for additional information.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3

The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major

Oral Communication requirement is satisfied in the major

Human Creativity cannot be met by MUSC 126A or MUSC 264A

Impact of Technology requirement is satisfied in the major with MUSC 335T

Upper-Division General Education

Satisfied through the professional education sequence.

Requirements for Graduation

Requirements for graduation include completion of ENGL 110C , ENGL 211C or ENGL 231C , and the writing intensive (W) course in the major with a grade of C or better; completion of the Senior Assessment; a minimum cumulative 2.75 GPA in the major area and in the professional education core with no grade less than a C- in the major/content and the professional education core; successful completion of the Teacher Candidate Internship, and a minimum of 128-136 credit hours, which must include both a minimum of 32-34 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training

Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the teacher education programs in the College of Arts and Letters are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information from their advisors and from the Office of Clinical Experiences website at <https://www.odu.edu/oce> (<https://www.odu.edu/oce/>).

Departmental Requirements

MUSC 160	Music and Ideas **	1
MUSC 221	Music Theory 1 *	2
MUSC 222	Music Theory 2 *	2
MUSC 223	Aural Skills 1 *	1
MUSC 224	Aural Skills 2 *	1
MUSC 266	Music in World Cultures **	1
MUSC 309	Principles of Conducting **	1
MUSC 321	Music Theory 3 *	2
MUSC 323	Aural Skills 3 *	1
Music Theory Electives **		
Choose 2-3 credits from the following:		2-3
MUSC 316	Popular Songwriting Techniques	
MUSC 322	Advanced Music Theory and Post-Tonal Compositional Techniques **	
MUSC 324	Advanced Aural Skills - Tonal and Beyond (If selected, choose a 2-credit Music Theory Elective to meet the requirements) **	
MUSC 337	Jazz Improvisation I	
MUSC 416	Arranging for the Contemporary Musician and Producer	
MUSC 421	Counterpoint	
MUSC 422	Form and Analysis	
MUSC 424	Orchestration	

223 Music with a Major in PreK-12 Instrumental Music Education (BM)

MUSC 425	Vocal Arranging	
MUSC 440	Scoring for Film	
MUSC 335T	Music Technology Survey (satisfies impact of technology requirement) **	3
MUSC 361	History of Western Art Music from Ancient through Baroque **	3
MUSC 362W	History of Western Art Music from Classical through Modern *	3
Total Credit Hours		23-24

* Students must earn a grade of C or better in these courses to advance to the next level.

** Students must earn a grade of C- or better in these courses. All other Music courses must be passed with a grade of C- or higher.

Professional Education Core

A grade of C- or better is required in all Professional Education Core courses.

MUSE 150	Freshman Seminar 1 for Music Education Students	1
MUSE 151	Freshman Seminar II for Music Education Students	1
MUSC 300	Foundations of Music Education	3
MUSC 401	Music Education: Elementary Vocal and General Methods	2
MUSC 402	Music Education: Practicum (Elementary Vocal and General)	1
MUSC 407	Music Education: Secondary Instrumental Methods	2
MUSC 408	Music Education: Practicum (Secondary Instrumental) *	1
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
TLED 360	Classroom Management and Discipline	2
TLED 408	Reading and Writing in Content Areas	3
TLED 485	Teacher Candidate Internship	12
Total Credit Hours		34

* A minimum passing score of 160 or above on the Praxis Music Content Knowledge test #5113 is required for MUSC 408

PreK-12 Instrumental Music Education Major

General Education

Complete lower-division requirements 35-41

Complete upper-division requirements (met in the major through the professional education coursework)

Departmental Requirements

Complete departmental requirements 23-24

Professional Education Core

Complete professional education core 34

PreK-12 Instrumental Music Education Major +

MUSC 101	Beginning Piano Class (Complete voice, keyboard or guitar core)	1
MUSC 102	Beginning Piano Class (II)	1
MUSC 107	Beginning Voice Class (I)	1

MUSC 301	Music Education: High Brass Class (Trumpet)	1
MUSC 302	Music Education: Low Brass Class	1
MUSC 303	Music Education: Clarinet and Oboe Class	1
MUSC 304	Music Education: Woodwind Class	1
MUSC 305	Music Education: Upper Strings Class	1
MUSC 306	Music Education: Lower Strings Class	1
MUSC 307	Music Education: Percussion Class I	1
MUSC 310	Music Education: Percussion Class II	1
MUSC 414	Advanced Instrumental Conducting	2
MUSC 426	Marching Band Techniques and Arranging (woodwind, brass and percussion. String students should take MUSC 424 Orchestration.)	2
Small Instrumental Ensemble (two semesters)		2
Large Instrumental Ensemble (five semesters) *		5
Monarch Marching Band is required for Woodwind, Brass, Percussion Only:		0-1
MUSC 390	Monarch Marching Band	
Applied Music Primary Performance Area - MUSA 141-441 **		14
Completion of half-hour senior recital required		
Recital Attendance Credit required ***		
Total Credit Hours		128-136

* The large instrumental ensemble requirement will be met through participation in wind ensemble, symphonic band, and orchestra as assigned by the ensemble directors. In addition, woodwind, brass and percussion instrumentalists are required to complete one semester of Marching Band, MUSC 390.

** At least two credits must be at the 400-level.

*** All Bachelor of Music, Music Education majors are required to enroll in and pass MUSC 311+ (<https://catalog.odu.edu/search/?P=MUSC%20311%2B>), the zero credit Recital Attendance class, for a total of six semesters in order to be eligible for graduation. Refer to the MUSC 311+ (<https://catalog.odu.edu/search/?P=MUSC%20311%2B>) syllabus and the Music Student Handbook (<https://www.odu.edu/music/students/undergraduate/handbook/section-three/>) for complete information.

+ A grade of C- or better is required in all major courses.

Dual Certification–Fifth Year Program

It is possible to receive dual certification (in both instrumental and vocal music education) by completing an additional year of study. The additional course requirements are listed below. The student teaching experience in this program will be a half semester of vocal teaching and a half semester of instrumental teaching. Students interested in dual certification should be advised by the Diehn School of Music music education specialist as early in their degree program as possible.

Instrumental

For those students who have started the PreK-12 Instrumental Music Education program (as described in the catalog) and need to add the vocal component of the five-year Dual Certification program, the following additional courses are required:

MUSC 130	Functional Piano Skills	1
Upon the completion of MUSC 130, students will take the Piano Barrier Exam.		
MUSE 141	Music Education Applied Piano Lesson	2
MUSA 139	Half-Hour Lesson (Voice)	1
MUSA 140	Half-Hour Lesson (Voice)	1

MUSA 239	Half-Hour Lesson (Voice)	1
MUSA 240	Half-Hour Lesson (Voice)	1
MUSA 240	Half-Hour Lesson (Voice)	1
MUSC 381+	Concert Choir	1
MUSC 403	Music Education: Secondary Vocal Methods	2
Vocal/Choral Proficiency exam required after passing MUSC 403		
MUSC 404	Music Education: Practicum (Secondary Vocal)	1
MUSC 413	Advanced Choral Conducting	2
Total Credit Hours		14

Vocal

For those students who have begun the PreK-12 Vocal Music Education program (as described in the catalog) and need to add the instrumental component of the five-year Dual Certification program, the following additional courses are required:

MUSC 301	Music Education: High Brass Class	1
MUSC 302	Music Education: Low Brass Class	1
MUSC 303	Music Education: Clarinet and Oboe Class	1
MUSC 304	Music Education: Woodwind Class	1
MUSC 305	Music Education: Upper Strings Class	1
MUSC 306	Music Education: Lower Strings Class	1
MUSC 307	Music Education: Percussion Class I	1
MUSC 310	Music Education: Percussion Class II	1
MUSC 407	Music Education: Secondary Instrumental Methods	2
MUSC 408	Music Education: Practicum (Secondary Instrumental)	1
MUSC 414	Advanced Instrumental Conducting	2
MUSC 380	Symphonic Band	1
or		
MUSC 382+	Wind Ensemble	
or		
MUSC 383+	Symphony Orchestra	
Total Credit Hours		14

Additional Requirements and Information

License in Music Education

Admission

All students must apply for and be admitted into the approved music education program. Students must meet the required criteria for admission by earning the minimum required grade point averages (GPA). This process is typically completed in the sophomore year after completing MUSC 300, Foundations of Music Education. See *Applying to Undergraduate Programs* on the Office of Clinical Experiences web pages for more information and the application process, or contact your Music Education advisor.

Required grade point averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required – A grade of C or better is required in MUSC 221, MUSC 222, MUSC 223, MUSC 224, MUSC 321, MUSC 323, and MUSC 362W. All other Music courses must be passed with a grade of C- or higher.
- A professional education GPA of 2.75 is required – All professional education courses must be passed with a grade of C- or higher.

Although students may enroll in a limited number of education courses, students must be admitted into the approved music education program prior to enrolling in any instructional strategies practicum education course. Students must also meet with an education advisor in the Office of Clinical Experiences.

Continuance

Students must maintain a cumulative GPA of 2.75, a major/content GPA of 2.75 and a professional education GPA of 2.75. A grade of C or better is required in MUSC 221, MUSC 222, MUSC 223, MUSC 224, MUSC 321, MUSC 323 , and MUSC 362W; all other music courses must be passed with a grade of C- or higher. The remaining courses required for the major and in the professional education core must be completed with a grade of C- or higher for continuance. A professional education GPA of 2.75 is required for continuance. Students must take and pass the PRAXIS Subject Assessment, music content knowledge examination (formerly Praxis II), test code 5113, prior to or while enrolled in the secondary music education practicum course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement (MUSE 151, MUSC 300, MUSC 402, MUSC 404, and MUSC 408). Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at <https://odu.edu/oce/placement/background-checks> (<https://odu.edu/oce/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Virginia Board of Education Prescribed Assessments for Licensure

- Praxis Subject Assessment, Music Content Knowledge (formerly Praxis II), test code 5113. A minimum passing score of 160 or above is required for MUSC 404 or MUSC 408

To review more information on the Virginia Board of Education prescribed assessments, visit the Office of Clinical Experiences website, <https://www.odu.edu/oce> (<https://www.odu.edu/oce/>).

Ensemble Options for Bachelor of Music and Music BA Majors

Each degree program has specific ensemble requirements, which are listed under the course requirements above.

For the purposes of fulfilling large Choral or Instrumental ensemble requirements, students may use only Wind Ensemble, Symphony Orchestra, Guitar Ensemble, Concert Choir, or Symphonic Band (based on general wind/brass/percussion ensemble audition).

For the purposes of fulfilling small ensemble requirements, students may use a variety of ensembles including, but not limited to: Madrigal Singers, Opera and Musical Theater Production and Performance, New Music Ensemble, Diehn Chorale, Brass Choir, Contemporary Music Ensemble, Clarinet Choir, Flute Choir, Jazz Choir, Jazz Orchestra, Jazz Combo, Chamber Music groups of varied sizes and instrumentation (brass, woodwind, percussion, guitar, string, piano, mixed ensembles, etc.), Saxophone Quartet, Collegium Musicum, and more.

Students in the Jazz Studies major must select eight semesters of a jazz or jazz-related ensemble. This includes Jazz Choir, Jazz Orchestra, Jazz Combo or other jazz -related ensemble of varied sizes and instrumentation.

Ensemble offerings may vary each semester; check the class schedule for the latest ensemble availability. Ensemble participation should be made in consultation with the appropriate Area Director/s, Applied Instructors, and Program Advisors.

Other ensembles are offered for credit, such as and including Athletic Bands. Some ensembles are also open to non-music majors with enrollment based on an audition and instrumentation needs.

All of these ensembles are led by and/or coached by a DSoM faculty member.

Students should be aware of the necessity for ensemble diversity, and are encouraged to participate in as many different ensembles as their schedules and advisors will allow.

Applied Lesson Continuance Policy

If a student fails two semesters of applied lessons, he or she will be required to re-audition for applied lesson placement and may be advised to choose another degree program that does not require applied lessons. If a student has five or more unexcused absences in one semester, he or she will fail applied music for that semester. An audition is required to re-enter applied music after an absence of two consecutive semesters or more.

Jury Examinations

Applied music students taking hour lessons at the MUSA 141, MUSA 151, MUSA 161 level or higher must play a jury examination each semester. Failure to perform a required jury will result in a final applied grade of F. The jury grade counts as 50% of the final applied grade. The remaining 50% is based on progress in lessons and is determined by the student's teacher. Students auditing Applied Music take juries in the first semester in which they are enrolled for credit. Audit status is normally allowed for one semester only and is granted on the auditioning committee's recommendation that the student will likely be ready for credit study after one semester of audit study. A student with audit status will audition for credit study during the jury examination period at the close of the audit semester.

Accompanying

All keyboard students are expected to accompany at least once a semester on a General Student Recital, Performance Session, or Applied Music Jury Examination after they have attained the Applied Music numbering of 241 and above or 251 and above, and after they have studied keyboard at Old Dominion University for a minimum of one semester.

Degree Program Guide*

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
MUSA 141	Hour Lesson **	2
MUSE 150	Freshman Seminar 1 for Music Education Students	1
MUSC 101	Beginning Piano Class **	1
MUSC 107	Beginning Voice Class (may be taken in the Freshman year, spring semester) **	1
MUSC 160	Music and Ideas **	1
MUSC 221	Music Theory 1 (Grade of C or better required)	2
MUSC 223	Aural Skills 1 (Grade of C or better required)	1
Large Ensemble **		1
MUSC 311+	Recital Attendance	0
Monarch Marching Band is required for Woodwind/Brass/ Percussion musicians only. **		0-1
MUSC 390	Monarch Marching Band	

ENGL 110C	English Composition (Grade of C or better required)	3
Mathematics		3
Credit Hours		16-17
Spring		
MUSA 142	Hour Lesson **	2
MUSE 151	Freshman Seminar II for Music Education Students	1
MUSC 102	Beginning Piano Class **	1
MUSC 222	Music Theory 2 (Grade of C or better required)	2
MUSC 224	Aural Skills 2 (Grade of C or better required)	1
MUSC 266	Music in World Cultures **	1
Large Ensemble **		1
MUSC 311+	Recital Attendance	0
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Interpreting the Past		3
Credit Hours		15
Sophomore		
Fall		
MUSA 241	Hour Lesson **	2
MUSC 300	Foundations of Music Education **	3
MUSC 301	Music Education: High Brass Class **	1
MUSC 305	Music Education: Upper Strings Class **	1
MUSC 311+	Recital Attendance	0
MUSC 321	Music Theory 3 (Grade of C or better required)	2
MUSC 323	Aural Skills 3 (Grade of C or better required)	1
MUSC 361	History of Western Art Music from Ancient through Baroque **	3
Large Ensemble **		1
Nature of Science I		4
Credit Hours		18
Spring		
MUSA 242	Hour Lesson **	2
MUSC 302	Music Education: Low Brass Class **	1
MUSC 306	Music Education: Lower Strings Class **	1
MUSC 311+	Recital Attendance	0
Music Theory Electives - Choose 2-3 credits from the following: **		2-3
MUSC 316	Popular Songwriting Techniques	
MUSC 322	Advanced Music Theory and Post-Tonal Compositional Techniques	
MUSC 324	Advanced Aural Skills - Tonal and Beyond	

MUSC 337	Jazz Improvisation I	
MUSC 416	Arranging for the Contemporary Musician and Producer	
MUSC 421	Counterpoint	
MUSC 422	Form and Analysis	
MUSC 424	Orchestration	
MUSC 425	Vocal Arranging	
MUSC 440	Scoring for Film	
MUSC 362W	History of Western Art Music from Classical through Modern (Grade of C or better required)	3
Large Ensemble **		1
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence **	3
Nature of Science II		4
Credit Hours		17-18
Junior		
Fall		
MUSA 341	Hour Lesson **	2
MUSC 303	Music Education: Clarinet and Oboe Class **	1
MUSC 307	Music Education: Percussion Class I **	1
MUSC 309	Principles of Conducting **	1
MUSC 311+	Recital Attendance	0
MUSC 335T	Music Technology Survey (Satisfies Impact of Technology) **	3
Small Ensemble **		1
Large Ensemble **		1
MUSC 401	Music Education: Elementary Vocal and General Methods **	2
MUSC 402	Music Education: Practicum (Elementary Vocal and General) **	1
Select one course appropriate to your instrumental area: **		2
MUSC 424	Orchestration (String Musicians Only)	
MUSC 426	Marching Band Techniques and Arranging (Woodwind/Brass/Percussion Musicians Only)	
TLED 360	Classroom Management and Discipline **	2
Credit Hours		17
Spring		
MUSA 342	Hour Lesson **	2
MUSC 304	Music Education: Woodwind Class **	1
MUSC 310	Music Education: Percussion Class II **	1
MUSC 311+	Recital Attendance	0
Small Ensemble **		1
MUSC 407	Music Education: Secondary Instrumental Methods **	2
MUSC 408	Music Education: Practicum (Secondary Instrumental) **	1

MUSC 414	Advanced Instrumental Conducting **	2
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics **	3
Literature		3
Credit Hours		16
Senior		
Fall		
MUSA 441	Hour Lesson (Recital semester) **	2
Recital		0
TLED 408	Reading and Writing in Content Areas **	3
Human Behavior		3
Philosophy & Ethics		3
Human Creativity (May not use MUSC 264A or MUSC 126A)		3
Information Literacy and Research		3
Credit Hours		17
Spring		
TLED 485	Teacher Candidate Internship	12
Credit Hours		12
Total Credit Hours		128-130

* Language and Culture requirement (0-6 credits) is not included in this degree program guide. Please see the requirements section for details.

** Grade of C- or better required.

Bachelor of Music

Music with a Major in PreK-12 Vocal Music Education (BM)

Douglas T. Owens (<https://www.odu.edu/directory/douglas-owens/>), Program Advisor

Students completing the Bachelor of Music, Music Education degree will be recommended for the appropriate license to teach music in the public schools. Majors are available in vocal or instrumental music for grades PreK-12. Music Education graduates that complete the approved teacher education program (including the Teacher Candidate Internship) are eligible for teaching licensure from the Virginia Department of Education, which is reciprocal in multiple states.

The ODU Bachelor of Music, Music Education degree program provides comprehensive preparation for the pre-service music educator. Multiple observation, practicum and internship field experiences allow the student to build upon the superb pedagogical, applied, and ensemble performance foundation required throughout the curriculum.

Contact Dr. Douglas Owens (dtowens@odu.edu), Music Education Undergraduate Program Advisor, for additional information.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3

Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major

Oral Communication requirement is satisfied in the major

Human Creativity cannot be met by MUSC 126A or MUSC 264A

Impact of Technology requirement is satisfied in the major with MUSC 335T

Upper-Division General Education

Satisfied through the professional education sequence.

Requirements for Graduation

Requirements for graduation include completion of ENGL 110C , ENGL 211C or ENGL 231C , and the writing intensive (W) course in the major with a grade of C or better; completion of the Senior Assessment; a minimum cumulative 2.75 GPA in the major area and in the professional education core with no grade less than a C- in the major/content and the professional education core; successful completion of the Teacher Candidate Internship, and a minimum of 125-132 credit hours, which must include both a minimum of 32-33 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the teacher education programs in the College of Arts and Letters are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information from their advisors and from the Office of Clinical Experiences website at <https://www.odu.edu/oce> (<https://www.odu.edu/oce/>).

Departmental Requirements

MUSC 160	Music and Ideas **	1
MUSC 221	Music Theory 1 *	2
MUSC 222	Music Theory 2 *	2
MUSC 223	Aural Skills 1 *	1
MUSC 224	Aural Skills 2 *	1
MUSC 266	Music in World Cultures **	1
MUSC 309	Principles of Conducting **	1
MUSC 321	Music Theory 3 *	2
MUSC 323	Aural Skills 3 *	1

<i>Music Theory Electives</i> **		
Choose 2-3 credits from the following:		2-3
MUSC 316	Popular Songwriting Techniques	
MUSC 322	Advanced Music Theory and Post-Tonal Compositional Techniques	
MUSC 324	Advanced Aural Skills - Tonal and Beyond (If selected, choose a 2-credit Music Theory Elective to meet the requirements)	
MUSC 337	Jazz Improvisation I	
MUSC 416	Arranging for the Contemporary Musician and Producer	
MUSC 421	Counterpoint	
MUSC 422	Form and Analysis	
MUSC 424	Orchestration	
MUSC 425	Vocal Arranging	
MUSC 440	Scoring for Film	
MUSC 335T	Music Technology Survey (satisfies impact of technology requirement) **	3
MUSC 361	History of Western Art Music from Ancient through Baroque **	3
MUSC 362W	History of Western Art Music from Classical through Modern *	3
Total Credit Hours		23-24

* Students must earn a grade of C or better in these courses to advance to the next level.

** Students must earn a grade of C- or better in these courses. All other Music courses must be passed with a grade of C- or higher.

Professional Education Core

A grade of C- or better is required in all Professional Education Core courses.

MUSE 150	Freshman Seminar 1 for Music Education Students	1
MUSE 151	Freshman Seminar II for Music Education Students	1
MUSC 300	Foundations of Music Education	3
MUSC 401	Music Education: Elementary Vocal and General Methods	2
MUSC 402	Music Education: Practicum (Elementary Vocal and General)	1
MUSC 403	Music Education: Secondary Vocal Methods	2
MUSC 404	Music Education: Practicum (Secondary Vocal) *	1
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
TLED 360	Classroom Management and Discipline	2
TLED 408	Reading and Writing in Content Areas	3
TLED 485	Teacher Candidate Internship	12
Total Credit Hours		34

* A minimum passing score of 160 or above on the Praxis Music Content Knowledge test #5113 is required for MUSC 404

PreK-12 Vocal Music Education Major

General Education

Complete lower-division requirements	35-41

Complete upper-division requirements (met in the major through the professional education coursework)

Departmental Requirements

Complete departmental requirements	23-24

Professional Core

Complete professional core	34

PreK-12 Vocal Music Education Major ⁺

MUSC 101	Beginning Piano Class (I)	1
MUSC 102	Beginning Piano Class (II)	1
MUSC 130	Functional Piano Skills	1

Upon completion of MUSC 130, students will take the Piano Barrier Exam.

MUSE 141	Music Education Applied Piano Lesson	2
MUSC 345	Diction for Singers (I)	1
MUSC 346	Diction for Singers (II)	1
MUSC 409	Music Education: Instrumental Techniques	1
MUSC 413	Advanced Choral Conducting	2
MUSC 425	Vocal Arranging (if not offered, MUSC 424 or MUSC 426 can be substituted)	2

Applied Music Requirement - MUSA 141-441*	14

Ensemble Requirement

Concert Choir (five semesters)	5
Small Vocal Ensemble (two semesters)**	2

Vocal/Choral Proficiency exam required after passing MUSC 403

Recital Attendance Credit required ***

Total Credit Hours	125-132

* Fourteen credit hours of the primary performance area, at least two of which must be at the 400-level, are required. Successful completion of a half-hour recital.

** Guitarists may choose guitar ensembles in lieu of small vocal ensemble.

*** All Bachelor of Music, Music Education majors are required to enroll in and pass MUSC 311+ (<https://catalog.odu.edu/search/?P=MUSC%20311%2B>), the zero credit Recital Attendance class, for a total of six semesters in order to be eligible for graduation. Refer to the MUSC 311+ (<https://catalog.odu.edu/search/?P=MUSC%20311%2B>) syllabus and the Music Student Handbook (<https://www.odu.edu/music/students/undergraduate/handbook/section-three/>) for complete information.

+ A grade of C- or better is required in all major courses.

Guitar Applied Music Area

Students that study Classical Guitar must complete the following courses in addition to the Vocal Music Education departmental requirements and professional education core.

MUSC 101	Beginning Piano Class	1
MUSC 102	Beginning Piano Class	1
MUSC 130	Functional Piano Skills	1

Upon completion of MUSC 130, students will take the Piano Barrier Exam

MUSE 141	Music Education Applied Piano Lesson	2
MUSC 107	Beginning Voice Class (I)	1
MUSA 139	Half-Hour Lesson (Voice)	1
MUSA 140	Half-Hour Lesson (Voice)	1
MUSA 239	Half-Hour Lesson (Voice)	1
MUSA 240	Half-Hour Lesson (Voice)	1
MUSA 240	Half-Hour Lesson (Voice)	1
MUSC 345	Diction for Singers (I)	1

MUSC 346	Diction for Singers (II)	1
MUSC 409	Music Education: Instrumental Techniques	1
MUSC 413	Advanced Choral Conducting	2
MUSC 425	Vocal Arranging (if not offered, MUSC 424 or MUSC 426 can be substituted)	2
Applied Music Requirement - MUSA 141-441 *		14
Ensemble		
Concert Choir (five semesters)		5
Small Vocal Ensemble (2 semesters) **		2
Vocal/Choral Proficiency exam required after passing MUSC 403		
Recital Attendance Credit required***		
Total Credit Hours		39

- * Fourteen credit hours of the primary performance area, at least two of which must be at the 400-level, are required. Successful completion of a half-hour recital.
- ** Guitarists may choose guitar ensembles in lieu of small vocal ensemble.
- *** All Bachelor of Music, Music Education majors are required to enroll in and pass MUSC 311+ (<https://catalog.odu.edu/search/?P=MUSC%20311%2B>), the zero credit Recital Attendance class, for a total of six semesters in order to be eligible for graduation. Refer to the MUSC 311+ (<https://catalog.odu.edu/search/?P=MUSC%20311%2B>) syllabus and the Music Student Handbook (<https://www.odu.edu/music/students/undergraduate/handbook/section-three/>) for complete information.

Keyboard Applied Music Area

Students that study Keyboard Instruments must complete the following courses in addition to the Vocal Music Education departmental requirements and professional education core.

MUSC 130	Functional Piano Skills	1
Upon completion of MUSC 130, students will take the Piano Barrier Exam.		
MUSC 107	Beginning Voice Class	1
MUSA 139	Half-Hour Lesson (Voice)	1
MUSA 140	Half-Hour Lesson (Voice)	1
MUSA 239	Half-Hour Lesson (Voice)	1
MUSA 240	Half-Hour Lesson (Voice)	1
MUSA 240	Half-Hour Lesson (Voice)	1
MUSC 345	Diction for Singers (I)	1
MUSC 346	Diction for Singers (II)	1
MUSC 409	Music Education: Instrumental Techniques	1
MUSC 413	Advanced Choral Conducting	2
MUSC 425	Vocal Arranging (if not offered, MUSC 424 or MUSC 426 can be substituted)	2
Applied Music Requirement - MUSA 141-441 *		14
Ensemble		
Concert Choir (five semesters)		5
Small Vocal Ensemble (2 semesters) **		2
Vocal/Choral Proficiency exam required after passing MUSC 403		
Recital Attendance Credit required***		
Total Credit Hours		35

- * Fourteen credit hours of the primary performance area, at least two of which must be at the 400-level, are required. Successful completion of a half-hour recital.
- ** Guitarists may choose guitar ensembles in lieu of small vocal ensemble.

All Bachelor of Music, Music Education majors are required to enroll in and pass MUSC 311+ (<https://catalog.odu.edu/search/?P=MUSC%20311%2B>), the zero credit Recital Attendance class, for a total of six semesters in order to be eligible for graduation. Refer to the MUSC 311+ (<https://catalog.odu.edu/search/?P=MUSC%20311%2B>) syllabus and the Music Student Handbook (<https://www.odu.edu/music/students/undergraduate/handbook/section-three/>) for complete information.

Dual Certification–Fifth Year Program

It is possible to receive dual certification (in both instrumental and vocal music education) by completing an additional year of study. The additional course requirements are listed below. The student teaching experience in this program will be a half semester of vocal teaching and a half semester of instrumental teaching. Students interested in dual certification should be advised by the Diehn School of Music music education specialist as early in their degree program as possible.

Instrumental

For those students who have started the Instrumental Music Education program (as described in the catalog) and need to add the vocal component of the five-year Dual Certification program, the following additional courses are required:

MUSC 130	Functional Piano Skills	1
Upon the completion of MUSC 130, students will take the Piano Barrier Exam.		
MUSE 141	Music Education Applied Piano Lesson	2
MUSA 139	Half-Hour Lesson (Voice)	1
MUSA 140	Half-Hour Lesson (Voice)	1
MUSA 239	Half-Hour Lesson (Voice)	1
MUSA 240	Half-Hour Lesson (Voice)	1
MUSA 240	Half-Hour Lesson (Voice)	1
MUSC 381+	Concert Choir	1
MUSC 403	Music Education: Secondary Vocal Methods	2
Vocal/Choral Proficiency exam required after passing MUSC 403		
MUSC 404	Music Education: Practicum (Secondary Vocal)	1
MUSC 413	Advanced Choral Conducting	2
Total Credit Hours		14

Vocal

For those students who have started the Vocal Music Education program (as described in the catalog) and need to add the instrumental component of the five-year Dual Certification program, the following additional courses are required:

MUSC 301	Music Education: High Brass Class	1
MUSC 302	Music Education: Low Brass Class	1
MUSC 303	Music Education: Clarinet and Oboe Class	1
MUSC 304	Music Education: Woodwind Class	1
MUSC 305	Music Education: Upper Strings Class	1
MUSC 306	Music Education: Lower Strings Class	1
MUSC 307	Music Education: Percussion Class I	1
MUSC 310	Music Education: Percussion Class II	1
MUSC 407	Music Education: Secondary Instrumental Methods	2
MUSC 408	Music Education: Practicum (Secondary Instrumental)	1
MUSC 414	Advanced Instrumental Conducting	2
MUSC 380	Symphonic Band	1

or

MUSC 382+	Wind Ensemble
or	
MUSC 383+	Symphony Orchestra
Total Credit Hours	14

The vocal area of study requires passage of a vocal/choral proficiency examination and a piano barrier examination before a student is eligible for Teacher Candidate Internship.

Additional Requirements and Information

License in Music Education

Admission

All students must apply for and be admitted into the approved music education program. Students must meet the required criteria for admission by earning the minimum required grade point averages (GPA). This process is typically completed in the sophomore year after completing MUSC 300, Foundations of Music Education. See *Applying to Undergraduate Programs* on the Office of Clinical Experiences web pages for more information and the application process, or contact your Music Education advisor.

Required grade point averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required – A grade of C or better is required in MUSC 221, MUSC 222, MUSC 223, MUSC 224, MUSC 321, MUSC 323, and MUSC 362W. All other Music courses must be passed with a grade of C- or higher.
- A professional education GPA of 2.75 is required – All professional education courses must be passed with a grade of C- or higher.

Although students may enroll in a limited number of education courses, students must be admitted into the approved music education program prior to enrolling in any instructional strategies practicum education course. Students must also meet with an education advisor in the Office of Clinical Experiences.

Continuance

Students must maintain a cumulative GPA of 2.75, a major/content GPA of 2.75 and a professional education GPA of 2.75. A grade of C or better is required in MUSC 221, MUSC 222, MUSC 223, MUSC 224, MUSC 321, MUSC 323, and MUSC 362W; all other music courses must be passed with a grade of C- or higher. The remaining courses required for the major and in the professional education core must be completed with a grade of C- or higher for continuance. A professional education GPA of 2.75 is required for continuance. Students must take and pass the PRAXIS Subject Assessment, music content knowledge examination (formerly Praxis II), test code 5113, prior to or while enrolled in the secondary music education practicum course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement (MUSE 151, MUSC 300, MUSC 402, MUSC 404, and MUSC 408). Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at <https://odu.edu/oce/placement/background-checks> (<https://odu.edu/oce/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Virginia Board of Education Prescribed Assessments for Licensure

- Praxis Subject Assessment, Music Content Knowledge (formerly Praxis II), test code 5113. A minimum passing score of 160 or above is required for MUSC 404 or MUSC 408

To review more information on the Virginia Board of Education prescribed assessments, visit the Office of Clinical Experiences website, <https://www.odu.edu/oce> (<https://www.odu.edu/oce/>).

Ensemble Options for Bachelor of Music and Music BA Majors

Each degree program has specific ensemble requirements, which are listed under the course requirements above.

For the purposes of fulfilling large Choral or Instrumental ensemble requirements, students may use only Wind Ensemble, Symphony Orchestra, Guitar Ensemble, Concert Choir, or Symphonic Band (based on general wind/brass/percussion ensemble audition).

For the purposes of fulfilling small ensemble requirements, students may use a variety of ensembles including, but not limited to: Madrigal Singers, Opera and Musical Theater Production and Performance, New Music Ensemble, Diehn Chorale, Brass Choir, Contemporary Music Ensemble, Clarinet Choir, Flute Choir, Jazz Choir, Jazz Orchestra, Jazz Combo, Chamber Music groups of varied sizes and instrumentation (brass, woodwind, percussion, guitar, string, piano, mixed ensembles, etc.), Saxophone Quartet, Collegium Musicum, and more.

Students in the Jazz Studies major must select eight semesters of a jazz or jazz-related ensemble. This includes Jazz Choir, Jazz Orchestra, Jazz Combo or other jazz -related ensemble of varied sizes and instrumentation.

Ensemble offerings may vary each semester; check the class schedule for the latest ensemble availability. Ensemble participation should be made in consultation with the appropriate Area Director/s, Applied Instructors, and Program Advisors.

Other ensembles are offered for credit, such as and including Athletic Bands. Some ensembles are also open to non-music majors with enrollment based on an audition and instrumentation needs.

All of these ensembles are led by and/or coached by a DSoM faculty member.

Students should be aware of the necessity for ensemble diversity, and are encouraged to participate in as many different ensembles as their schedules and advisors will allow.

Applied Lesson Continuance Policy

If a student fails two semesters of applied lessons, he or she will be required to re-audition for applied lesson placement and may be advised to choose another degree program that does not require applied lessons. If a student has five or more unexcused absences in one semester, he or she will fail applied music for that semester. An audition is required to re-enter applied music after an absence of two consecutive semesters or more.

Jury Examinations

Applied music students taking hour lessons at the MUSA 141, MUSA 151, MUSA 161 level or higher must play a jury examination each semester. Failure to perform a required jury will result in a final applied grade of F. The jury grade counts as 50% of the final applied grade. The remaining 50% is based on progress in lessons and is determined by the student's teacher. Students auditing Applied Music take juries in the first semester in which they are enrolled for credit. Audit status is normally allowed for one semester only and is granted on the auditioning committee's recommendation that the student will likely be ready for credit study after one semester of audit study. A student with audit status will audition for credit study during the jury examination period at the close of the audit semester.

Accompanying

All keyboard students are expected to accompany at least once a semester on a General Student Recital, Performance Session, or Applied Music Jury Examination after they have attained the Applied Music numbering of 241

and above or 251 and above, and after they have studied keyboard at Old Dominion University for a minimum of one semester.

Degree Program Guide*

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
MUSA 141	Hour Lesson **	2
MUSE 150	Freshman Seminar 1 for Music Education Students	1
MUSC 101	Beginning Piano Class **	1
MUSC 160	Music and Ideas **	1
MUSC 221	Music Theory 1 (Grade of C or better required)	2
MUSC 223	Aural Skills 1 (Grade of C or better required)	1
MUSC 311+	Recital Attendance	0
MUSC 345	Diction for Singers **	1
MUSC 381+	Concert Choir **	1
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematics		3
Credit Hours		16
Spring		
MUSA 142	Hour Lesson **	2
MUSE 151	Freshman Seminar II for Music Education Students	1
MUSC 102	Beginning Piano Class **	1
MUSC 222	Music Theory 2 (Grade of C or better required)	2
MUSC 224	Aural Skills 2 (Grade of C or better required)	1
MUSC 266	Music in World Cultures **	1
MUSC 311+	Recital Attendance	0
MUSC 346	Diction for Singers **	1
MUSC 381+	Concert Choir **	1
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Interpreting the Past		3
Credit Hours		16
Sophomore		
Fall		
MUSA 241	Hour Lesson **	2
MUSC 130	Functional Piano Skills (Complete the Piano Barrier Exam following MUSC 130) **	1
MUSC 300	Foundations of Music Education **	3
MUSC 311+	Recital Attendance	0

MUSC 321	Music Theory 3 (Grade of C or better required)	2
MUSC 323	Aural Skills 3 (Grade of C or better required)	1
MUSC 361	History of Western Art Music from Ancient through Baroque **	3
MUSC 381+	Concert Choir **	1
MUSC 409	Music Education: Instrumental Techniques **	1
Nature of Science I		4
Credit Hours		18
Spring		
MUSE 141	Music Education Applied Piano Lesson **	2
MUSA 242	Hour Lesson **	2
MUSC 309	Principles of Conducting **	1
MUSC 311+	Recital Attendance	0
Music Theory Electives - Choose 2-3 credits from the following: **		2-3
MUSC 316	Popular Songwriting Techniques	
MUSC 322	Advanced Music Theory and Post-Tonal Compositional Techniques	
MUSC 324	Advanced Aural Skills - Tonal and Beyond	
MUSC 337	Jazz Improvisation I	
MUSC 416	Arranging for the Contemporary Musician and Producer	
MUSC 421	Counterpoint	
MUSC 422	Form and Analysis	
MUSC 424	Orchestration	
MUSC 425	Vocal Arranging	
MUSC 440	Scoring for Film	
MUSC 362W	History of Western Art Music from Classical through Modern (Grade of C or better required)	3
MUSC 381+	Concert Choir	1
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence **	3
Literature		3
Credit Hours		17-18
Junior		
Fall		
MUSA 341	Hour Lesson **	2
MUSC 311+	Recital Attendance	0
MUSC 335T	Music Technology Survey (Satisfies Impact of Technology) **	3
MUSC 381+	Concert Choir **	1
MUSC 401	Music Education: Elementary Vocal and General Methods **	2
MUSC 402	Music Education: Practicum (Elementary Vocal and General) **	1
MUSC 413	Advanced Choral Conducting **	2

MUSC 425	Vocal Arranging **	2
TLED 360	Classroom Management and Discipline **	2
Credit Hours		15
Spring		
MUSA 342	Hour Lesson **	2
MUSC 311+	Recital Attendance	0
Small Ensemble **		1
MUSC 403	Music Education: Secondary Vocal Methods **	2
MUSC 404	Music Education: Practicum (Secondary Vocal) **	1
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics **	3
TLED 408	Reading and Writing in Content Areas **	3
Nature of Science II		4
Credit Hours		16
Senior		
Fall		
MUSA 441	Hour Lesson (Recital semester) **	2
Recital		0
Small Ensemble **		1
Human Behavior		3
Philosophy & Ethics		3
Human Creativity (May not use MUSC 264A or MUSC 126A)		3
Information Literacy and Research		3
Credit Hours		15
Spring		
TLED 485	Teacher Candidate Internship	12
Credit Hours		12
Total Credit Hours		125-126

* Language and Culture requirement (0-6 credits) is not included in this degree program guide. Please see the requirements section for details.

** Grade of C- or better required.

Bachelor of Music

Music with an Emphasis in Sound Recording Technology (BM)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3

Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major

Human Creativity: Cannot be met by MUSC 126A or MUSC 264A

Impact of Technology requirement is satisfied in the major with MUSC 335T

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Emphasis in Sound Recording Technology

Alek Palmersmith, Program Advisor

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6

Emphasis in Sound Recording Technology

MUSC 101	Beginning Piano Class	1
MUSC 102	Beginning Piano Class	1
MUSC 150	Freshman Seminar for Music Students	1
MUSC 160	Music and Ideas	1
MUSC 221	Music Theory 1 *	2
MUSC 222	Music Theory 2 *	2
MUSC 223	Aural Skills 1 *	1
MUSC 224	Aural Skills 2 *	1
MUSC 266	Music in World Cultures	1

MUSC 309	Principles of Conducting	1
MUSC 321	Music Theory 3 *	2
MUSC 323	Aural Skills 3 *	1
<i>Music Theory Electives **</i>		
Choose 2-3 credits from the following:		2-3
MUSC 316	Popular Songwriting Techniques	
MUSC 322	Advanced Music Theory and Post-Tonal Compositional Techniques	
MUSC 324	Advanced Aural Skills - Tonal and Beyond (If selected, choose a 2-credit Music Theory Elective to meet the requirements)	
MUSC 337	Jazz Improvisation I	
MUSC 421	Counterpoint	
MUSC 422	Form and Analysis	
MUSC 424	Orchestration	
MUSC 425	Vocal Arranging	
MUSC 440	Scoring for Film	
MUSC 335T	Music Technology Survey	3
MUSC 361	History of Western Art Music from Ancient through Baroque **	3
MUSC 362W	History of Western Art Music from Classical through Modern *	3
<i>Music History Elective</i>		
Choose one of the following		3
MUSC 460	History of Jazz	
MUSC 461	History of Recorded Music	
MUSC 462	Hip-Hop Music and Culture	
MUSC 466	Music of the 20th Century to the Present	
MUSC 491	Music History from the Ancient to Baroque Era	
MUSC 492	Music History from the Classical through Modern Era	
MUSC 495	Topics in Music	
MUSC 496	Topics in Music	
Supportive Courses in Music		
Applied Lessons (Required - 7 Semesters)		14
MUSA 161	Hour Lesson - SRT Major	
MUSA 162	Hour Lesson - SRT Major	
MUSA 261	Hour Lesson - SRT Major	
MUSA 262	Hour Lesson - SRT Major	
MUSA 361	Hour Lesson - SRT Major	
MUSA 362	Hour Lesson - SRT Major	
MUSA 461	Hour Lesson - SRT Major	
Applied Lesson Electives (Optional) ++		0-8
MUSA 460	Applied Sound Recording Technology Mentorship	
MUSA 462	Hour Lesson - SRT Major	
MUSA 463	Hour Lesson - SRT Major - Secondary Instrument	
MUSA 464	Hour Lesson - SRT Major - Secondary Instrument	
Large and Small Ensembles (7 semesters required) +		7
Large Ensemble (2-5 Semesters) +		
Small Ensemble - (2-5 Semesters) +		
MUSC 355	Music Production I	3
MUSC 435	Music Production II	3
Sound Recording Technology Courses		
MUSC 113	Live Audio Engineering	3
MUSC 315	Digital Audio Workstation Essentials	3
MUSC 320	Studio Recording Principles	3

MUSC 415	The Art and Craft of Mixing	3
MUSC 333	Music Business and Entrepreneurship	3
MUSC 368	Music Industry Internship	3
<i>Sound Recording Technology Elective</i>		
Choose two of the following		6
MUSC 420	Music Production Techniques	
MUSC 416	Arranging for the Contemporary Musician and Producer	
MUSC 352	Critical Listening in Audio Production	
MUSC 336	Electronic Music	
MUSC 340	Synthesis and Sound Design Techniques for Music Production	
MUSC 350	Music Notation	
Recital Attendance Credit required ***		
Total Credit Hours		124-139

*	Students must earn a C or better in these courses to advance to the next level.
**	Students must earn a grade of C- or better in these courses.
***	PLEASE NOTE: All Bachelor of Music, Sound Recording Technology majors are required to enroll in and pass MUSC 311+, the zero credit Recital Attendance class, for a total of six semesters in order to be eligible for graduation. Refer to the MUSC 311+ syllabus and the Music Student Handbook (https://www.odu.edu/music/students/undergraduate/handbook/section-three/) for complete information.
+	Students must participate in ensembles for a total of seven (7) semesters as part of their degree requirements. At least two (2) semesters must be in a large ensemble, with up to three (3) additional semesters allowable toward degree completion. For the remaining two (2) to five (5) semesters, students may enroll in ensembles that align with their instrumental or vocal specialization. To promote a diverse ensemble experience, no more than two (2) semesters in any single ensemble may count toward this requirement. Exceptions include additional semesters in a large ensemble and instrument-specific limitations on ensemble choices. Additional exceptions may be granted with approval from the Director of the SRT program and the program advisor. Large ensembles include: symphonic band, wind ensemble, symphony orchestra, concert choir and guitar ensemble. Students studying applied guitar in the BM with an Emphasis in Sound Recording and Technology program may substitute jazz orchestra or other similar option for their large ensemble with approval from the Director of SRT and Program Advisor. Small ensembles may include: Commercial Music Ensemble, Madrigal Singers, Collegium Musicum, Opera and Musical Theater Production and Performance, new music ensemble, brass choir, clarinet choir, flute choir, jazz choir, jazz orchestra, and chamber music groups of varied sizes and instrumentation (brass, woodwind, percussion, guitar, string, piano, mixed ensembles, etc.). Small ensemble offerings may vary each semester; check the class schedule for the latest ensemble availability.
++	If eligible, MUSA 460, MUSA 462, MUSA 463, and MUSA 464 may be used in place of or in addition to MUSA 362 and/or MUSA 461. Confirm eligibility with the Director of SRT or the Program Advisor.

Additional Requirements and Information

Ensemble Options for Bachelor of Music and Music BA Majors

Each degree program has specific ensemble requirements, which are listed under the course requirements above.

For the purposes of fulfilling large Choral or Instrumental ensemble requirements, students may use only Wind Ensemble, Symphony Orchestra, Guitar Ensemble, Concert Choir, or Symphonic Band (based on general wind/brass/percussion ensemble audition).

For the purposes of fulfilling small ensemble requirements, students may use a variety of ensembles including, but not limited to: Madrigal Singers, Opera and Musical Theater Production and Performance, New Music Ensemble, Diehn Chorale, Brass Choir, Contemporary Music Ensemble, Clarinet Choir, Flute Choir, Jazz Choir, Jazz Orchestra, Jazz Combo, Chamber Music groups of varied sizes and instrumentation (brass, woodwind, percussion, guitar, string, piano, mixed ensembles, etc.), Saxophone Quartet, Collegium Musicum, and more.

Students in the Jazz Studies major must select eight semesters of a jazz or jazz-related ensemble. This includes Jazz Choir, Jazz Orchestra, Jazz Combo or other jazz -related ensemble of varied sizes and instrumentation.

Ensemble offerings may vary each semester; check the class schedule for the latest ensemble availability. Ensemble participation should be made in consultation with the appropriate Area Director/s, Applied Instructors, and Program Advisors.

Other ensembles are offered for credit, such as and including Athletic Bands. Some ensembles are also open to non-music majors with enrollment based on an audition and instrumentation needs.

All of these ensembles are led by and/or coached by a DSoM faculty member.

Students should be aware of the necessity for ensemble diversity, and are encouraged to participate in as many different ensembles as their schedules and advisors will allow.

Applied Lesson Continuance Policy

If a student fails two semesters of applied lessons, he or she will be required to re-audition for applied lesson placement and may be advised to choose another degree program that does not require applied lessons. If a student has five or more unexcused absences in one semester, he or she will fail applied music for that semester. An audition is required to re-enter applied music after an absence of two consecutive semesters or more.

Jury Examinations

Applied music students taking hour lessons at the MUSA 141, MUSA 151, MUSA 161 level or higher must play a jury examination each semester. Failure to perform a required jury will result in a final applied grade of F. The jury grade counts as 50% of the final applied grade. The remaining 50% is based on progress in lessons and is determined by the student's teacher. Students auditing Applied Music take juries in the first semester in which they are enrolled for credit. Audit status is normally allowed for one semester only and is granted on the auditioning committee's recommendation that the student will likely be ready for credit study after one semester of audit study. A student with audit status will audition for credit study during the jury examination period at the close of the audit semester.

Accompanying

All keyboard students are expected to accompany at least once a semester on a General Student Recital, Performance Session, or Applied Music Jury Examination after they have attained the Applied Music numbering of 241 and above or 251 and above, and after they have studied keyboard at Old Dominion University for a minimum of one semester.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly

encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
Small or Large Ensemble		1
MUSC 101	Beginning Piano Class	1
MUSA 161	Hour Lesson - SRT Major	2
MUSC 150	Freshman Seminar for Music Students	1
MUSC 160	Music and Ideas	1
MUSC 221	Music Theory 1 (C or better required)	2
MUSC 223	Aural Skills 1 (C or better required)	1
MUSC 335T	Music Technology Survey (Satisfies Impact of Technology)	3
ENGL 110C	English Composition (C or better required)	3
MUSC 311+	Recital Attendance	0
Credit Hours		15
Spring		
Small or Large Ensemble		1
MUSC 102	Beginning Piano Class	1
MUSA 162	Hour Lesson - SRT Major	2
MUSC 222	Music Theory 2 (C or better required)	2
MUSC 224	Aural Skills 2 (C or better required)	1
MUSC 266	Music in World Cultures	1
MUSC 113	Live Audio Engineering	3
Mathematics		3
MUSC 311+	Recital Attendance	0
Credit Hours		14
Sophomore		
Fall		
Small or Large Ensemble		1
MUSA 261	Hour Lesson - SRT Major	2
MUSC 321	Music Theory 3 (C or better required)	2
MUSC 323	Aural Skills 3 (C or better required)	1
MUSC 315	Digital Audio Workstation Essentials	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MUSC 361	History of Western Art Music from Ancient through Baroque (C- or better required)	3
Interpreting the Past		3
MUSC 311+	Recital Attendance	0
Credit Hours		18
Spring		
Small or Large Ensemble		1

MUSA 262	Hour Lesson - SRT Major	2
Music Theory Electives - Choose from the following (C- or better required):		2-3
MUSC 316 or MUSC 322 or MUSC 324 or MUSC 337 or MUSC 421 or MUSC 422 or MUSC 424 or MUSC 425 or MUSC 440		
MUSC 362W	History of Western Art Music from Classical through Modern (C or better required)	3
MUSC 320	Studio Recording Principles	3
Literature		3
Oral Communication		3
MUSC 311+	Recital Attendance	0
Credit Hours		17-18
Junior		
Fall		
Small or Large Ensemble		1
MUSA 361	Hour Lesson - SRT Major	2
MUSC 415	The Art and Craft of Mixing	3
MUSC 309	Principles of Conducting	1
MUSC 355	Music Production I	3
Sound Recording Technology Elective 1		3
Nature of Science I		4
MUSC 311+	Recital Attendance	0
Credit Hours		17
Spring		
Small or Large Ensemble		1
MUSA 362	Hour Lesson - SRT Major	2
MUSC 435	Music Production II	3
Music History Elective		3
Human Creativity (May not use MUSC 264A or MUSC 126A)		3
Nature of Science II		4
MUSC 311+	Recital Attendance	0
Credit Hours		16
Senior		
Fall		
Small or Large Ensemble		1
MUSA 461	Hour Lesson - SRT Major	2
MUSC 333	Music Business and Entrepreneurship	3
Human Behavior		3
Information Literacy and Research		3
Philosophy & Ethics		3
Credit Hours		15
Spring		
MUSC 368	Music Industry Internship	3
Sound Recording Technology Elective 2		3
Upper-Division General Education course (Option D)		3
Upper-Division General Education course (Option D)		3
Credit Hours		12
Total Credit Hours		124-125

**Language and Culture requirement (0-6 credits) is not included in this four-year plan. Please see requirement details.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Music Production Minor Requirements

For a minor in music production, the student must complete 12 hours at the 300/400 level. Prerequisites for the minor (not included in the grade point average) are MUSC 335T (for the entire minor) and MUSC 221 (for MUSC 316 and MUSC 440 only). Requirements for the minor are:

MUSC 461	History of Recorded Music	3
Select three of the following:		9
MUSC 315	Digital Audio Workstation Essentials	
MUSC 316	Popular Songwriting Techniques	
MUSC 333	Music Business and Entrepreneurship	
MUSC 340	Synthesis and Sound Design Techniques for Music Production	
MUSC 352	Critical Listening in Audio Production	
MUSC 355	Music Production I	

Total Credit Hours**12**

All music minors are required to enroll in and pass MUSC 311+, the zero credit Recital Attendance class, for a total of four semesters in order to be eligible for graduation. Should their graduation be projected in under four semesters, music minors may receive accelerated credit by doubling attendance totals in any given semester. Refer to the MUSC 311+ syllabus and Music Student Handbook (<https://www.odu.edu/music/students/undergraduate/handbook/section-three/>) for complete information.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

History

Web Site: <http://www.odu.edu/historydept> (<http://www.odu.edu/historydept/>)

Ingo Heidbrink, Chair

The study of history is central to a liberal arts education, and provides students with the insights and analytical skills useful to understanding our contemporary world. The history major at Old Dominion University prepares students for careers in government service, law, international trade, education, journalism, and other areas. History majors from ODU have gone on to the PhD in history as well as related fields in the humanities and social sciences. Many of our history majors have become exceptional teachers.

Programs

Bachelor of Arts Programs

- History (BA) (p. 237)
- History with a Major in Secondary History/Social Sciences Education (6-12) (BA) (p. 240)

Minor Program

- History Minor (p. 244)

Linked Bachelor of Arts and Master of Arts–History

Students with exceptional academic skills can enter this program and count up to 12 credit hours of graduate history courses toward both an undergraduate and graduate degree. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

To be admitted to the program, students must be a declared major in history, have completed a minimum of 60 undergraduate credit hours, including at least nine hours in history courses at the 300-level or above, and have a GPA of 3.30 or better overall and in history.

Admission Procedures

Students who meet the admission requirements should consult with the graduate program director to discuss their eligibility and to plan graduate courses to be taken as an undergraduate. During their senior year, students must file an application to the program in history with the Office of Admissions. This application includes an Old Dominion University graduate application, a 500-word personal statement, at least two letters of recommendation, and a writing sample of 10+ pages using primary and secondary sources. Graduate admission deadlines apply.

Once students have been awarded their BA degree and fulfilled all regular admission requirements for the MA in history, they will be officially admitted into the MA program.

Requirements for the Linked BA/MA Program

Students in the program will fulfill all regular admission and curricular requirements for both the BA and MA in history, with the following exceptions:

1. Upon completing 90 hours of undergraduate work and attaining senior status, admitted students may take up to 12 hours of graduate courses as an undergraduate, provided that those courses fulfill curricular requirements for both the BA and MA degrees in history.
2. Students will need to complete the following major requirements for the BA:

HIST 100-level elective: *	3
HIST 201 Introduction to Historical Methods **	3
HIST 402W Senior Seminar in History	3
HIST 300 and 400-level classes ***	21
Field One: United States History	
Field Two: European History	
Field Three: Area Studies (Asia, Latin America, Middle East, Russia, Africa)	
Field Four: Comparative History	
Total Credit Hours	30

- * Only HIST courses fulfill history course requirements for the major and the Interpreting the Past requirement for the General Education requirement.
- ** Meets information literacy and research requirement.
- *** A minimum of one class from three of the four fields listed, one of which must be 400-level

Up to 12 credits of graduate-level course work taken as an undergraduate during the senior year can substitute for 300- and 400-level requirements above and will be counted toward the BA degree in history. The following guidelines apply:

A. Any 500-level course that is cross listed with a 400-level course may be substituted for the 400-level course; however, the student cannot take a 500-level course which has already been taken at the 400 level. Only nine credits of 500-level course work will count toward the MA degree.

B. The following courses can be taken to fulfill the 300-400 level American elective requirement:

HIST 602	Readings in Early American History	3
HIST 607	A People's Contest: Civil War and Reconstruction	3
HIST 609	Melting Pot? Readings in Immigration History	3
HIST 610	Edible History: Food and Drink in the U.S. and Global History	3
HIST 611	The Military in America	3
HIST 617	The Long Civil Rights Movement	3
HIST 619	United States Labor and Working Class History	3
HIST 622	The Atlantic Slave Trade	3
HIST 621	The Atlantic World and Early America	3
HIST 683	History of the Global 1960s	3

C. The following courses can be taken to fulfill the 300-400 level European elective requirement:

HIST 636	The British Empire	3
HIST 641	Individual & Society in Ancient Greece	3
HIST 643	Religion, Culture, and Empire in Greco-Roman Palestine	3
HIST 646	Studies in Russian History	3

HIST 648	France and the Sea	3
HIST 655	Early Modern Europe: Religion, Reform, and Violence	3
HIST 657	Old Regime and French Revolution	3
HIST 662	North Atlantic Resources	3
HIST 674	Holocaust History and Memory	3

D. The following course can be taken to fulfill the 300-400 level elective requirement in African, Asian, Latin American, Middle Eastern, or Russian history:

HIST 628	History of the U.S. Mexico Borderlands	3

3. All graduate courses taken as an undergraduate that are completed with a grade of B (3.0) or better will also count toward the 30-credit MA degree in history.

Students should consult the Graduate Catalog for information and requirements for the MA in history.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts History (BA)

Robert Del Corso, Chief Departmental Advisor rdelcors@odu.edu

The Department of History offers a Bachelor of Arts degree that prepares students broadly for modern careers in business, government, and teaching, or for graduate study in history, law, library science, business, or education. The major requires 36 hours of course work. At least 12 hours of History at the 300 and 400 levels must be taken in courses offered by Old Dominion University.

Specialization options include Race, Gender, and Religion; War, Revolution, and Society; Mobilities and Migrations; History of Science and Technology; and Maritime History.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Language and Culture: Proficiency through 202 level: proficiency is not met by completion of an associate degree.

Lower-division information literacy and research general education requirement is satisfied in the major by HIST 201.

Only a HIST course fulfills the lower-division interpreting the past general education requirement.

Impact of Technology: HIST 304T, HIST 386T, HIST 388T, or HIST 389T

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

History Major

General Education

Complete lower-division requirements ¹	35-44
Complete upper-division requirements (minimum of 6 credit hours)	6
Complete foreign language coursework through the 202 level	0-6

History

HIST 201	Introduction to Historical Methods ²	3
HIST 402W	Senior Seminar in History ³	3
Applied History requirement		3
HIST 368	Internship	
HIST 481	Museums and Museology	
HIST 483	Oral History	
HIST 300 and 400-level classes ⁴		24
Field One: United States History (at least 2 classes)		
Field Two: Pre-1800 History (at least 2 classes)		
Field Three: Post-1800 World History (at least 2 classes)		

Total Credit Hours	74-89

- 1 Only a HIST course fulfills the lower-division interpreting the past general education requirement.
- 2 Fulfills the lower-division information literacy and research general education requirement.
- 3 Grade of C or better required.
- 4 At least one elective must be at the 400-level. If an optional specialization is selected, four of the eight electives must be chosen from a single specialization. Specialization options include Race, Gender, and Religion; War, Revolution, and Society; Mobilities and Migrations; History of Science and Technology; and Maritime History.

Elective Credit

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

Advanced Placement

Advanced placement credit is awarded to students who earn qualifying scores on AP and IB subject examinations. See the equivalency charts on the Office of Undergraduate Admissions website at <https://www.odu.edu/admission/undergraduate/credit> (<https://www.odu.edu/admission/undergraduate/credit>). Students may also earn advanced placement credit with a qualifying score on the CLEP exam. Consult the Testing Center for further information on advanced placement.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity		3
Interpreting the Past (must be an HIST course)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
Credit Hours		15
Spring		
Oral Communication		3
Literature		3
Human Behavior		3
Elective or Language and Culture II (May be waived; See requirement details)		3
HIST 300/400-level elective		3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Philosophy and Ethics		3
HIST 201	Introduction to Historical Methods (fulfills the lower-division literacy and research general education requirement)	3
Credit Hours		16
Spring		
Impact of Technology (May be met with a T course in the major)		3
Nature of Science II		4
Language and Culture IV		3
HIST 300/400-level elective		3
HIST 300/400-level elective		3
Credit Hours		16
Junior		
Fall		
HIST 300/400-level elective		3
HIST 300/400-level elective		3
Elective course		3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
HIST 300/400-level elective		3
HIST 300/400-level elective		3
Applied history course or internship		3
Elective course		3

Upper-Division General Education Course or Minor	3
Credit Hours	15
Senior	
Fall	
HIST 402W	Senior Seminar in History (Grade of C or better required) 3
Elective course	3
HIST 300/400-level elective	3
Elective course	3
Minor or Elective	3
Credit Hours	15
Spring	
Elective course	3
Elective course	3
Elective course	3
Elective course	1
Minor or Elective	3
Credit Hours	13
Total Credit Hours	120

Linked Bachelor of Arts and Master of Arts–History

Students with exceptional academic skills can enter this program and count up to 12 credit hours of graduate history courses toward both an undergraduate and graduate degree. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

To be admitted to the program, students must be a declared major in history, have completed a minimum of 60 undergraduate credit hours, including at least nine hours in history courses at the 300-level or above, and have a GPA of 3.30 or better overall and in history.

Admission Procedures

Students who meet the admission requirements should consult with the graduate program director to discuss their eligibility and to plan graduate courses to be taken as an undergraduate. During their senior year, students must file an application to the program in history with the Office of Admissions. This application includes an Old Dominion University graduate application, a 500-word personal statement, at least two letters of recommendation, and a writing sample of 10+ pages using primary and secondary sources. Graduate admission deadlines apply.

Once students have been awarded their BA degree and fulfilled all regular admission requirements for the MA in history, they will be officially admitted into the MA program.

Requirements for the Linked BA/MA Program

Students in the program will fulfill all regular admission and curricular requirements for both the BA and MA in history, with the following exceptions:

1. Upon completing 90 hours of undergraduate work and attaining senior status, admitted students may take up to 12 hours of graduate courses as an undergraduate, provided that those courses fulfill curricular requirements for both the BA and MA degrees in history.
2. Students will need to complete the following major requirements for the BA:

HIST 100-level elective: *	3
HIST 201	Introduction to Historical Methods ** 3

HIST 402W	Senior Seminar in History	3
HIST 300 and 400-level classes ***		21
Field One: United States History		
Field Two: European History		
Field Three: Area Studies (Asia, Latin America, Middle East, Russia, Africa)		
Field Four: Comparative History		
Total Credit Hours		30

* Only HIST courses fulfill history course requirements for the major and the Interpreting the Past requirement for the General Education requirement.

** Meets information literacy and research requirement.

*** A minimum of one class from three of the four fields listed, one of which must be 400-level

Up to 12 credits of graduate-level course work taken as an undergraduate during the senior year can substitute for 300- and 400-level requirements above and will be counted toward the BA degree in history. The following guidelines apply:

A. Any 500-level course that is cross listed with a 400-level course may be substituted for the 400-level course; however, the student cannot take a 500-level course which has already been taken at the 400 level. Only nine credits of 500-level course work will count toward the MA degree.

B. The following courses can be taken to fulfill the 300-400 level American elective requirement:

HIST 602	Readings in Early American History	3
HIST 607	A People's Contest: Civil War and Reconstruction	3
HIST 609	Melting Pot? Readings in Immigration History	3
HIST 610	Edible History: Food and Drink in the U.S. and Global History	3
HIST 611	The Military in America	3
HIST 617	The Long Civil Rights Movement	3
HIST 619	United States Labor and Working Class History	3
HIST 622	The Atlantic Slave Trade	3
HIST 621	The Atlantic World and Early America	3
HIST 683	History of the Global 1960s	3

C. The following courses can be taken to fulfill the 300-400 level European elective requirement:

HIST 636	The British Empire	3
HIST 641	Individual & Society in Ancient Greece	3
HIST 643	Religion, Culture, and Empire in Greco-Roman Palestine	3
HIST 646	Studies in Russian History	3
HIST 648	France and the Sea	3
HIST 655	Early Modern Europe: Religion, Reform, and Violence	3
HIST 657	Old Regime and French Revolution	3
HIST 662	North Atlantic Resources	3
HIST 674	Holocaust History and Memory	3

D. The following course can be taken to fulfill the 300-400 level elective requirement in African, Asian, Latin American, Middle Eastern, or Russian history:

HIST 628	History of the U.S. Mexico Borderlands	3

3. All graduate courses taken as an undergraduate that are completed with a grade of B (3.0) or better will also count toward the 30-credit MA degree in history.

Students should consult the Graduate Catalog for information and requirements for the MA in history.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts History with a Major in Secondary History/Social Sciences Education (6-12) (BA)

The Colleges of Arts and Letters and the Darden College of Education and Professional Studies cooperate in providing a Bachelor of Arts degree that licenses recipients to teach on the secondary level in the Commonwealth of Virginia. Most other states honor this license. Students must achieve passing scores on the Virginia Board of Education prescribed assessments as a prerequisite for entry into the professional education core. They must also pass the Praxis Subject Assessment, social studies content knowledge (formerly Praxis II) in order to be admitted to TLED 485 (Teacher Candidate Internship) and to be licensed. For information on these standardized tests, students should consult with their education advisor. To gain admission to this program, students must have a cumulative grade point average of 2.75

and maintain this average to graduate. Students must also have and maintain a major/content grade point average of 2.75 with grades of C- or higher in all history/social sciences courses and a professional education grade point average of 2.75 with all grades C- or higher in all education courses. The history/social sciences content consists of history, political science, geography, and economics. An optional specialization may be completed using students' History electives; these specializations include Race, Gender, and Religion; War, Revolution, and Society; Mobilities and Migrations; History of Science and Technology; and Maritime History.

Entering students must declare their intention to take their degree in History with a major in secondary history/social sciences education (6-12) in the History Department, whereupon they will be assigned an advisor. Another advisor will be assigned in the Darden College of Education and Professional Studies. It is the responsibility of the student to see both advisors regularly.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Language and Culture: Proficiency through 202 level; proficiency is not met by completion of an associate degree.

Lower-division information literacy and research general education requirement is satisfied in the major by HIST 201.

Only a HIST course fulfills the lower-division interpreting the past general education requirement.

Literature: WCS 100L recommended

Philosophy and Ethics: PHIL 250E recommended

Impact of Technology requirement satisfied by TLED 430W.

Human Behavior: ECON 200S is recommended; however, ECON 201S together with ECON 202S are acceptable.

Upper-Division General Education

Students in the secondary history/social sciences education (6-12) program satisfy the Upper-Division General Education requirement through their professional education courses.

Requirements for Graduation

Requirements for graduation include completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better; completion of the Senior Assessment; a minimum cumulative 2.75 GPA in the major area and in the professional education core with no grade less than a C- in the major/content and the professional education core; successful completion of the Teacher Candidate Internship, and a minimum of 122 credit hours, which must include both a minimum of 31 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the teacher education programs in the College of Arts and Letters are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information from their advisors and from the Office of Clinical Experiences website at www.odu.edu/oce (<http://www.odu.edu/oce/>).

Secondary History/Social Sciences Education (6-12) Major

General Education

Complete lower-division requirements	35-44

Complete upper-division requirements (met in the major through professional education coursework)

Complete foreign language coursework through the 202 level	0-6

Secondary History/Social Sciences Education (6-12)

SOC 201S	Introduction to Sociology	3
HIST 102H	Interpreting the European Past ¹	3
HIST 104H	Interpreting the American Past	3
HIST 201	Introduction to Historical Methods ²	3
HIST 356	Virginia History	3
HIST 402W	Senior Seminar in History ³	3
HIST 300 and 400-level classes ⁴		15

Field One: United States History (at least 1 class)

Field Two: Pre-1800 History (at least 1 class)

Field Three: Post-1800 World History (at least 1 class)

History and Social Sciences License Requirements

Geography courses

GEOG 100S	Human Geography	3
GEOG 300	Maps and Geographic Information	3
GEOG 305	World Resources	3
or GEOG 320	Political Geography	

Political Science courses

POLS 101S	Introduction to American Politics	3
POLS 331	State and Local Government	3
or POLS 334	Electoral Politics	
or POLS 434	Political Behavior and Public Opinion in the United States	

Select one of the following:	3

POLS 309	Race, Culture and Public Policy
POLS 310	Political Theory
POLS 312	American Political Thought
POLS 314	European Politics
POLS 316	Politics of Africa
POLS 323	International Political Economy

POLS 328	Russian Politics
POLS 337	Latin American Politics
POLS 338W	Politics of East Asia
POLS 350T	Technology and War
POLS 400	Congress
POLS 407	American Presidency
POLS 409	American Constitutional Law: Powers of Government
POLS 410	African American Politics
POLS 415	Women and Politics in America

Professional Education Core

TLED 301	Foundations and Introduction to Assessment of Education	3
TLED 360	Classroom Management and Discipline	2
TLED 408	Reading and Writing in Content Areas	3
TLED 430W	PK-12 Instructional Technology ⁵	3
TLED 455	Developing Instructional Strategies for Teaching in the Middle/High School: Social Studies	3
TLED 483	Seminar in Teacher Education	1
TLED 485	Teacher Candidate Internship	12
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3

Total Credit Hours	119-134

- 1 HIST 102H fulfills the lower-division interpreting the past general education requirement.
- 2 Fulfills the lower-division information literacy and research general education requirement.
- 3 Grade of C or better required.
- 4 At least one elective must be at the 400-level. If an optional specialization is selected, four of the five electives must be chosen from a single specialization. Specialization options include Race, Gender, and Religion; War, Revolution, and Society; Mobilities and Migrations; History of Science and Technology; and Maritime History.
- 5 Fulfills the impact of technology general education requirement.

Additional Requirements and Information

Admission

All students must apply for and be admitted into the approved secondary history/social sciences education (6-12) major. Students must meet the required criteria for admission by earning the minimum required grade point averages (GPA).

Prescribed Virginia Board of Education Assessment for Admission to an Approved Teacher Education Program

For the most current information on the prescribed Virginia Board of Education admission assessment, visit the Office of Clinical Experiences website, <http://www.odu.edu/oce> (<http://www.odu.edu/oce/>) and review the *Professional Education Handbook*.

Required grade point averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required – all history and social science courses must be passed with a grade of C- or higher.
- A professional education GPA of 2.75 is required – all professional education courses must be passed with a grade of C- or higher.

Although students may enroll in a limited number of education courses, students must be admitted into the approved secondary history/social sciences education (6-12) major prior to enrolling in any instructional

strategies practicum education course. Students must also meet with an education advisor in the Office of Clinical Experiences.

Continuance

Students must maintain a cumulative GPA of 2.75, a major/content GPA of 2.75 and a professional education GPA of 2.75. History and social science courses must be passed with a grade of C- or higher. The remaining courses required for the major and in the professional education core must be completed with a grade of C- or higher for continuance. A professional education GPA of 2.75 is required for continuance. Students must take and pass the Praxis Subject Assessment, social studies content knowledge (formerly Praxis II) prior to or while enrolled in the instructional strategies course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <http://www.odu.edu/success/academic/teacher-education/placement/background-checks> (<http://www.odu.edu/success/academic/teacher-education/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Virginia Board of Education Prescribed Assessments for Licensure

- Praxis Subject Assessment, social studies content knowledge (test code 5081) – passing score of 161 required.

To review more information on the Virginia Board of Education prescribed assessments, visit the Office of Clinical Experiences website, www.odu.edu/oce (<http://www.odu.edu/oce/>).

Advanced Placement

Advanced placement credit is awarded to students who earn qualifying scores on AP and IB subject examinations. See the equivalency charts on the Office of Undergraduate Admissions website at <https://www.odu.edu/admission/undergraduate/credit> (<https://www.odu.edu/admission/undergraduate/credit/>). Students may also earn advanced placement credit with a qualifying score on the CLEP exam. Consult the Testing Center for further information on advanced placement.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Oral Communication		3
Language and Culture I (May be waived; See requirement details)		0-3
HIST 102H	Interpreting the European Past	3
Credit Hours		12-15

Spring		
Human Creativity		3
Literature (WCS 100L recommended)		3
Human Behavior (ECON 200S is recommended; however, ECON 201S together with ECON 202S are acceptable)		3
Language and Culture II (May be waived; See requirement details)		0-3
HIST 104H	Interpreting the American Past	3

Credit Hours		12-15

Sophomore

Fall

ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
SOC 201S	Introduction to Sociology	3
HIST 201	Introduction to Historical Methods (fulfills the lower-division literacy and research general education requirement)	3

Credit Hours		16

Spring

Philosophy and Ethics (PHIL 250E recommended)		3
Nature of Science II		4
Language and Culture IV		3
HIST 300/400-level elective		3
TLED 301	Foundations and Introduction to Assessment of Education	3

Credit Hours		16

Junior

Fall

HIST 356	Virginia History	3
HIST 300/400-level elective		3
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
GEOG 100S	Human Geography	3
POLS 101S	Introduction to American Politics	3
TLED 430W	PK-12 Instructional Technology (satisfies Impact of Technology)	3

Credit Hours		18

Spring

HIST 300/400-level elective		3
HIST 300/400-level elective		3
HIST 300/400-level elective		3
TLED 408	Reading and Writing in Content Areas	3
GEOG 300	Maps and Geographic Information	3
POLS 331 or POLS 334 or POLS 434		3

Credit Hours		18

Senior		
Fall		
HIST 402W	Senior Seminar in History (Grade of C or better required)	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
TLED 360	Classroom Management and Discipline	2
TLED 455	Developing Instructional Strategies for Teaching in the Middle/High School: Social Studies	3
TLED 483	Seminar in Teacher Education	1
GEOG 305 or GEOG 320		3
POLS-300/400-level elective		3
Credit Hours		18
Spring		
TLED 485	Teacher Candidate Internship	12
Credit Hours		12
Total Credit Hours		122-128

Linked Bachelor of Arts and Master of Arts–History

Students with exceptional academic skills can enter this program and count up to 12 credit hours of graduate history courses toward both an undergraduate and graduate degree. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

To be admitted to the program, students must be a declared major in history, have completed a minimum of 60 undergraduate credit hours, including at least nine hours in history courses at the 300-level or above, and have a GPA of 3.30 or better overall and in history.

Admission Procedures

Students who meet the admission requirements should consult with the graduate program director to discuss their eligibility and to plan graduate courses to be taken as an undergraduate. During their senior year, students must file an application to the program in history with the Office of Admissions. This application includes an Old Dominion University graduate application, a 500-word personal statement, at least two letters of recommendation, and a writing sample of 10+ pages using primary and secondary sources. Graduate admission deadlines apply.

Once students have been awarded their BA degree and fulfilled all regular admission requirements for the MA in history, they will be officially admitted into the MA program.

Requirements for the Linked BA/MA Program

Students in the program will fulfill all regular admission and curricular requirements for both the BA and MA in history, with the following exceptions:

1. Upon completing 90 hours of undergraduate work and attaining senior status, admitted students may take up to 12 hours of graduate courses as an undergraduate, provided that those courses fulfill curricular requirements for both the BA and MA degrees in history.
2. Students will need to complete the following major requirements for the BA:

HIST 100-level elective: *		3
HIST 201	Introduction to Historical Methods **	3
HIST 402W	Senior Seminar in History	3

HIST 300 and 400-level classes ***	21
Field One: United States History	
Field Two: European History	
Field Three: Area Studies (Asia, Latin America, Middle East, Russia, Africa)	
Field Four: Comparative History	
Total Credit Hours	30

- * Only HIST courses fulfill history course requirements for the major and the Interpreting the Past requirement for the General Education requirement.
- ** Meets information literacy and research requirement.
- *** A minimum of one class from three of the four fields listed, one of which must be 400-level

Up to 12 credits of graduate-level course work taken as an undergraduate during the senior year can substitute for 300- and 400-level requirements above and will be counted toward the BA degree in history. The following guidelines apply:

A. Any 500-level course that is cross listed with a 400-level course may be substituted for the 400-level course; however, the student cannot take a 500-level course which has already been taken at the 400 level. Only nine credits of 500-level course work will count toward the MA degree.

B. The following courses can be taken to fulfill the 300-400 level American elective requirement:

HIST 602	Readings in Early American History	3
HIST 607	A People's Contest: Civil War and Reconstruction	3
HIST 609	Melting Pot? Readings in Immigration History	3
HIST 610	Edible History: Food and Drink in the U.S. and Global History	3
HIST 611	The Military in America	3
HIST 617	The Long Civil Rights Movement	3
HIST 619	United States Labor and Working Class History	3
HIST 622	The Atlantic Slave Trade	3
HIST 621	The Atlantic World and Early America	3
HIST 683	History of the Global 1960s	3

C. The following courses can be taken to fulfill the 300-400 level European elective requirement:

HIST 636	The British Empire	3
HIST 641	Individual & Society in Ancient Greece	3
HIST 643	Religion, Culture, and Empire in Greco-Roman Palestine	3
HIST 646	Studies in Russian History	3
HIST 648	France and the Sea	3
HIST 655	Early Modern Europe: Religion, Reform, and Violence	3
HIST 657	Old Regime and French Revolution	3
HIST 662	North Atlantic Resources	3
HIST 674	Holocaust History and Memory	3

D. The following course can be taken to fulfill the 300-400 level elective requirement in African, Asian, Latin American, Middle Eastern, or Russian history:

HIST 628	History of the U.S. Mexico Borderlands	3

3. All graduate courses taken as an undergraduate that are completed with a grade of B (3.0) or better will also count toward the 30-credit MA degree in history.

Students should consult the Graduate Catalog for information and requirements for the MA in history.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor History Minor

The History minor requires an H-course (3 credit hours) and 12 hours of 300/400-level HIST electives, at least 6 of which must be taken at ODU. Only HIST courses fulfill these requirements. At least six hours of upper-level courses must be taken through courses offered by Old Dominion University.

Specialization options include Race, Gender, and Religion; War, Revolution, and Society; Mobilities and Migrations; History of Science and Technology; and Maritime History.

For completion of a minor a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses.

Humanities

Dr. Anne H. Muraoka, Director, Institute for the Humanities
757-683-3821 main office

Visit our website: www.odu.edu/humanities (<https://www.odu.edu/humanities/>)

The Master of Arts in Humanities program fosters cross-disciplinary learning and interdisciplinary research outcomes with a primary focus on humanistic methodologies. Our goal is to prepare students to engage global concerns in the arts, culture, equity, and historic narratives at a local, national, or international level. The program seeks to provide students with these skills through an interdisciplinary core curriculum that culminates with the development of a thesis or capstone project. Students collaborate with the Program Director to create an appropriate, rigorous program of study. In alignment with the mission of the college and university, the program aims to develop students' skills in critical thinking, effective communication, and creative problem solving. Students will become engaged citizens and stewards of the value of the human experience to transform the world and improve their own lived experiences.

High-performing undergraduates in the College of Arts and Letters may take graduate courses while completing their undergraduate degree through the Linked BA/BS-MA Humanities Program. To learn more about our program, visit our catalog (<http://catalog.odu.edu/graduate/arts-letters/humanities/>) section.

Linked BA/BS-MA Program

Linked Master of Arts in Humanities – Art History, Communication, Fine Arts, Geography, Interdisciplinary Studies, Philosophy and Religious Studies, Visual Studies, Women's and Gender Studies, and World Languages and Cultures.

The linked degree programs make it possible for exceptional majors in the areas of Art History, Communication, Fine Arts, Geography, Interdisciplinary Studies, Philosophy and Religious Studies, Visual Studies, Women's and Gender Studies, and World Languages and Cultures to take up to 12 credit hours of graduate courses while completing their undergraduate degree and to gain a head start on a graduate degree. Students interested in pursuing the linked program should carefully plan their undergraduate course of study considering the requirements of the program.

Admission Requirements

To be admitted to the linked BA/BS-MA program, students must declare a major in the area of Art History, Communication, Fine Arts, Geography, Interdisciplinary Studies, Philosophy and Religious Studies, Visual Studies, Women's and Gender Studies, or World Languages and Cultures and complete a minimum of at least 60 undergraduate credit hours, including at least six hours of 300/400 level courses in the major. At the time of admission to the linked program, students must have an overall undergraduate GPA of 3.25 or better or with permission granted by the Graduate Program Director to be in the program.

Admission Procedure

Interested students who meet the admission requirements should apply to the Humanities Graduate Program Director as soon as possible after completing the required 60 undergraduate hours. In consultation with the undergraduate advisor for their department and the Humanities Graduate Program Director, students will:

1. Draft a schedule of graduate courses to be taken as an undergraduate, which will be placed in the student's undergraduate and graduate advising files.
2. Submit an Old Dominion University graduate application, a 500-word personal statement, a sample critical/analytical essay or research paper, and two letters of recommendation.
3. Submit an application form found here (https://itsapps.odu.edu/forms_admin/viewform.php?formid=19479).

Students will be officially admitted into the MA in Humanities program once they have been awarded their bachelor's degree and have fulfilled all regular admission requirements for the MA in Humanities. (Please refer to the appropriate section of this catalog for information on the requirements for the bachelor's degree in the areas of Art History, Communication, Fine Arts, Geography, Interdisciplinary Studies, Philosophy and Religious Studies, Visual Studies, Women's and Gender Studies, and World Languages and Cultures.)

Bridge Courses

Students admitted to the linked program may count 12 hours of bridge courses (graduate courses taken as an undergraduate) for which they have earned a grade of B (3.0) or better toward both the specific BA or BS and the MA in Humanities. These courses may be 500 or 600 level courses within or cross-listed with the discipline or approved graduate courses. Any 500-level course that is cross listed with a 400-level course may be substituted for the 400 level-course. However, students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). In addition, all students must complete an undergraduate writing intensive course in the major. Students who complete fewer than 12 bridge course credits may fulfill Humanities program requirements by taking courses during summer sessions and/or an additional semester; however, all students are required to fulfill a minimum of six bridge course credits to be eligible to continue in the linked program.

The MA in Humanities

Students in the linked program will fulfill all normal admission and curricular requirements for both a BA or BS in their discipline and an MA in Humanities, with the following exceptions, conditions, and requirements.

1. In addition, all students, regardless of their concentration, are required to take:

HUM 601	Introduction to the Humanities	3
HUM 602	Critical Methods in Humanities	3
HUM 603	Strategic Professional Development Pro-Seminar	3
HUM 704	Technology and the Humanities	3
HUM 698	Capstone Project and Thesis Preparation Seminar	3
2. All students must either complete a thesis (HUM 699) or capstone project (HUM 693) as their culminating work toward the MA degree.
3. No more than 12 hours of graduate credit at the 500-level may be applied to the MA in Humanities.
4. Students will not be permitted to take any 500-level course that they have already taken at the undergraduate 400 level.
5. Upon completion of 36 graduate credits *including* a thesis or capstone project, students will be awarded the MA in Humanities.
6. For additional information on the MA in Humanities and the thesis and capstone project options required to graduate, please refer to the Graduate Catalog (<http://catalog.odu.edu/graduate/>).

Interdisciplinary Studies

Virginia Tucker Steffen, Director of Interdisciplinary Programs and Program Coordinator and Advisor, Individualized Integrative Studies and Professional Writing

Michele Mitchell, Chief Departmental Advisor and Assistant Director

Phil Mann, Program Coordinator and Advisor, Cybercrime

Kevin Moberly, Advisor, Game Studies and Design, Director of Monarch Institute of Game Development & Design

Karen Sanzo, Program Coordinator, Leadership

Richard Ungo, Faculty Advisor, Supply Chain and Maritime Logistics

Hans-Peter Plag, Program Coordinator, Sustainability and Conservation Leadership Interdisciplinary Minor

Interdisciplinary Studies (IDS) coordinates the administration and delivery of the following degree programs: the Bachelor of Arts in interdisciplinary studies with a major in individualized Integrative studies and the Bachelor

of Science in interdisciplinary studies with majors in professional writing, cybercrime, game studies and design, general studies, leadership, and supply chain and maritime logistics. For IDS students, no more than two classes, or six credits, may be counted for both the major and a minor. Topics courses, such as ENGL 395/ENGL 495, COMM 395/COMM 396, etc., must be approved by the student's advisor to ensure that the topic is appropriate for the major.

Programs

Bachelor of Arts Program

- Interdisciplinary Studies with a Major in Individualized Integrative Studies (BA) (p. 254)

Bachelor of Science Programs

- Interdisciplinary Studies with a Major in Cybercrime (BS) (p. 246)
- Interdisciplinary Studies with a Major in Game Studies and Design-Design and Criticism (BS) (p. 249)
- Interdisciplinary Studies with a Major in Game Studies and Design-Development and Criticism (BS) (p. 251)
- Interdisciplinary Studies with a Major in General Studies (BS) (p. 253)
- Interdisciplinary Studies with a Major in Leadership (BS) (p. 256)
- Interdisciplinary Studies with a Major in Professional Writing (BS) (p. 259)
- Interdisciplinary Studies with a Major in Supply Chain and Maritime Logistics (BS) (p. 261)

Minor Programs

- Cybercrime Minor (p. 248)
- Sustainability and Conservation Leadership Minor (p. 263)

Linked BA in Interdisciplinary Studies - Individualized Integrative Studies and MA in Humanities

The linked BA program in interdisciplinary studies-individualized integrative studies (IIS) and the MA in humanities makes it possible for exceptional students whose IIS major is humanities oriented to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Please refer to the Humanities section of this Catalog for additional information on the linked program.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Interdisciplinary Studies with a Major in Cybercrime (BS)

Philip Mann, Program Coordinator and Faculty Advisor (pmann@odu.edu)

This major explores cybercrime from an interdisciplinary perspective that merges the disciplines of criminal justice, computer science, and information technology. Students will receive a foundational understanding of crime and criminal justice and more in-depth understanding about cybersecurity, cyber law, and digital forensics. In addition, students will receive a basic introduction to information technology.

While many crimes have decreased over the past 25 years, the one group of crimes that has increased dramatically is cybercrimes. Careers responding to cybercrime have grown tremendously over the past decade. While many of these careers require in-depth understanding about computer engineering and computer science, many careers also require a broader orientation grounded in the social sciences. Across the country there are 350,000 current vacancies in cybersecurity-related careers. Roughly ten percent of those vacancies are in Virginia.

Cybersecurity experts across the world agree that academic programming should be interdisciplinary in nature. While many universities have difficulty developing interdisciplinary majors, the IDS degree at ODU provides a national model that can be used to develop a cybercrime major grounded in the social sciences. ODU's current cybersecurity and cyber operations majors fill the employment gap for technologically-driven careers. The cybercrime major will fill the employment gap in the area of policy- and legal-driven careers.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6

Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both written communication courses and in ENGL 110C before declaring major.

Mathematics: MATH 102M or MATH 103M with a C or better and MATH 162M are required. Further math may be necessary for upper-level electives.

Impact of Technology requirement is met in the major by
CYSE 200T/IT 200T

Human Behavior: CRJS 215S required

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Cybercrime Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6
MATH 162M	Precalculus I

Interdisciplinary Studies Core

IDS 300W	Interdisciplinary Theory and Concepts (grade of C or higher required) ***
IDS 493	IDS Electronic Portfolio Project ***

CRJS 368	Internship (Students may also enroll in CYSE 494 upon approval by the Director of the Center for Cybersecurity Education and Research.)	
or CYSE 368	Cybersecurity Internship	
Cybercrime Core ⁺		
CRJS 310	Cybercriminology: Foundations	3
CYSE/CRJS 406	Cyber Law	3
CYSE 407	Digital Forensics	3
CRJS 409	Crime and Computer Applications	3
or CYSE 409	Crime and Computer Applications	
Criminology Core ⁺		
CRJS 222	The Criminal Justice System	3
SOC 337	Social Research Methods	3
Select three from the following:		9
CRJS 319	Public and Private Security	
CRJS 320	Law and Social Control	
CRJS 323	Police in American Society	
CRJS 340	White-Collar Crime	
CRJS 344	Social Science and Crime Mapping	
CRJS 345	Organized Crime: A Survey of Domestic and World-Wide Organized Crime Activities	
CRJS 404	Law and Digital Forensics	
CRJS 415	Courtroom As a Social System	
CRJS 421	Deviant Behavior	
CRJS 462	Substantive Criminal Law	
Technical Base ⁺⁺		
IT/CYSE 200T	Cybersecurity, Technology, and Society	3
CYSE 250	Basic Cybersecurity Programming and Networking	3
CYSE 300	Introduction to Cybersecurity	3
Select two of the following: ⁺⁺⁺		6
CS 150	Introduction to Programming with C++	
CS 170	Introduction to Computer Architecture I	
CS 250	Programming with C++	
IT 201	Introduction to Information Systems	
IT 205	Introduction to Object-Oriented Programming	
IT 315	Introduction to Networking and Security	
IT 325	Web Site and Web Page Design	
IT 450	Database Concepts	
Total Credit Hours		98-104

**	Further math may be necessary for upper-level electives.
***	Offered online only.
+	Other courses may be substituted with the approval of the program coordinator.
++	Prerequisites may be required; review the course description or consult an advisor. Other courses may be substituted with the approval of the program coordinator.
+++	Students may also select cybersecurity (CYSE) courses at the 300 or 400 level not otherwise required.

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Honors Program in Interdisciplinary Studies

Qualified students in the interdisciplinary studies majors may earn honors by fulfilling all degree requirements and meeting the honors requirements listed below.

1. Attain an overall grade point average of 3.25.
2. Attain a grade point average in the major of 3.5.
3. Complete two upper-division courses designated as honors courses: IDS 300W and IDS 493.
4. Complete at least 60 credits at Old Dominion University, 54 of which must be in grade-point graded courses.

An application for departmental honors must be provided by the student for approval by the Director of Interdisciplinary Programs.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 102M or MATH 103M (C or better required; meets Mathematical Skills)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
Oral Communication		3
CRJS 215S	Introduction to Criminology (Meets Human Behavior)	3
Credit Hours		15
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MATH 162M	Precalculus I	3
Interpreting the Past		3
Approved prerequisite or program elective		3
Elective or Language and Culture II (May be waived; See requirement details)		3
Credit Hours		15
Sophomore		
Fall		
Nature of Science I		4
CRJS 222	The Criminal Justice System	3
CRJS 310	Cybercriminology: Foundations	3
CYSE 250	Basic Cybersecurity Programming and Networking	3
IDS 300W	Interdisciplinary Theory and Concepts (C or better required)	3
Credit Hours		16
Spring		
Information Literacy and Research		3

Nature of Science II		4
CYSE 300	Introduction to Cybersecurity	3
SOC 337	Social Research Methods	3
Criminology Core elective		3
Credit Hours		16
Junior		
Fall		
CYSE 407	Digital Forensics	3
CRJS 409 or CYSE 409	Crime and Computer Applications or Crime and Computer Applications	3
Criminology Core elective		3
Technical Base elective		3
Approved prerequisite or program elective		3
Credit Hours		15
Spring		
CYSE 200T/IT 200T (meets Impact of Technology)		3
CRJS 406 or CYSE 406	Cyber Law or Cyber Law	3
Technical Base elective		3
Criminology Core elective		3
Elective		3
Credit Hours		15
Senior		
Fall		
Human Creativity		3
Philosophy and Ethics		3
Upper-Division General Education course or Minor		3
Upper-Division General Education course of Minor		3
Minor or Elective		3
Credit Hours		15
Spring		
Literature		3
IDS 493	IDS Electronic Portfolio Project	3
CYSE 368 or CRJS 368	Cybersecurity Internship or Internship	3
Elective		1
Minor or Elective		3
Credit Hours		13
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course

of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Cybercrime Minor

Philip Mann, Program Coordinator and Faculty Advisor (pmann@odu.edu)

The interdisciplinary minor in cybercrime provides students with an understanding of crime and deviance in the digital environment. Students will be required to take two introductory courses in the cybercrime and cybersecurity majors, respectively. In these core courses, students will learn the fundamental issues involved in cybersecurity (computer system architectures, critical infrastructures, cyber threats and vulnerabilities) and cybercrime (defining and describing the different types of computer-related crimes, the techniques used by law enforcement, and the legal issues inherent in combating cybercrime). They can then expand their knowledge by taking electives in psychology, political science, criminal justice, information technology, or cybersecurity. The minor aspires to develop graduates who can think critically about how human behavior impacts and is impacted by computer technologies.

Three credit hours in the interdisciplinary minor may be in the major if a major course is listed as an option for the interdisciplinary minor. As such, it will be credited toward both the major and the interdisciplinary minor. Interdisciplinary minors require 12 credit hours of 300/400-level courses selected from at least two different disciplines with a maximum of six credits from any one discipline. Course substitutions may be approved by the interdisciplinary minor coordinator.

For completion of a minor, a student must have a minimum grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement at Old Dominion University.

Requirements

Prerequisite

CRJS 215S	Introduction to Criminology *

Core **

CYSE 300	Introduction to Cybersecurity	3

CRJS 310	Cybercriminology: Foundations	3
Select two of the following: **		6
CYSE 301	Cybersecurity Techniques and Operations	
CYSE 407	Digital Forensics	
CRJS 340	White-Collar Crime	
CRJS 344	Social Science and Crime Mapping	
CRJS/CYSE 406	Cyber Law	
PHIL 355E	Cybersecurity Ethics	
PSYC 307	Institutionalization of Human-Centered Computing	
PSYC 344	Human Factors	
POLS 350T	Technology and War	
Total Credit Hours		12

* Not included in the calculation of the grade point average for the minor.

** The two courses from the core and the two electives must be selected from at least two different disciplines with no more than six credits from any one discipline.

Bachelor of Science Interdisciplinary Studies with a Major in Game Studies and Design- Design and Criticism (BS)

Kevin Moberly, Director of Monarch Institute of Game Development & Design

The interdisciplinary studies Game Studies and Design major is for students who are interested in three specific aspects of game production and criticism (programming, designing, or studying games and game-related productions), but who are also interested in a larger understanding of the game design and development process. Students may choose a major in either Development and Criticism or Design and Criticism.

Graduates of this undergraduate major will be strong candidates for jobs in the mainstream gaming industry, game journalism, and graduate programs in game studies.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3

The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C and before declaring major.

Mathematics: MATH 101M for Design majors; MATH 102M or MATH 103M for Development majors

Philosophy and Ethics requirement may be met by PHIL 355E.

Impact of Technology requirement may be met by IDS 307T/ENGL 307T, GAME 201T or PHIL 383T

Upper-Division General Education

Met in the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Interdisciplinary Studies Core

IDS 300W	Interdisciplinary Theory and Concepts	3
Select two of the following:		6
IDS/ENGL 307T	Digital Writing	
IDS 368	Internship in Interdisciplinary Studies	
IDS 493	IDS Electronic Portfolio Project	
Total Credit Hours		9

Game Studies and Design-Design and Criticism Major

General Education

Complete lower-division requirements	35-47

Complete upper-division requirements (met in the major)

Interdisciplinary Studies Core

Complete interdisciplinary studies core requirements	9

Game Studies and Design

GAME 201T	Introduction to Game Studies	3
GAME 214	Visual Design Fundamentals for Game Design	3
GAME 222	Technologies for Game Design and Development	3
GAME 240	Game Criticism	3
COMM 260	Understanding Media	3
GAME 355	Game Design and Rhetoric	3
GAME 450	Game Development and Design Workshop	3
Select three of the following:		9
COMM 325	Sound Design for Stage and Camera	
COMM 340	Media and Popular Culture	

COMM 353	Animation
ENGL 338	Writing for Games
GAME 111	Introduction to Game Programming
GAME 333	Game Balance, Rules, and Mechanics
GAME 340	Visual Design and Digital Graphics for Games
GAME 395	Topics in Game Studies
GAME 440	Advanced Visual Design and Digital Graphics for Games
GAME 465	Narrative World Building
GAME 466	Graphical World Building
GAME/ENTR 494	Entrepreneurship in Game Studies, Development, and Design
GAME 495	Topics in Game Studies
PHIL 355E	Cybersecurity Ethics
PHIL 383T	Philosophy of Technology
PHIL 400	Philosophy and Video Games

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Honors Program in Interdisciplinary Studies

Qualified students in the interdisciplinary studies majors may earn honors by fulfilling all degree requirements and meeting the honors requirements listed below.

1. Attain an overall grade point average of 3.25.
2. Attain a grade point average in the major of 3.5.
3. Complete two upper-division courses designated as honors courses: IDS 300W and IDS 493.
4. Complete at least 60 credits at Old Dominion University, 54 of which must be in grade-point graded courses.

An application for departmental honors must be provided by the student for approval by the Director of Interdisciplinary Programs.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 101M	An Introduction to Mathematics for Critical Thinking	3
Human Creativity		3
Interpreting the Past		3
Elective or Language and Culture I (May be waived; See requirement details)		3
Credit Hours		15
Spring		
Literature		3
Human Behavior		3

Information Literacy and Research		3
Elective or Language and Culture II (May be waived; See requirement details)		3
GAME 201T	Introduction to Game Studies	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Oral Communication		3
Philosophy and Ethics (May be met by PHIL 355E)		3
GAME 214	Visual Design Fundamentals for Game Design	3
Credit Hours		16
Spring		
Nature of Science II		4
GAME 222	Technologies for Game Design and Development	3
GAME 240	Game Criticism	3
COMM 260	Understanding Media	3
Approved Elective		3
Credit Hours		16
Junior		
Fall		
IDS 300W	Interdisciplinary Theory and Concepts (C or better required)	3
GAME 355	Game Design and Rhetoric	3
Electives		9
Credit Hours		15
Spring		
ENGL 307T/IDS 307T or IDS 368 or IDS 493		3
Approved Elective		3
Electives		9
Credit Hours		15
Senior		
Fall		
ENGL 307T/IDS 307T or IDS 368 or IDS 493		3
Approved Elective		3
Electives		9
Credit Hours		15
Spring		
GAME 450	Game Development and Design Workshop	3
Electives		10
Credit Hours		13
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

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Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Interdisciplinary Studies with a Major in Game Studies and Design-Development and Criticism (BS)

Kevin Moberly, Director of Monarch Institute of Game Development & Design

The interdisciplinary studies Game Studies and Design major is for students who are interested in three specific aspects of game production and criticism (programming, designing, or studying games and game-related productions), but who are also interested in a larger understanding of the game design and development process. Students may choose a major in either Development and Criticism or Design and Criticism.

Graduates of this undergraduate major will be strong candidates for jobs in the mainstream gaming industry, game journalism, and graduate programs in game studies.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C and before declaring major.

Mathematics: MATH 101M for Design majors; MATH 102M or MATH 103M for Development majors

Philosophy and Ethics requirement may be met by PHIL 355E.

Impact of Technology requirement may be met by IDS 307T/ENGL 307T or GAME 201T.

Upper-Division General Education

Met in the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Interdisciplinary Studies Core

IDS 300W	Interdisciplinary Theory and Concepts	3
Select two of the following:		6
IDS/ENGL 307T	Digital Writing	
IDS 368	Internship in Interdisciplinary Studies	

IDS 493	IDS Electronic Portfolio Project
Total Credit Hours	9

Game Studies and Design-Development and Criticism Major

General Education

Complete lower-division requirements	35-47

Complete upper-division requirements (met in the major)

Interdisciplinary Studies Core

Complete interdisciplinary studies core requirements	9

Game Studies and Design

GAME 201T	Introduction to Game Studies	3

GAME 222	Technologies for Game Design and Development	3

GAME 240	Game Criticism	3

GAME 450	Game Development and Design Workshop	3

MATH 163	Precalculus II	3

Select one of the following:	4

CS 150	Introduction to Programming with C++	

CS 151	Introduction to Programming with Java	

CS 153	Introduction to Programming with Python	

Select one of the following:	4

CS 250	Programming with C++	

CS 251	Programming with Java	

CS 253	Transfer Credit for Programming with Python	

Select a minimum of 9 credits from the following:	9

MATH 211	Calculus I	

GAME 111	Introduction to Game Programming	

CS 252	Introduction to Unix for Programmers	

CS 260	C++ for Programmers	

CS 261	Java for Programmers	

CS 330	Object-Oriented Design and Programming	

GAME 360	Development with Game Engines	

CS 361	Data Structures and Algorithms	

ECE 407	Introduction to Game Development	

GAME 395	Topics in Game Studies	

GAME 460	Advanced Development with Game Engines	

GAME/ENTR 494	Entrepreneurship in Game Studies, Development, and Design	

IT 205	Introduction to Object-Oriented Programming	

IT 310	Object-Oriented Programming with C++	

IT 374	C# and Applications	

PHIL 355E	Cybersecurity Ethics	

Total Credit Hours	76-88

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Honors Program in Interdisciplinary Studies

Qualified students in the interdisciplinary studies majors may earn honors by fulfilling all degree requirements and meeting the honors requirements listed below.

1. Attain an overall grade point average of 3.25.
2. Attain a grade point average in the major of 3.5.

3. Complete two upper-division courses designated as honors courses: IDS 300W and IDS 493.
4. Complete at least 60 credits at Old Dominion University, 54 of which must be in grade-point graded courses.

An application for departmental honors must be provided by the student for approval by the Director of Interdisciplinary Programs.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity		3
MATH 102M or MATH 103M	College Algebra (C or better required) or College Algebra with Supplemental Instruction	3
Interpreting the Past		3
Elective or Language and Culture I (May be waived; See requirement details)		3
Credit Hours		15
Spring		
MATH 162M	Precalculus I (C or better required)	3
GAME 201T		3
Literature		3
Human Behavior		3
Elective or Language and Culture II (May be waived; See requirement details)		3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MATH 163		3
Nature of Science I		4
Oral Communication		3
Information Literacy and Research		3
Credit Hours		16
Spring		
Nature of Science II		4
GAME 240		3
GAME 222		3
CS 150 or CS 151 or CS 153	Introduction to Programming with C++ or Introduction to Programming with Java or Introduction to Programming with Python	4
Credit Hours		14

Junior		
Fall		
IDS 300W	Interdisciplinary Theory and Concepts (C or better required)	3
CS 250 or CS 251 or CS 253	Programming with C++ or Programming with Java or Transfer Credit for Programming with Python	4
Philosophy and Ethics (May be met by PHIL 355E)		3
Approved Elective		3
Elective		3
Credit Hours		16
Spring		
ENGL 307T/IDS 307T or IDS 368 or IDS 493		3
Electives		12
Credit Hours		15
Senior		
Fall		
ENGL 307T/IDS 307T or IDS 368 or IDS 493		3
Approved Elective		3
Electives		9
Credit Hours		15
Spring		
GAME 450	Game Development and Design Workshop	3
Approved Elective		3
Electives		8
Credit Hours		14
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses

may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Interdisciplinary Studies with a Major in General Studies (BS)

Virginia Tucker Steffen, Advisor
vmtucker@odu.edu (mmitchel@odu.edu)

General Studies is a degree program that seeks to serve the needs of students whose goals cannot be met within existing departmental curricula. Through general studies, students are able to combine courses from three or more disciplines into a customized and multidisciplinary degree. The program makes possible the pursuit of a wide variety of disciplinary interests while teaching the skills necessary to apply interdisciplinary integration to multi-disciplinary skill sets.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Impact of Technology met in the major with ENGL 307T/IDS 307T.

Upper-Division General Education

Met in the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Interdisciplinary Studies Core

IDS 300W	Interdisciplinary Theory and Concepts (C or better required) *	3
IDS 493	IDS Electronic Portfolio Project *	3
IDS/ENGL 307T	Digital Writing	3
Total Credit Hours		9

* Offered online only.

General Studies Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (met in the major)	

Interdisciplinary Studies Core

Complete interdisciplinary studies core	9

General Studies Major

Complete General Studies major coursework **	24
Total Credit Hours	71-77

** 24 hours of upper-division coursework within at least 3 different academic disciplines. See advisor for recommendations.

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Interdisciplinary Studies with a Major in Individualized Integrative Studies (BA)

<http://www.odu.edu/ids/individualized> (<http://www.odu.edu/ids/individualized/>)

Virginia Tucker Steffen, Advisor
vmtucker@odu.edu (mmitchel@odu.edu)

Interdisciplinary Studies with a major in Individualized integrative studies at Old Dominion University is a degree program that seeks to serve the needs of students whose goals cannot be met within existing departmental curricula. Through interdisciplinary studies, students are able to combine courses from three or more disciplines into an individualized degree. The program makes possible the pursuit of a wide variety of interests in areas such as medieval and renaissance studies, advertising, legal studies, ecological studies, public relations, management of technical services, photo journalism, and health care administration.

A proposal is required to begin development of a custom degree representing at least three disciplines. Students who decide to design their own degrees must have committee approval and faculty sponsorship. The degree awarded is a Bachelor of Arts in interdisciplinary studies in the student's area of interest.

Please note: Admissions beyond Fall 2025 is on hold for program review.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3

Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Language and Culture: Proficiency through 202 required for BA; not met by completion of an associate degree

Impact of Technology met by ENGL 307T/IDS 307T.

Upper-Division General Education

Met in the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Interdisciplinary Studies Core

IDS 300W	Interdisciplinary Theory and Concepts (C or better required) *	3
ENGL/IDS 307T	Digital Writing	3
Select one of the following: **		3
IDS 368	Internship in Interdisciplinary Studies	
IDS 493	IDS Electronic Portfolio Project *	
IDS 497	IDS Individualized Senior Project	
Total Credit Hours		9

* Offered online only.

** Senior standing and completion of IDS 300W are required for enrollment in IDS 368, IDS 493, or IDS 497.

Individualized Integrative Studies Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (met in the major)	
Complete foreign language coursework through the 202 level	0-6

Interdisciplinary Studies Core

Complete interdisciplinary studies core	9

Individualized Major

Complete individualized major coursework	42
Total Credit Hours	89-101

All individualized program students must design a major that includes a minimum of 42 credit hours. This includes courses from three or more disciplines that the student integrates into a single program, subject to departmental approval. At least 30 hours must be upper level. No more than two-thirds of the major area may be in one discipline. Topics courses, such as ENGL 395, ENGL 495, COMM 395, COMM 396, etc., must be approved by the student's advisor to ensure that the topic is appropriate for the major. No more than two classes, or six credits, may be counted for both the major and a minor. Some minors may allow fewer courses to share.

All IDS individualized program students must prepare and submit a proposal to the Interdisciplinary Studies Committee for approval. The purpose of the proposal is to outline the courses and other learning experiences that will lead to the fulfillment of the proposed course of study. Students must have at least 30 hours of course work left in their overall degree program (this can include current and proposed courses) when the proposal is submitted to the IDS Committee. Students must complete at least 15 hours of course work in their major after acceptance into the program. Any exceptions must be approved by the IDS Committee. Students must also identify two faculty sponsors who will provide guidance as they develop their proposals and progress through the program. Acceptance decisions are made by the director of Interdisciplinary Studies, the Interdisciplinary Studies Committee, and faculty sponsors. For more information see <http://www.odu.edu/ids/individualized> (<http://www.odu.edu/ids/individualized/>).

Students must receive a grade of C- or better in all courses taken within the concentration area.

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Linked BA in Interdisciplinary Studies - Individualized Integrative Studies and MA in Humanities

The linked BA program in interdisciplinary studies-individualized integrative studies (IIS) and the MA in humanities makes it possible for exceptional students whose IIS major is humanities oriented to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Please refer to the Humanities section of this Catalog for additional information on the linked program.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Interdisciplinary Studies with a Major in Leadership (BS)

Karen Sanzo, Program Coordinator (ksanzo@odu.edu) (bpayne@odu.edu)
Michele Mitchell, Program Advisor (mmitchel@odu.edu)

The major in Leadership is a flexible, interdisciplinary academic degree that focuses on characteristics and skills necessary to lead in organizational and social contexts, and will emphasize ethical leadership, legal issues, and written and oral communication skills. A goal of this program is to facilitate adult students to complete their degree and as such, there is inherent flexibility in transferring existing credit. A hybrid of on-line and traditional on-campus classes results in a very flexible curriculum. Seventy five percent of courses in this major are offered on-line.

Graduates of this undergraduate major will possess the core liberal arts skills and knowledge such as reasoning, communications and analysis that are crucial to the challenges employers, organizations and governments face. The academic and critical thinking skills taught through the Leadership curriculum are valuable on the job as well as navigating modern changes and challenges.

This Leadership major is offered through the College of Arts & Letters and coordinated with the School of Continuing Education. The program provides opportunities for students to integrate education and training with the application of problem-solving skills through a senior interdisciplinary project. Courses are drawn from the disciplines of communication, criminal justice, engineering management, environmental health, finance, human services, management, public administration, and philosophy to examine the multi-faceted nature of leadership. Students admitted to the program have a variety of credit options including portfolio review, CLEP, DANTES, and departmental exams.

Topics courses, such as ENGL 395/ENGL 495, COMM 395/COMM 396, etc., must be approved by the student's advisor to ensure that the topic is appropriate for the major. No more than two classes, or six credits, may be counted for both the major and a minor.

Requirements

Lower-Division General Education

Written Communication (<http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written>) 6

Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C and before declaring major.

Philosophy and Ethics requirement can be met by PHIL 303E.

Impact of Technology requirement can be met by ENGL 307T/IDS 307T or IT 360T.

Upper-Division General Education

Met in the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Interdisciplinary Studies Core

IDS 300W	Interdisciplinary Theory and Concepts (grade of C or higher required) ¹	3
Select two of the following:		6
ENGL/IDS 307T	Digital Writing	
IDS 368 or IDS 494	Internship in Interdisciplinary Studies Entrepreneurship in Interdisciplinary Studies	
IDS 493	IDS Electronic Portfolio Project ¹	
Total Credit Hours		9

¹ Offered online only.

Leadership Major

General Education

Complete lower-division requirements	35-47
Complete upper-division requirements (met in the major)	

Interdisciplinary Studies Core

Complete interdisciplinary studies core	9

Ethical Leadership

Select two of the following:	6
CPD 410 Leadership Ethics ¹	
DASC/PHIL 357E Ethics and Data	
ENMA 480 Ethics and Philosophy in Engineering Applications	
PAS 301 Ethics, Governance and Accountability in Public Service ¹	
PHIL 303E Business Ethics	
PHIL 345E Bioethics	

Communication Skills and Leadership

Select two of the following:	6
COMM 351 Interpersonal Communication in Organizations	
COMM 355 Organizational Communication	
COMM 421 Communication and Conflict Management	
CPD 414 Design Thinking for Leaders ¹	
CPD 417 Digital Leadership ¹	
ENGL 334W Technical Writing ¹	
ENGL 435W Management Writing	
MGMT 330 Organizational Behavior ²	

Legal Issues

Select two of the following:	6
CRJS 340 White-Collar Crime	
CRJS 406 Cyber Law	
or CPD 406 Cyber Law	
or CYSE 406 Cyber Law	
CRJS 448 Women, Sex Discrimination and the Law	
CPD 412 Leadership and Law ¹	
ENVH 402W Environmental and Occupational Health Administration and Law	
ENVH 425 Occupational Safety and Health Program Management	
FIN 331 Legal Environment of Business ²	
MGMT 417 Employment Law ²	
SOC 445 Workplace Law and Society	
or CRJS 445 Workplace Law and Society	

Leadership Electives

Select three classes from at least two different disciplines:	9
CPD 400 Foundations of Leadership ¹	
CPD 408 Global Leadership ¹	
CPD 415 Women in Leadership ¹	
CPD 416 Trends and Issues in Leadership ¹	
DASC 300 Foundations of Data Science	
ENMA 301 Introduction to Engineering Management	
ENMA 401 Project Management	
HLTH 425 Leadership and Management for Health Professionals	
IDS 467 Sustainability Leadership	
IT 360T Principles of Information Technology ²	
MGMT 325 Contemporary Organizations and Management ²	
MGMT 340 Human Resource Management ²	

MGMT 350	Employee Relations Problems and Practices ²	
MGMT 426	Entrepreneurship: New Ventures Creation ²	
OPMT 303	Operations Management ²	
PAS 409	Leadership and Cultural Competence ¹	
PSYC 303	Industrial/Organizational Psychology ¹	
PSYC 307	Institutionalization of Human-Centered Computing ¹	
PSYC 345	Organizational Psychology ¹	
Total Credit Hours		71-83

- ¹ Offered online only.
- ² No more than 27 credits from courses in the Strome College of Business may be applied to the degree requirements, including named elective courses and general electives (ACCT, BNAL, BUSN, ECON, ENTR, FIN, INBU, IT, MGMT, MKTG, MSCM, OPMT, PORT, REST, RMI).

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree. No more than 27 credits from courses in the Strome College of Business may be applied to the degree requirements, including named elective courses and general electives (ACCT, BNAL, BUSN, ECON, ENTR, FIN, INBU, IT, MGMT, MKTG, MSCM, OPMT, PORT, REST, RMI).

Double Major in Leadership and Human Services

The Department of Interdisciplinary Studies and the Department of Counseling and Human Services have created an opportunity for undergraduate students to major in both IDS leadership and human services. Combining interest areas between two majors allows more versatility for students' future through enhanced opportunities to pursue graduate school and strengthening employability. Both majors can be earned within the 120 credit hours required for an undergraduate degree. Within this double major, students will be exposed to a number of fields of study to enhance their knowledge and skills in the area of leadership, professional writing, and technology, while engaging in human services coursework. In addition, students may pursue two specialized certificates within the double major – addiction prevention and treatment and professional leadership.

Students interested in the double major option should contact the program advisor.

Honors Program in Interdisciplinary Studies

Qualified students in the interdisciplinary studies majors may earn honors by fulfilling all degree requirements and meeting the honors requirements listed below.

1. Attain an overall grade point average of 3.25.
2. Attain a grade point average in the major of 3.5.
3. Complete two upper-division courses designated as honors courses: IDS 300W and IDS 493.
4. Complete at least 60 credits at Old Dominion University, 54 of which must be in grade-point graded courses.

An application for departmental honors must be provided by the student for approval by the Director of Interdisciplinary Programs.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly

encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity		3
Interpreting the Past		3
Oral Communication		3
Elective or Language and Culture I (May be waived; See requirement details)		3
Credit Hours		15
Spring		
Literature		3
Mathematical Skills		3
Information Literacy and Research		3
Philosophy and Ethics (Can be met with PHIL 303E)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Human Behavior		3
Nature of Science I		4
Elective course		3
Elective course		3
Credit Hours		16
Spring		
Nature of Science II		4
Impact of Technology (Can be met by ENGL 307T/IDS 307T, IT 360T or STEM 370T)		3
Elective course		3
Elective course		3
Elective course		3
Credit Hours		16
Junior		
Fall		
IDS 300W	Interdisciplinary Theory and Concepts (C or better required)	3
Ethical Leadership course		3
Communication Skills and Leadership course		3
Legal Issues course		3
ENGL 307T/IDS 307T, IDS 368 or IDS 494, or IDS 493		3
Credit Hours		15
Spring		
Ethical Leadership course		3
Communication Skills and Leadership course		3
Legal Issues course		3

Leadership elective	3
Leadership elective	3
Credit Hours	15
Senior	
Fall	
Leadership elective	3
Electives	10
Credit Hours	13
Spring	
ENGL 307T/IDS 307T, IDS 368 or IDS 494, or IDS 493	3
Electives	12
Credit Hours	15
Total Credit Hours	120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science

Interdisciplinary Studies with a Major in Professional Writing (BS)

Virginia Tucker Steffen, Program Coordinator and Advisor

The professional writing major produces graduates capable of moving into professional and technical writing fields. Students in the major complete a core of courses in technical writing as well as in business, communication, and human resources. The major is ideal for returning students already working who are interested in expanding their management skills and/or increasing their eligibility for promotion.

Some courses in the professional writing major are available online only.

Topics courses, such as ENGL 395/ENGL 495, COMM 395/COMM 396, etc., must be approved by the student's advisor to ensure that the topic is appropriate for the major. No more than two classes, or six credits, may be counted for both the major and a minor.

Requirements

Course requirements are as follows.

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Philosophy and Ethics requirement can be met by PHIL 303E

Impact of Technology requirement met by ENGL 307T/IDS 307T.

Upper-Division General Education

Met in the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Interdisciplinary Studies Core

Required of all students (required grade of C or better in IDS 300W and C- or better in the remaining courses)

ENGL/IDS 307T	Digital Writing (meets impact of technology requirement)	3
IDS 300W	Interdisciplinary Theory and Concepts	3
IDS 493	IDS Electronic Portfolio Project *	3
Total Credit Hours		9

* Offered online only.

Professional Writing Core

Required of all students (required grade of C- or better)

ENGL 325	Introduction to Rhetorical Studies	3
or COMM 335W	Rhetorical Criticism	
ENGL 327W	Advanced Composition	3
ENGL 334W	Technical Writing	3
Total Credit Hours		9

Organizational Foundations Core

Required grade of C- or better; meets upper-division general education

Select three from the following: 9

COMM 303	Introduction to Strategic Communications
COMM 304	Advanced Public Speaking
COMM 305	Work-Life Communication
COMM 308W	Effective Media Writing
COMM 351	Interpersonal Communication in Organizations
COMM 355	Organizational Communication
COMM 400W	Intercultural Communication
CPD 410	Leadership Ethics
CPD 417	Digital Leadership
CS 300T	Computers in Society
HMSV 339	Interpersonal Relations
IDS 301	Data and Humanities Research
IDS 400	Study Abroad
IDS 494	Entrepreneurship in Interdisciplinary Studies
IDS 496	Topics in Interdisciplinary Studies
MGMT 325	Contemporary Organizations and Management
MGMT 327	Business Communication
MGMT 330	Organizational Behavior
MGMT 340	Human Resource Management
MKTG 311	Marketing Principles and Problems
MKTG 402	Consumer Behavior
MKTG 411	Multi-National Marketing
PHIL 303E	Business Ethics
PSYC 303	Industrial/Organizational Psychology
PSYC 343	Personnel Psychology

PSYC 344	Human Factors	
PSYC 345	Organizational Psychology	
SEPS 302	Workforce Supervision Management	
Total Credit Hours		9

Professional Writing Major

General Education

Complete lower-division requirements	35-44
Complete upper-division requirements (met in the major)	

Interdisciplinary Studies Core

Complete interdisciplinary studies core requirements	9

Professional Writing Core

Complete the professional writing core requirements	9

Organizational Foundations Core

Complete organizational foundations core requirements	9

Professional Writing Coursework (required grade of C- or better)

Select three from the following:	9
ENGL 335	Editing and Document Design
ENGL 350	Aspects of the English Language
ENGL 368	English Internship
ENGL 370	English Linguistics
ENGL 371W	Language and Culture
ENGL 395/396	Topics in English
ENGL 427W	Writing in the Disciplines
ENGL 435W	Management Writing
ENGL 436	Writing for the Government
ENGL 439	Writing in Digital Spaces
ENGL 468	Advanced English Internship
ENGL 477	Language, Gender and Power
ENGL 495/496	Topics in English

Professional Writing Major

General Education		
Complete lower-division requirements		35-44
Complete upper-division requirements (met in the major)		
Interdisciplinary Studies Core		
Complete interdisciplinary studies core requirements		9
Professional Writing Core		
Complete the professional writing core requirements		9
Organizational Foundations Core		
Complete organizational foundations core requirements		9
Professional Writing Coursework (required grade of C- or better)		
Select three from the following:		9
ENGL 335	Editing and Document Design	
ENGL 350	Aspects of the English Language	
ENGL 368	English Internship	
ENGL 370	English Linguistics	
ENGL 371W	Language and Culture	
ENGL 395/396	Topics in English	
ENGL 427W	Writing in the Disciplines	
ENGL 435W	Management Writing	
ENGL 436	Writing for the Government	
ENGL 439	Writing in Digital Spaces	
ENGL 468	Advanced English Internship	
ENGL 477	Language, Gender and Power	
ENGL 495/496	Topics in English	

Total Credit Hours	71-80

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Honors Program in Interdisciplinary Studies

Qualified students in the interdisciplinary studies majors may earn honors by fulfilling all degree requirements and meeting the honors requirements listed below.

1. Attain an overall grade point average of 3.25.
2. Attain a grade point average in the major of 3.5.
3. Complete two upper-division courses designated as honors courses: IDS 300W and IDS 493.
4. Complete at least 60 credits at Old Dominion University, 54 of which must be in grade-point graded courses.

An application for departmental honors must be provided by the student for approval by the Director of Interdisciplinary Programs.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity		3
Interpreting the Past		3
Oral Communication		3
Elective or Language and Culture I (May be waived; See requirement details)		3
Credit Hours		15
Spring		
Human Behavior		3
Mathematical Skills		3
Information Literacy and Research		3
Philosophy and Ethics (Can be met with PHIL 303E)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Literature		3
Nature of Science I		4
Elective course		3
Elective course		3
Credit Hours		16
Spring		
Nature of Science II		4
Elective course		3
Elective course		3
Elective course		3
Elective course		3
Credit Hours		16
Junior		
Fall		
IDS 300W	Interdisciplinary Theory and Concepts (C or better required)	3
ENGL 325 or COMM 335W	Introduction to Rhetorical Studies or Rhetorical Criticism	3
ENGL 327W	Advanced Composition	3
ENGL/IDS 307T	Digital Writing (meets Impact of Technology)	3
Organizational Foundations course		3
Credit Hours		15
Spring		
ENGL 334W	Technical Writing	3
Organizational Foundations course		3
Organizational Foundations course		3
Professional Writing course		3

Professional Writing course		3
Credit Hours		15
Senior		
Fall		
Professional Writing course		3
Electives		10
Credit Hours		13
Spring		
IDS 493	IDS Electronic Portfolio Project	3
Electives		12
Credit Hours		15
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Interdisciplinary Studies with a Major in Supply Chain and Maritime Logistics (BS)

Department web site: <https://www.odu.edu/supply-chain-logistics-maritime>
(<https://www.odu.edu/supply-chain-logistics-maritime/>)

Ricardo Ungo, Faculty Advisor (rungo@odu.edu)

The demand in the supply chain industry and maritime logistics fields has increased dramatically in the last decades. The Supply Chain and Maritime Logistics program is designed to provide students with an integrated working knowledge of how goods flow globally and domestically from origin to destination using an array of storage facilities, information technology, and multiple transportation modes, with a special focus on maritime logistics. The graduates of this program will have the skills and proficiencies that are critical to regional, national, and international shipping, transportation, and distribution industries. The coursework balances theory and concepts with experiential learning connected to real-world problems. Courses are building on the disciplines of analytics, leadership, law, technology and transportation to examine the interdisciplinary nature of the global supply chains.

For more information about the Supply Chain and Maritime Logistics program, email Dr. Ricardo Ungo (rungo@odu.edu).

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C and before declaring major.

Oral Communication: COMM 101R or MKTG 200R recommended.

Mathematics: STAT 130M required.

Information Literacy: CYSE 200T recommended.

Human Behavior: COMM 200S required.

Philosophy and Ethics: Met in Foundations with PHIL 303E.

Nature of Science: OEAS 106N and OEAS 108N recommended.

Impact of Technology: Met in the major with SCLM 303T/CPD 303T.

Upper-Division General Education

Met in the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Foundations Coursework

Major Preparation

ACCT 201	Principles of Financial Accounting	3
DASC 300	Foundations of Data Science	3
ECON 202S	Principles of Microeconomics	3
SCLM 201	Introduction to Spreadsheet Applications	1
SCLM 202	Data-Driven Decision Making in Supply Chain and Maritime Operations	3

Leadership

COMM 355	Organizational Communication	3
CPD 400	Foundations of Leadership	3
ENGL 334W	Technical Writing	3
PHIL 303E	Business Ethics	3

Total Credit Hours 25

Supply Chain and Maritime Logistics Major

General Education

Complete lower-division requirements	35-41
Complete upper-division requirements (met in the major)	0

Foundations Coursework

Complete Foundations Coursework	25

Major Prerequisite

SCLM 204	Fundamentals of Global Supply Chain Management	3

Interdisciplinary Studies Core

IDS 300W	Interdisciplinary Theory and Concepts	3
IDS 493	IDS Electronic Portfolio Project	3
SCLM/IDS 368	Internship in Supply Chain, Logistics, and Maritime Operations	3

Major Coursework

SCLM 301	Supply Chain Analytics	3
SCLM/CPD 303T	Maritime Leadership, Technology, and Society	3
SCLM 370	Global Logistics	3
SCLM 410	International Maritime and Transportation Law and Policy	3
SCLM 414	Maritime Operations	3
SCLM 430	Global Sourcing and Supply Market Analysis	3

SCLM 450	Supply Chain 4.0 Technologies and Innovations	3
SCLM 461	Warehousing, Distribution and Material Management	3
Approved Program Electives **		
Select three of the following:		9
BDA 411	Introduction to Machine Learning	
CS 480	Introduction to Artificial Intelligence	
CYSE 301	Cybersecurity Techniques and Operations	
HIST 359	American Maritime History	
SCLM 311	Project Management in Supply Chain & Logistics Operations	
SCLM 380	Multimodal Freight Transportation	
SCLM 415	Maritime and Supply Chain Safety and Security	
SCLM 419	Maritime and Supply Chain Risk and Insurance	
SCLM 442	Supply Chain and Maritime Intelligence	
SCLM 443	Building Sustainable Supply Chains	
SCLM 471	Port and Terminal Operations	
SCLM 472	Vessel Fleet Operations	
SCLM 473	Inland Waterways and Dredging Operations	
SCLM 474	Shipbuilding & Ship Repair Logistics	
SCLM 481	Freight Brokerage and 3PL Services	
SCLM 486	Cruise Ship Operations	
SCLM 495	Selected Topics in Supply Chain, Logistics and Maritime Operations	
SCLM 497	Independent Study	
Total Credit Hours		105-111

**

Note regarding the approved program elective courses:

- To focus studies in **Maritime Logistics**, the student can take 3 program elective courses from the following: HIST 359, SCLM 380, SCLM 415, SCLM 419, SCLM 442, SCLM 443, SCLM 481, SCLM 495, or SCLM 497.
- To focus studies in **Port, Ships, and Shipyard Operations**, the student can take 3 program elective courses from the following: SCLM 311, SCLM 471, SCLM 472, SCLM 473, SCLM 474, SCLM 486, SCLM 495, or SCLM 497.
- To focus studies in **Supply Chain 4.0**, the student can take 3 program elective courses from the following: BDA 411, CS 480, CYSE 301, SCLM 495, or SCLM 497.

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Honors Program in Interdisciplinary Studies

Qualified students in the interdisciplinary studies majors may earn honors by fulfilling all degree requirements and meeting the honors requirements listed below.

1. Attain an overall grade point average of 3.25.
2. Attain a grade point average in the major of 3.5.
3. Complete two upper-division courses designated as honors courses: IDS 300W and IDS 493.
4. Complete at least 60 credits at Old Dominion University, 54 of which must be in grade-point graded courses.

An application for departmental honors must be provided by the student for approval by the Director of Interdisciplinary Programs.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
Mathematics (STAT 130M required)		3
Oral Communication (COMM 101R or MKTG 200R recommended)		3
Information Literacy and Research (CYSE 200T recommended)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
Credit Hours		15
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Interpreting the Past		3
ECON 202S	Principles of Microeconomics	3
ACCT 201	Principles of Financial Accounting	3
Elective or Language and Culture II (May be waived; See requirement details)		3
Credit Hours		15
Sophomore		
Fall		
Nature of Science I (OEAS 106N recommended)		4
Literature		3
SCLM 201	Introduction to Spreadsheet Applications	1
DASC 300	Foundations of Data Science	3
SCLM 204	Fundamentals of Global Supply Chain Management	3
Credit Hours		14
Spring		
Nature of Science II (OEAS 108N recommended)		4
Human Creativity		3
SCLM/CPD 303T	Maritime Leadership, Technology, and Society (meets Impact of Technology)	3
SCLM 202	Data-Driven Decision Making in Supply Chain and Maritime Operations	3
Human Behavior (COMM 200S required)		3
Credit Hours		16
Junior		
Fall		
PHIL 303E	Business Ethics (meets Philosophy/Ethics)	3

IDS 300W	Interdisciplinary Theory and Concepts (C or better required)	3
SCLM 370	Global Logistics	3
General Elective		3
SCLM 410	International Maritime and Transportation Law and Policy	3
Credit Hours		15
Spring		
ENGL 334W	Technical Writing	3
SCLM 461	Warehousing, Distribution and Material Management	3
SCLM/IDS 368	Internship in Supply Chain, Logistics, and Maritime Operations	3
SCLM 414		3
SCLM 301		3
Credit Hours		15
Senior		
Fall		
CPD 400	Foundations of Leadership	3
SCLM 450	Supply Chain 4.0 Technologies and Innovations	3
Approved Program Electives		6
General Elective		3
Credit Hours		15
Spring		
SCLM 430	Global Sourcing and Supply Market Analysis	3
COMM 355	Organizational Communication	3
IDS 493	IDS Electronic Portfolio Project	3
Approved Program Elective		3
General Elective		3
Credit Hours		15
Total Credit Hours		120

Minor Sustainability and Conservation Leadership Minor

Hans-Peter Plag, Department of Ocean and Earth Sciences, Coordinator (hpplag@odu.edu)

The interdisciplinary minor in Sustainability and Conservation Leadership is offered by Old Dominion University in collaboration with the U.S. Fish and Wildlife Service (USFWS) as part of a long-term, sustainable program of conservation-related service-learning, internships and leadership programs. The minor will facilitate the development of the next generation of professionals who can address conservation issues and challenges posed by a changing climate and sea level rise. A unique aspect of this interdisciplinary minor is the requirement to take one course that is designated as a service-learning (SL) course in which the student will work at a USFWS (or related) facility.

The interdisciplinary minor in Sustainability and Conservation Leadership requires 15 credit hours of 300/400-level courses selected from at least two different disciplines with a maximum of six credits from any one discipline. There are two required, core courses and a required internship; a service-learning component is also required and is satisfied by IDS 467/BIOL 467/OEAS 467. The remaining six elective credits must be

chosen from different disciplines. Three credit hours in the interdisciplinary minor may be in the major if a major course is listed as an option for the interdisciplinary minor. As such, it will be credited toward both the major and the interdisciplinary minor. Course substitutions may be approved by the interdisciplinary minor coordinator.

For completion of the interdisciplinary minor, students must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses. At least six hours of 300/400 upper-level courses must be taken through courses offered by Old Dominion University.

Three credit hours in the interdisciplinary minor may be in the major, if a major course is listed as an option for the interdisciplinary minor. As such, it will be credited toward both the major and the interdisciplinary minor.

Requirements

Course requirements and options are as follows.

IDS/BIOL/OEAS 466W	Introduction to Mitigation and Adaptation Studies	3
IDS/BIOL/OEAS 467	Sustainability Leadership *	3
IDS 369	Internship in Sustainability and Conservation Leadership	3
Select two of the following:		6
BIOL 311	Global Change Biology	
BIOL 404	Conservation Biology and Sustainable Development	
CHEM 339T	The Chemistry of the Environment	
COMM 400W	Intercultural Communication	
ENVH 301	Principles of Environmental Health Science	
GEOG 305	World Resources	
GEOG 306T	Hazards: Natural and Technological	
GEOG 400W	Seminar in Geography (Weather, Climate and Society)	
GEOG 402	Geographic Information Systems	
GEOG 419	Spatial Analysis of Coastal Environments	
GEOG 496	Topics in Geography	
HLSC 405	Interprofessional Study Abroad on Global Health (SL)	
OEAS 310	Global Earth Systems	
OEAS 444	Communicating Ocean Science to Informal Audiences	
PAS 300	Foundations of Public Service	
PAS 301	Ethics, Governance and Accountability in Public Service (SL)	
PAS 409	Leadership and Cultural Competence	
PAS 411	Multi-Sector Partnerships for Public Service	
PHIL 344E	Environmental Ethics	
POLS 335	Environmental Politics	
POLS 401	Global Environmental Policy	
POLS 455	The Politics of Climate Change	
PRTS 405	Outdoor Recreation (SL)	
PRTS 433	Camp Administration (SL)	
WGS 395	Topics in Women's, Gender, and Sexuality Studies (Women, the Environment and Climate Change)	
TOTAL		15

* Satisfies service-learning component.

Philosophy and Religious Studies

Web Site: <http://www.odu.edu/philosophy> (<http://www.odu.edu/philosophy/>)

Nicole Willock, Chair (Interim)
James R. Van Dore, Chief Departmental Advisor
Office: (757) 683-3861

The Department of Philosophy and Religious Studies offers a Bachelor of Arts degree in Philosophy with three major options: General, Political and Legal Studies, and Religious Studies. The degree program in Philosophy is dedicated to instruction in critical reading and critical thinking that supports students in discovering, clarifying, and reformulating their values and beliefs through open inquiry that looks across and is informed by the wide diversity of human experience. Students interested in the study of religion can minor in Religious Studies or choose Religious Studies as their major within the Philosophy degree.

Programs

Bachelor of Arts Programs

- Philosophy (BA) (p. 265)
- Philosophy with a Major in Political and Legal Studies (BA) (p. 268)
- Philosophy with a Major in Religious Studies (BA) (p. 271)

Minors

- Administrative Leadership and Ethics for Professional Roles Interdisciplinary Minor (p. 274)
- Applied Ethics Minor (p. 275)
- Philosophy Minor (p. 268)
- Political and Legal Studies Minor (p. 271)
- Religious Studies Minor (p. 274)

Linked BA in Philosophy and MA in Humanities

The linked BA in philosophy and MA in Humanities makes it possible for exceptional philosophy majors to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). For more information, consult the Humanities section of this catalog.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's

degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Philosophy (BA)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in ENGL 110C before declaring major.

Oral Communication requirement can be satisfied by PHIL 160R.

Information Literacy and Research requirement can be satisfied by PHIL 202G, PHIL 290G, REL 147G, and REL 260G.

Language and Culture: BA students must have competence through the 202 level; competence is not met by completion of an associate degree.

Philosophy and Ethics requirement can be satisfied in the major by PHIL 303E, PHIL 344E, PHIL 345E, PHIL 355E, PHIL 357E, or PHIL 442E.

Impact of Technology requirement can be satisfied in the major by PHIL 383T.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

- Requirements for graduation include the following:
- Minimum of 120 credit hours.
 - Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
 - Minimum overall cumulative grade point average of C (2.00) in all courses taken.
 - Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
 - Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
 - Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
 - Completion of Senior Assessment.

Philosophy Core

Topics core		
PHIL 300	Knowledge and Reality	3
PHIL 301	Ethics and Metaethics	3
PHIL 491W	Seminar in Philosophy	3
European Foundations		
Select one of the following:		3
PHIL 330	Ancient Greek Philosophy	
PHIL 332	Medieval Philosophy	
PHIL 331	Early Modern European Philosophy	
PHIL 334	Late Modern European Philosophy	
History of Philosophy		
Select another course from the list above OR one of the courses below:		3
PHIL/REL 381	Buddhist Traditions	
PHIL 364	African-American Philosophy	
PHIL 404	Existentialism and Phenomenology	
PHIL 405	American Pragmatist Philosophy	
PHIL 406	Language and Thought: History of Analytic Philosophy	
PHIL 411	Post-Modernism and Post-Structuralism	
PHIL 425	Kant and Hume	
PHIL 430	Marx and Hegel	
PHIL 432	Nietzsche and Life Affirmation	
PHIL 482	Chinese Religion and Philosophy	
PHIL 485	Japanese Religion and Philosophy	

Total Credit Hours 15

Students must complete all core requirements plus the requirements for their selected major for a total of 33 credit hours in 300- and 400-level philosophy (PHIL) and religious studies (REL) courses; at least 9 hours must be at the 400 level.

Philosophy General Major

General Education		
Complete lower-division requirements		35-47
Complete upper-division requirements (minimum of 6 credit hours)		6
Complete foreign language coursework through the 202 level		0-6
Philosophy Core		
Complete Philosophy core requirements		15
Logic		
PHIL 340	Logic	3
Philosophy Electives		
Choose five additional PHIL courses at the 300 or 400 level.		15
Total Credit Hours		74-92

Electives

Elective courses will be needed to meet the minimum 120 credit hours required for graduation.

Additional Requirements and Information

Advanced Placement

Since the study of philosophy and religion involves intensive work with sophisticated texts and extensive analytical and critical writing, credit by examination is not usually appropriate. Students who believe that there are reasons why they should be considered for exceptions to this policy should present their cases in writing to the chair of the department. Students who have earned credit for one of the introductory philosophy and ethics way of knowing courses (e.g., PHIL 110P, PHIL 120P, PHIL 126P, PHIL 127P, PHIL 150P, REL 150P, PHIL 155E, REL 155E, PHIL 227E, PHIL 228E, PHIL 230E, PHIL 235E, REL 235E, PHIL 250E, or PHIL 270P) may not receive credit by examination for another of them.

Double Majoring in Philosophy and Political Science

The departments of Political Science and Geography and Philosophy and Religious Studies have established an arrangement that makes it possible to complete a double major in as few as 60 hours, only 9 credits more than the 51 required to major in Political Science and minor in Philosophy.

Political Science majors double majoring in Philosophy will be allowed to count any two of the following Philosophy courses as Political Science electives:

PHIL 365	Race & Power	3
PHIL 410	Social and Political Philosophy	3
PHIL 411	Post-Modernism and Post-Structuralism	3
PHIL 412	Philosophy of Law	3
PHIL 430	Marx and Hegel	3

These courses will not count toward the requirement to take a specific number of hours in the American politics/public law and international relations/comparative politics areas. Philosophy "topics" courses and PHIL 442E may also be counted as Political Science electives when the topic covered is appropriate; prior approval is required from the chief departmental advisor of Political Science and Geography.

Philosophy majors double majoring in political science may count any two of the following Political Science courses toward their philosophy major:

POLS 309	Race, Culture and Public Policy	3
POLS 310	Political Theory	3
POLS 312	American Political Thought	3
POLS 403	American Constitutional Law: First Amendment	3
POLS 408	American Constitutional Law: Individual Rights	3

POLS 409	American Constitutional Law: Powers of Government	3
POLS 419	Jurisprudence: History of Legal Theory	3

These courses will count as Political-Legal electives; students will still be required to take 6 hours of Political-Legal core courses. Students doing the linked BA/MA in Philosophy and Humanities can count only one 500-level Political Science course as a "bridge" course. Certain Political Science "topics" courses may be counted as Philosophy electives with prior approval from the Philosophy and Religious Studies Department.

Students interested in double majoring in philosophy and a subject other than political science should consult the chief departmental advisor for Philosophy and Religious Studies; there may be some opportunity for double counting at least one class.

Double Majoring in Philosophy and Women's Studies

The Departments of Women's and Gender Studies and Philosophy and Religious Studies have established an arrangement that makes it possible to complete a double major in as few as 57 hours, only 9 credits more than the 48 hours needed for a major in Women's Studies and minor in Philosophy. Any four of the following courses, totaling no more than 12 credit hours, may count toward both majors. Courses "double-counted" from one major will be considered electives in the other major.

PHIL 365	Race & Power	3
PHIL 402	Gender and Philosophy	3
REL 403	Gender and Sexuality in Islam	3
WGS 302W	Dimensions of Diversity: Intersectionality Among Women	3
WGS 303	Queer Studies	3
WGS 460W	Feminist and Queer Theory	3

With prior approval other courses from PHIL, REL, or WGS, such as topics courses, may be counted toward both majors.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Behavior		3
Oral Communication (can be satisfied by PHIL 160R)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
Credit Hours		15
Spring		
Literature		3
Philosophy and Ethics (Can be satisfied in the major by PHIL 303E, PHIL 344E, PHIL 345E, PHIL 355E, PHIL 357E, or PHIL 442E)		3
Human Creativity		3
Information Literacy and Research (Can be satisfied by PHIL 202G, PHIL 290G, REL 147G, REL 260G)		3

Elective or Language and Culture II (May be waived; See requirement details)		3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
PHIL 301	Ethics and Metaethics	3
Nature of Science I		4
Language and Culture III		3
Interpreting the Past		3
Credit Hours		16
Spring		
PHIL 300	Knowledge and Reality	3
Impact of Technology (Can be satisfied with PHIL 383T)		3
Nature of Science II		4
Language and Culture IV		3
Elective course		3
Credit Hours		16
Junior		
Fall		
PHIL 340	Logic	3
300/400-level PHIL major course		3
European Foundations course (PHIL 330, PHIL 331, PHIL 332, or PHIL 334)		3
Elective course		3
Upper-Division General Education or Minor course		3
Credit Hours		15
Spring		
PHIL 491W	Seminar in Philosophy (Grade of C or better required)	3
300/400-level PHIL major course		3
History of Philosophy course, (PHIL 330, PHIL 331, PHIL 332, PHIL 334, PHIL 364, PHIL 381/REL 381, PHIL 404, PHIL 405, PHIL 406, PHIL 411, PHIL 425, PHIL 430, PHIL 432, PHIL 482, or PHIL 485)		3
Elective course		3
Upper-Division General Education or Minor course		3
Credit Hours		15
Senior		
Fall		
300/400-level PHIL major course		3
300/400-level PHIL major course		3
Minor or Elective course		3
Elective course		3
Elective course		3
Credit Hours		15
Spring		
300/400-level PHIL major course		3
Minor or Elective course		3
Elective course		1

Elective course	3
Elective course	3
Credit Hours	13
Total Credit Hours	120

Linked BA in Philosophy and MA in Humanities

The linked BA in philosophy and MA in Humanities makes it possible for exceptional philosophy majors to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). For more information, consult the Humanities section of this catalog.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor

Philosophy Minor

Requirements

Any four PHIL courses at the 300 or 400 level, including courses crosslisted as a PHIL course at the 300 or 400 level but taken under another designation.

Total Credit Hours 12

For completion of a minor, a student must have a minimum cumulative grade point average of 2.00 in all upper-level courses specified as a requirement for the minor and complete a minimum of six hours in the minor through courses offered by Old Dominion University.

Bachelor of Arts

Philosophy with a Major in Political and Legal Studies (BA)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in ENGL 110C before declaring major.

Oral Communication requirement can be satisfied by PHIL 160R

Information Literacy and Research requirement can be satisfied by PHIL 202G, PHIL 290G, REL 147G, and REL 260G

Language and Culture: BA students must have competence through the 202 level; competence is not met by completion of an associate degree.

Philosophy and Ethics requirement can be satisfied in the major by PHIL 303E, PHIL 344E, PHIL 345E, PHIL 355E, PHIL 357E, or PHIL 442E.

Impact of Technology requirement can be satisfied in the major by PHIL 383T.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Philosophy Core

Topics core

PHIL 300	Knowledge and Reality	3
PHIL 301	Ethics and Metaethics	3
PHIL 491W	Seminar in Philosophy	3

European Foundations

Select one of the following:		3
PHIL 330	Ancient Greek Philosophy	
PHIL 332	Medieval Philosophy	
PHIL 331	Early Modern European Philosophy	
PHIL 334	Late Modern European Philosophy	

History of Philosophy

Select another course from the list above OR one of the courses below:		3
PHIL/REL 381	Buddhist Traditions	
PHIL 364	African-American Philosophy	
PHIL 404	Existentialism and Phenomenology	
PHIL 405	American Pragmatist Philosophy	
PHIL 406	Language and Thought: History of Analytic Philosophy	
PHIL 411	Post-Modernism and Post-Structuralism	
PHIL 425	Kant and Hume	
PHIL 430	Marx and Hegel	
PHIL 432	Nietzsche and Life Affirmation	
PHIL 482	Chinese Religion and Philosophy	
PHIL 485	Japanese Religion and Philosophy	

Total Credit Hours 15

Students must complete all core requirements plus the requirements for their selected major for a total of 33 credit hours in 300- and 400-level philosophy (PHIL) and religious studies (REL) courses; at least 9 hours must be at the 400 level.

Political and Legal Studies Major

The political and legal studies major is aimed at students interested in social and political philosophy, particularly those planning to attend law school or pursue work in public policy.

General Education

Complete lower-division requirements	35-47
Complete upper-division requirements (minimum of 6 credit hours)	6
Complete foreign language coursework through the 202 level	0-6

Philosophy Core

Complete philosophy core requirements	15

Logic

PHIL 340	Logic	3

Select two of the following:	6

PHIL 365	Race & Power	
PHIL 402	Gender and Philosophy	
PHIL 410	Social and Political Philosophy	
PHIL 412	Philosophy of Law	
PHIL 430	Marx and Hegel	

Select two more courses from the courses listed above OR from the courses below:	6

JST 300	Holocaust and Genocide Studies	
PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL 357E	Ethics and Data	
PHIL 364	African-American Philosophy	
PHIL 383T	Philosophy of Technology	
PHIL 411	Post-Modernism and Post-Structuralism	
PHIL 442E	Studies in Applied Ethics	

Philosophy Elective

Choose one additional PHIL course at the 300 or 400 level.	3

Total Credit Hours	74-92

Electives

Elective courses will be needed to meet the minimum 120 credit hours required for graduation.

Additional Requirements and Information

Advanced Placement

Since the study of philosophy and religion involves intensive work with sophisticated texts and extensive analytical and critical writing, credit by examination is not usually appropriate. Students who believe that there are reasons why they should be considered for exceptions to this policy should present their cases in writing to the chair of the department. Students who have earned credit for one of the introductory philosophy and ethics way of knowing courses (e.g., PHIL 110P, PHIL 120P, PHIL 126P, PHIL 127P, PHIL 150P, REL 150P, PHIL 155E, REL 155E, PHIL 227E, PHIL 228E, PHIL 230E, PHIL 235E, REL 235E, PHIL 250E, or PHIL 270P) may not receive credit by examination for another of them.

Double Majoring in Philosophy and Political Science

The departments of Political Science and Geography and Philosophy and Religious Studies have established an arrangement that makes it possible to complete a double major in as few as 60 hours, only 9 credits more than the 51 required to major in Political Science and minor in Philosophy.

Political Science majors double majoring in Philosophy will be allowed to count any two of the following Philosophy courses as Political Science electives:

PHIL 365	Race & Power	3
PHIL 410	Social and Political Philosophy	3
PHIL 411	Post-Modernism and Post-Structuralism	3
PHIL 412	Philosophy of Law	3
PHIL 430	Marx and Hegel	3

These courses will not count toward the requirement to take a specific number of hours in the American politics/public law and international relations/comparative politics areas. Philosophy "topics" courses and PHIL 442E may also be counted as Political Science electives when the topic covered is appropriate; prior approval is required from the chief departmental advisor of Political Science and Geography.

Philosophy majors double majoring in political science may count any two of the following Political Science courses toward their philosophy major:

POLS 309	Race, Culture and Public Policy	3
POLS 310	Political Theory	3
POLS 312	American Political Thought	3
POLS 403	American Constitutional Law: First Amendment	3
POLS 408	American Constitutional Law: Individual Rights	3
POLS 409	American Constitutional Law: Powers of Government	3
POLS 419	Jurisprudence: History of Legal Theory	3

These courses will count as Political-Legal electives; students will still be required to take 6 hours of Political-Legal core courses. Students doing the linked BA/MA in Philosophy and Humanities can count only one 500-level Political Science course as a "bridge" course. Certain Political Science "topics" courses may be counted as Philosophy electives with prior approval from the Philosophy and Religious Studies Department.

Students interested in double majoring in philosophy and a subject other than political science should consult the chief departmental advisor for Philosophy and Religious Studies; there may be some opportunity for double counting at least one class.

Double Majoring in Philosophy and Women's Studies

The Departments of Women's and Gender Studies and Philosophy and Religious Studies have established an arrangement that makes it possible to complete a double major in as few as 57 hours, only 9 credits more than the 48 hours needed for a major in Women's Studies and minor in Philosophy. Any four of the following courses, totaling no more than 12 credit hours, may count toward both majors. Courses "double-counted" from one major will be considered electives in the other major.

PHIL 365	Race & Power	3
PHIL 402	Gender and Philosophy	3
REL 403	Gender and Sexuality in Islam	3
WGS 302W	Dimensions of Diversity: Intersectionality Among Women	3
WGS 303	Queer Studies	3
WGS 460W	Feminist and Queer Theory	3

With prior approval other courses from PHIL, REL, or WGS, such as topics courses, may be counted toward both majors.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly

encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Behavior		3
Oral Communication (Can be satisfied by PHIL 160R)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
Credit Hours		15
Spring		
Literature		3
Philosophy and Ethics (Can be satisfied in the major by PHIL 303E, PHIL 344E, PHIL 345E, PHIL 355E, PHIL 357E, or PHIL 442E)		3
Human Creativity		3
Information Literacy and Research (Can be satisfied by PHIL 202G, PHIL 290G, REL 147G, REL 260G)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
PHIL 301	Ethics and Metaethics	3
Nature of Science I		4
Language and Culture III		3
Interpreting the Past		3
Credit Hours		16
Spring		
PHIL 300	Knowledge and Reality	3
Impact of Technology (Can be satisfied with PHIL 383T)		3
Nature of Science II		4
Language and Culture IV		3
Elective course		3
Credit Hours		16
Junior		
Fall		
PHIL 340	Logic	3
300/400-level PHIL major course		3
European Foundations course (PHIL 330, PHIL 331, PHIL 332, or PHIL 334)		3
Elective course		3
Upper-Division General Education or Minor course		3
Credit Hours		15
Spring		
PHIL 491W	Seminar in Philosophy (Grade of C or better required)	3

300/400-level PHIL major course	3
History of Philosophy course, (PHIL 330, PHIL 331, PHIL 332, PHIL 334, PHIL 364, PHIL 381/REL 381, PHIL 404, PHIL 405, PHIL 406, PHIL 411, PHIL 425, PHIL 430, PHIL 432, PHIL 482, or PHIL 485)	3
Elective course	3
Upper-Division General Education or Minor course	3
Credit Hours	15
Senior	
Fall	
300/400-level PHIL major course	3
300/400-level PHIL major course	3
Minor or Elective course	3
Elective course	3
Elective course	3
Credit Hours	15
Spring	
300/400-level PHIL major course	3
Minor or Elective course	3
Elective course	3
Elective course	3
Elective course	1
Credit Hours	13
Total Credit Hours	120

Linked BA in Philosophy and MA in Humanities

The linked BA in philosophy and MA in Humanities makes it possible for exceptional philosophy majors to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). For more information, consult the Humanities section of this catalog.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated

students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor

Political and Legal Studies Minor

Requirements

Select two of the following: 6

PHIL 301	Ethics and Metaethics
PHIL 330	Ancient Greek Philosophy
PHIL 334	Late Modern European Philosophy
PHIL 340	Logic
PHIL 364	African-American Philosophy
PHIL 365	Race & Power
PHIL 402	Gender and Philosophy
PHIL 410	Social and Political Philosophy
PHIL 412	Philosophy of Law
PHIL 430	Marx and Hegel

Select two additional courses from the courses listed above OR from the list below: 6

JST 300	Holocaust and Genocide Studies
PHIL 303E	Business Ethics
PHIL 344E	Environmental Ethics
PHIL 345E	Bioethics
PHIL 355E	Cybersecurity Ethics
PHIL 357E	Ethics and Data
PHIL 383T	Philosophy of Technology
PHIL 411	Post-Modernism and Post-Structuralism
PHIL 442E	Studies in Applied Ethics

Total Credit Hours 12

For completion of a minor, a student must have a minimum cumulative grade point average of 2.00 in all upper-level courses specified as a requirement for the minor and complete a minimum of six hours in the minor through courses offered by Old Dominion University.

Bachelor of Arts

Philosophy with a Major in Religious Studies (BA)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3

Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in ENGL 110C before declaring major.

Oral Communication requirement can be satisfied by PHIL 160R

Information Literacy and Research requirement can be satisfied by PHIL 202G, PHIL 290G, REL 147G, and REL 260G

Language and Culture: BA students must have competence through the 202 level; competence is not met by completion of an associate degree.

Philosophy and Ethics requirement can be satisfied in the major by PHIL 303E, PHIL 344E, PHIL 345E, PHIL 355E, PHIL 357E, or PHIL 442E.

Impact of Technology requirement can be satisfied in the major by PHIL 383T.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Philosophy Core

Topics core		
PHIL 300	Knowledge and Reality	3
PHIL 301	Ethics and Metaethics	3
PHIL 491W	Seminar in Philosophy	3
European Foundations		
Select one of the following:		3
PHIL 330	Ancient Greek Philosophy	
PHIL 332	Medieval Philosophy	
PHIL 331	Early Modern European Philosophy	
PHIL 334	Late Modern European Philosophy	
History of Philosophy		
Select another course from the list above OR one of the courses below:		3
PHIL/REL 381	Buddhist Traditions	
PHIL 364	African-American Philosophy	
PHIL 404	Existentialism and Phenomenology	
PHIL 405	American Pragmatist Philosophy	
PHIL 406	Language and Thought: History of Analytic Philosophy	
PHIL 411	Post-Modernism and Post-Structuralism	
PHIL 425	Kant and Hume	
PHIL 430	Marx and Hegel	
PHIL 432	Nietzsche and Life Affirmation	
PHIL 482	Chinese Religion and Philosophy	
PHIL 485	Japanese Religion and Philosophy	
Total Credit Hours		15

Students must complete all core requirements plus the requirements for their selected major for a total of 33 credit hours in 300- and 400-level philosophy (PHIL) and religious studies (REL) courses; at least 9 hours must be at the 400 level.

Religious Studies Major

The religious studies major is designed for students looking to understand the role of religion in human culture and is also an excellent major for those intending to enter graduate programs in religious studies or area studies.

General Education		
Complete lower-division requirements		35-47
Complete upper-division requirements (minimum of 6 credit hours)		6
Complete foreign language coursework through the 202 level		0-6
Philosophy Core		
Complete philosophy core requirements		15
Islam		
Select one of the following:		3
REL 315	Qur'an	
REL 352	Islam	
REL 403	Gender and Sexuality in Islam	
Judaism and Christianity		
Select one of the following:		3
JST 300	Holocaust and Genocide Studies	
REL 311	Hebrew Bible/Old Testament	
REL 312	New Testament	
REL 333	Historical Jesus	
REL 350	Judaism	
REL 351	Christianity	
Asian Religions		
Select one of the following:		3
REL 353	Asian Religions	

REL 380	Hinduism	
PHIL/REL 381	Buddhist Traditions (if not used in the Core)	
PHIL 482	Chinese Religion and Philosophy	
REL 483	Tibet, Happiness, and this Precious Life	
PHIL 485	Japanese Religion and Philosophy	
Religious Studies Electives		
Choose three additional PHIL or REL courses at the 300 or 400 level.		9
Total Credit Hours		74-92

Electives

Elective courses will be needed to meet the minimum 120 credit hours required for graduation.

Additional Requirements and Information

Advanced Placement

Since the study of philosophy and religion involves intensive work with sophisticated texts and extensive analytical and critical writing, credit by examination is not usually appropriate. Students who believe that there are reasons why they should be considered for exceptions to this policy should present their cases in writing to the chair of the department. Students who have earned credit for one of the introductory philosophy and ethics way of knowing courses (e.g., PHIL 110P, PHIL 120P, PHIL 126P, PHIL 127P, PHIL 150P, REL 150P, PHIL 155E, REL 155E, PHIL 227E, PHIL 228E, PHIL 230E, PHIL 235E, REL 235E, PHIL 250E, or PHIL 270P) may not receive credit by examination for another of them.

Double Majoring in Philosophy and Political Science

The departments of Political Science and Geography and Philosophy and Religious Studies have established an arrangement that makes it possible to complete a double major in as few as 60 hours, only 9 credits more than the 51 required to major in Political Science and minor in Philosophy.

Political Science majors double majoring in Philosophy will be allowed to count any two of the following Philosophy courses as Political Science electives:

PHIL 365	Race & Power	3
PHIL 410	Social and Political Philosophy	3
PHIL 411	Post-Modernism and Post-Structuralism	3
PHIL 412	Philosophy of Law	3
PHIL 430	Marx and Hegel	3

These courses will not count toward the requirement to take a specific number of hours in the American politics/public law and international relations/comparative politics areas. Philosophy "topics" courses and PHIL 442E may also be counted as Political Science electives when the topic covered is appropriate; prior approval is required from the chief departmental advisor of Political Science and Geography.

Philosophy majors double majoring in political science may count any two of the following Political Science courses toward their philosophy major:

POLS 309	Race, Culture and Public Policy	3
POLS 310	Political Theory	3
POLS 312	American Political Thought	3
POLS 403	American Constitutional Law: First Amendment	3
POLS 408	American Constitutional Law: Individual Rights	3
POLS 409	American Constitutional Law: Powers of Government	3
POLS 419	Jurisprudence: History of Legal Theory	3

These courses will count as Political-Legal electives; students will still be required to take 6 hours of Political-Legal core courses. Students doing the linked BA/MA in Philosophy and Humanities can count only one 500-level Political Science course as a "bridge" course. Certain Political Science "topics" courses may be counted as Philosophy electives with prior approval from the Philosophy and Religious Studies Department.

Students interested in double majoring in philosophy and a subject other than political science should consult the chief departmental advisor for Philosophy and Religious Studies; there may be some opportunity for double counting at least one class.

Double Majoring in Philosophy and Women's Studies

The Departments of Women's and Gender Studies and Philosophy and Religious Studies have established an arrangement that makes it possible to complete a double major in as few as 57 hours, only 9 credits more than the 48 hours needed for a major in Women's Studies and minor in Philosophy. Any four of the following courses, totaling no more than 12 credit hours, may count toward both majors. Courses "double-counted" from one major will be considered electives in the other major.

PHIL 365	Race & Power	3
PHIL 402	Gender and Philosophy	3
REL 403	Gender and Sexuality in Islam	3
WGS 302W	Dimensions of Diversity: Intersectionality Among Women	3
WGS 303	Queer Studies	3
WGS 460W	Feminist and Queer Theory	3

With prior approval other courses from PHIL, REL, or WGS, such as topics courses, may be counted toward both majors.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Behavior		3
Oral Communication (Can be satisfied by PHIL 160R)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
Credit Hours		15
Spring		
Literature		3
Philosophy and Ethics (Can be satisfied in the major by PHIL 303E, PHIL 344E, PHIL 345E, PHIL 355E, PHIL 357E, or PHIL 442E)		3
Human Creativity		3
Information Literacy and Research (Can be satisfied by PHIL 202G, PHIL 290G, REL 147G, REL 260G)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
Credit Hours		15

Sophomore

Fall

ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3

PHIL 301	Ethics and Metaethics	3
Nature of Science I		4
Language and Culture III		3
Interpreting the Past		3

Credit Hours 16

Spring

PHIL 300	Knowledge and Reality	3
Impact of Technology (Can be satisfied with PHIL 383T)		3
Nature of Science II		4
Language and Culture IV		3
Elective course		3

Credit Hours 16

Junior

Fall

300/400-level PHIL/REL major course		3
European Foundations course (PHIL 330, PHIL 331, PHIL 332, or PHIL 334)		3
Islam, Judaism & Christianity, or Asian Religions Course (see requirements for course options)		3
Elective course		3
Upper-Division General Education or Minor course		3

Credit Hours 15

Spring

PHIL 491W	Seminar in Philosophy (Grade of C or better required)	3
300/400-level PHIL/REL major course		3
History of Philosophy course, (PHIL 330, PHIL 331, PHIL 332, PHIL 334, PHIL 364, PHIL 381/REL 381, PHIL 404, PHIL 405, PHIL 406, PHIL 411, PHIL 425, PHIL 430, PHIL 432, PHIL 482, or PHIL 485)		3
Elective course		3
Upper-Division General Education or Minor course		3

Credit Hours 15

Senior

Fall

Islam, Judaism & Christianity, or Asian Religions Course (see requirements for course options)		3
300/400-level PHIL/REL major course		3
Minor or Elective course		3
Elective course		3
Elective course		3

Credit Hours 15

Spring

Islam, Judaism & Christianity, or Asian Religions Course (see requirements for course options)		3
Minor or Elective course		3
Elective course		3
Elective course		3

Elective course	1
Credit Hours	13
Total Credit Hours	120

Linked BA in Philosophy and MA in Humanities

The linked BA in philosophy and MA in Humanities makes it possible for exceptional philosophy majors to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). For more information, consult the Humanities section of this catalog.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Religious Studies Minor

Requirements

Select any four of:	12
Any REL class at the 300 or 400 level or	
JST 300	Holocaust and Genocide Studies

JST 350	Judaism
JST 395	Topics in Jewish Studies
JST 495	Topics in Jewish Studies
PHIL 313	Philosophy of Religion
PHIL 353	Asian Religions
PHIL 380	Hinduism
PHIL 381	Buddhist Traditions
PHIL 451	Native American Philosophies
PHIL 482	Chinese Religion and Philosophy
PHIL 485	Japanese Religion and Philosophy

Total Credit Hours	12

For completion of a minor, a student must have a minimum cumulative grade point average of 2.00 in all upper-level courses specified as a requirement for the minor and complete a minimum of six hours in the minor through courses offered by Old Dominion University.

Minor Administrative Leadership and Ethics for Professional Roles Interdisciplinary Minor

James Van Dore, Department of Philosophy and Religious Studies, Coordinator

The intent of the Administrative Leadership and Ethics for Professional Roles interdisciplinary minor is to develop management-related skills. The minor is designed to improve the student's professionalism through an understanding of applied ethics, effective communication, processes in organizations, applied psychology, and legal issues in the workplace. An appreciation for the qualities of leadership, the functions of administration, and a sensitivity for ethical decision making will allow the student to apply for a wider variety of positions.

Requirements

Course options are as follows:

COMM 351	Interpersonal Communication in Organizations	3
DNTH 416	Administrative Leadership and Professional Development	3
ENGL 486	Media Law and Ethics	3
ENVH 402W	Environmental and Occupational Health Administration and Law	3
HLSC 450	Public and Community Health Administration	3
HLSC 480	Health Ethics and the Law	3
HLTH 425	Leadership and Management for Health Professionals	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 350	Employee Relations Problems and Practices	3
MKTG 414	Ethics and Social Issues in Administration	3
MLS 403W	Management in the Clinical Setting	3
NMED 475W	Administration and Management in Nuclear Medicine Technology	3
NURS 480W	Nursing in the Health Care System: Leadership	3
NURS 490W	Nursing Leadership	3
PAS 301	Ethics, Governance and Accountability in Public Service	3
PHIL 303E	Business Ethics	3
PHIL 344E	Environmental Ethics	3

PHIL 345E	Bioethics	3
PHIL 355E	Cybersecurity Ethics	3
PHIL 357E	Ethics and Data	3
PSYC 303	Industrial/Organizational Psychology	3
SMGT 450W	Ethics and Morality in Sport	3

Minor

Applied Ethics Minor

Requirements

Ethics Core

PHIL 301	Ethics and Metaethics	3
Select three courses from the following:		9
PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL 357E	Ethics and Data	
PHIL 365	Race & Power	
PHIL 383T	Philosophy of Technology	
PHIL 402	Gender and Philosophy	
PHIL 404	Existentialism and Phenomenology	
PHIL 410	Social and Political Philosophy	
PHIL 412	Philosophy of Law	
PHIL 442E	Studies in Applied Ethics	

Total Credit Hours 12

For completion of a minor, a student must have a minimum cumulative grade point average of 2.00 in all upper-level courses specified as a requirement for the minor and complete a minimum of six hours in the minor through courses offered by Old Dominion University.

Political Science and Geography

Web Site: <http://www.odu.edu/pols-geog> (<http://www.odu.edu/pols-geog/>)

Tom R. Allen, Chair

The Department of Political Science and Geography offers undergraduate degrees in political science, geography and international studies.

In political science, the Department offers Bachelor of Arts and Bachelor of Science degrees. The political science program is designed to give students an essential core of basic knowledge and analytical skills, while providing an opportunity to specialize in one of two emphasis areas: American politics and public law, or international relations and comparative politics. Optionally, students may major in one of the following areas: 1) International Affairs and Global Politics or 2) Analytics, Institutions, and Public Policy.

In geography, the Department offers Bachelor of Arts and Bachelor of Science degrees. The geography program is designed to give students a broad base of geographical training and an understanding of human-environment interrelationships, while providing an opportunity to specialize in one of three majors: urban planning and emergency/hazards management, environment and resources, and geographic information systems (BS only). Undergraduate and graduate certificates in cyber risk management, geographic information science, hazards and emergency management, spatial analysis of coastal environments, and urban studies and planning are also offered.

The Department offers a Bachelor of Arts degree with a major in International Studies, which is an interdisciplinary program that offers students a chance to explore the interrelations among nations and peoples and to study world affairs from a variety of perspectives. The International Studies major centers on studies in world languages and cultures, geography, history, and political science. Students have considerable flexibility to

structure their academic programs to meet their particular needs and interests or to focus in a variety of geographical or topical fields.

In addition to developing subject-area expertise, political science and geography courses are designed to build analytic and communication skills. Writing and critical thinking skills are emphasized throughout the curriculum. Undergraduates in most 400-level courses in political science and geography are required to make oral presentations in class. Instructors also strengthen students' verbal competency skills through in-class discussions. Students gain technical skills in lower and upper-level methods classes where computers are employed for data analysis and social science research.

Undergraduate students may earn honors in the major in political science, geography or international studies by fulfilling all the requirements for the specific degree (BA and BS) and meeting the honors requirements. The requirements for honors do not increase the credit hours necessary for the major.

Advanced Placement

Students interested in advanced placement credit should confer with the department chair. Information on credit awarded for qualifying scores on AP and IB subject examinations can be found on the equivalency charts on the Office of Undergraduate Admissions website at <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Programs

Bachelor of Arts Programs

- Geography (BA) (p. 277)
- Geography with a Major in Environment and Resources (BA) (p. 282)
- Geography with a Major in Urban Planning & Emergency/Hazards Management (BA) (p. 289)
- International Studies (BA) (p. 310)
- Political Science (BA) (p. 295)
- Political Science with a Major in International Affairs and Global Politics (BA) (p. 303)

Bachelor of Science Programs

- Geography (BS) (p. 279)
- Geography with a Major in Environment and Resources (BS) (p. 284)
- Geography with a Major in Geographic Information Systems (BS) (p. 287)
- Geography with a Major in Urban Planning & Emergency/Hazards Management (BS) (p. 291)
- Political Science (BS) (p. 298)
- Political Science with a Major in Analytics, Institutions, and Public Policy (BS) (p. 301)
- Political Science with a Major in International Affairs and Global Politics (BS) (p. 306)

Certificate Programs

- Environmental Resources and Policy Certificate (p. 294)
- Geographic Information Science Certificate (p. 294)
- Hazards and Emergency Management Certificate (p. 295)
- Spatial Analysis of Coastal Environments Certificate (p. 295)
- Urban Studies and Planning Certificate (p. 295)

Minor Programs

- Environment and Resources Minor (p. 294)
- Geography Minor (p. 294)
- International Studies Minor (p. 314)
- Political Geography Minor (p. 310)

- Political Science Minor (p. 309)
- Public Law Minor (p. 310)

Linked BA/BS in Geography and MA in Humanities

The linked BA/BS program in geography and the MA in humanities makes it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Please refer to the Humanities section of this Catalog for additional information on the linked program.

Linked BA/MA Program in International Studies

Qualified students can apply for admission to the linked BA/MA graduate degree program in international studies. The program allows exceptional students to count up to 12 credit hours of international studies courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credits for the undergraduate degree and 30 discrete credits for the graduate degree).

Requirements for Admission

Requirements for admission are:

1. A declared major in the BA program in international studies (BAIS).
2. A minimum of 60 hours completed, including at least six hours of 300/400 courses in the major.
3. A minimum GPA of 3.5 at the time of application.
4. Application to the linked BA/MA program in international studies, approved by both the BA and MA directors.
5. Take the GRE during the last semester of BAIS work with an expected minimum score of 1100 (verbal and quantitative totals).
6. Complete an application form for Old Dominion University graduate admission. Students specializing in a region (e.g. Asia, Latin America, etc.) are encouraged to complete a minor at the undergraduate level.

Program Requirements

Students pursuing the linked BA/MA program will fulfill all lower-level General Education requirements that have been approved for the BAIS and meet the requirements to earn a BA in international studies.

Method Courses

Select one of the following:	3
GEOG 308	Research Design
POLS 308	Research Design
HIST 201	Introduction to Historical Methods

Foreign Language *

Complete foreign language requirements	18-21

Core Courses in Geography, History, Political Science, and Cultural Studies

Five of the following six courses are required:	15
GEOG 305	World Resources
GEOG 320	Political Geography
HIST 415	Empire, Nations, and Industrialization: Evolution of the State System, 1815-1914
or HIST 416	States, Territories and International Organization: Evolution of the State System Since 1914
or HIST 414	Freedom, Rights and Revolution: Evolution of the State System 1648-1815
POLS 323	International Political Economy
POLS 324	International Relations Theory

Cultural Studies: **

BAIS Senior Seminar	3

Select one of the following: 3

GEOG 480W	Senior Seminar in International Studies
HIST 480W	Senior Seminar in International Studies
POLS 480W	Senior Seminar in International Studies
WLC 480W	Senior Seminar in International Studies
Other approved course	

Bridge Courses (to be taken during Senior Year) ***

IS 600	Research Methods in International Studies	3
IS 601	Seminar in International Relations Theory	3
IS 726	American Foreign Policy and World Order	3
ECON 650	International Economics	3

Total Credit Hours 54-57

- * A minimum of six credits beyond the requirement for the Bachelor of Arts (preferably in the language pursued for the BA) or demonstrated proficiency to that level as approved by the chair of the Department of World Languages and Cultures. Current language offerings include: Arabic, Chinese, French, German, Hebrew, Italian, Japanese, Latin, Russian, and Spanish. Native speakers of a language other than English may ask for a waiver. To be considered a native speaker, a student must be admitted to Old Dominion University with a passing TOEFL score.
- ** Students select one course that links culture to other aspects of international studies in an integrative, interdisciplinary way. Examples are World Cultural Studies (WCS) literature and film courses, English World Literature courses, and other culturally focused, international, interdisciplinary courses, and those from disciplines other than GEOG, HIST, and POLS as available and approved by the BAIS director.
- *** An overall GPA of at least 3.00 is required in these courses.

The BA in international studies will be awarded on completion of 120 credit hours including all the preceding courses and other University requirements for graduation.

Master of Arts Requirements

After obtaining the BA in international studies, students must complete the following:

1. Four graduate courses in one of the following fields of concentration (instead of the three required for MA students): international relations/ U.S. foreign policy; conflict and cooperation; international political economy and development; and interdependence and transnationalism.
2. Two electives at the 600 level or above. At least one should have a regional focus (e.g. Europe, Asia, Middle East, Latin America).

The MA in international studies requires 18 credits beyond the four Bridge Courses (the MAIS core courses). It is anticipated that a student who has completed the BAIS could thus take three courses in the fall and spring semesters. There will be no thesis option.

Additional Requirements

Students in the linked BA/MA program must also complete the following:

1. Fulfill the BAIS language requirement (which also fulfills MAIS requirements).
2. Take the GRE during the last semester of BAIS work with a minimum expected score of 1100 (verbal and quantitative totals).
3. Have an overall GPA of 3.00 in the seven core undergraduate courses and at least a GPA of 3.00 in the four Bridge courses (MAIS core courses).

- Maintain an overall GPA of 3.00. (Students failing to maintain a 3.00 GPA may revert to the regular BAIS degree and count up to 12 hours of completed graduate core courses toward the BAIS.)
- Complete an application form for Old Dominion University graduate admission. Students specializing in a region (e.g. Asia, Latin America, etc.) are encouraged to complete a minor at the undergraduate level.

Additional Explanations

- Students interested in the BA/MA program will be advised as early as possible, and admitted students will start the program during their Junior year in order to meet all the requirements. Thus, students may apply for admission to the linked program after they have earned 60 credits (including at least six hours of 300/400 courses in the major). Applications can be filed with the undergraduate director on or before April 1 for admission in the following Fall semester and on or before November 1 for admission in the following Spring semester. Notifications of acceptance to students will be forwarded by May 1 and December 1, respectively.
- Students fulfill the BAIS language requirement (which also fulfills MAIS requirements).
- Students will receive the BA degree after fulfilling all the requirements for the undergraduate degree. Students whose overall GPA drops below a 3.00 before attaining the BA degree can revert to the regular BAIS program and count any graduate credits they may have earned toward the BAIS. Students with a GPA of less than 3.00 at the end of their fourth year will not be permitted to continue toward the MA degree.
- Students in the linked program must meet the BAIS requirement that students must receive a minimum grade of C (2.00) in the following undergraduate courses:

ENGL 110C	English Composition	3
ENGL 211C	Writing, Rhetoric, and Research	3
GEOG 100S	Human Geography	3
POLS 100S	Introduction to International Politics	3
or POLS 102S	Introduction to Comparative Government and Politics	
ECON 201S	Principles of Macroeconomics	3
Select one of the following:		3
HIST 100H	Interpreting the World Past Since 1500	
HIST 101H	Interpreting the Asian Past	
HIST 102H	Interpreting the European Past	
HIST 103H	Interpreting the Latin America Past	
HIST 105H	Interpreting the African Past	
Not accepted for the major:		
HIST 104H	Interpreting the American Past	

- Please refer to the Graduate Catalog for additional information on the MA in international studies as well as the doctoral program in international studies.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/>

[graduate/stromecollegeofbusiness/](http://catalog.odu.edu/graduate/stromecollegeofbusiness/)) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Geography (BA)

Jennifer L. Whytlaw, Geography Program Director

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Mathematics: BS students must earn C- or better in STAT 130M.

Language and Culture: BS students' competence must be at the 102 level. BA students must have competence through the 202 level. Competence is not met by the associate degree for BA students.

Information Literacy and Research requirement satisfied in the major with GEOG 308.

The Nature of Science: OEAS 106N, OEAS 108N, OEAS 111N, or OEAS 112N is recommended for one of the two nature of science courses.

Impact of Technology requirement can be met with GEOG 306T.

Human Behavior: GEOG 100S and GEOG 101S cannot be used to satisfy this requirement.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

- Requirements for graduation include the following:
- Minimum of 120 credit hours.
 - Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
 - Minimum overall cumulative grade point average of C (2.00) in all courses taken.
 - Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
 - Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
 - Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
 - Completion of Senior Assessment.

Geography Major

General Education		
Complete lower-division requirements		35-44
Complete upper-division requirements (minimum of 6 credit hours)		6
Complete foreign language coursework through the 202 level		0-6
Geography Coursework		
GEOG 100S	Human Geography	3
GEOG 101S	Environmental Geography	3
GEOG 300	Maps and Geographic Information	3
GEOG 308	Research Design *	3
Select one of the following: **		3
GEOG 400W	Seminar in Geography	
GEOG 422W	Coastal Geography	
GEOG 454W	Latin America	
GEOG 480W	Senior Seminar in International Studies	
General Geography Major		
Geography 300-400 level electives ***		
GEOG: 300-400 level electives		12
GEOG 400-level electives		9
Total Credit Hours		77-92

* C- or better. Meets information literacy and research requirement.

** C or better required.

*** At least nine credit hours must be taken at the 400 level. Those wishing to pursue coursework in physical geography may substitute the following ocean, earth and atmospheric science courses for up to 12 hours of Geography credit: OEAS 306, OEAS 310, OEAS 344W, OEAS 412.

Three hours of internship count toward the 36 hours of geography courses. All majors must complete a capstone paper in the junior or senior year.

Options

As an option to the general geography curriculum, students may select one of the following majors to substitute for 12 credit hours of geography credit: urban planning and emergency/hazards management or environment and resources.

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Honors Program in Geography

- The requirements are as follows:
1. Attain an overall grade point average of 3.25.
 2. Attain a grade point average in the major of 3.50.
 3. Earn honors in nine hours of courses in the major at the 300/400 level, excluding internship and independent study courses, with no more than six hours taken from the same instructor.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity		3
Oral Communication		3
Elective or Language and Culture I (May be waived; See requirement details)		3
GEOG 100S	Human Geography	3
Credit Hours		15
Spring		
Interpreting the Past		3
Mathematical Skills		3
Human Behavior (GEOG 100S and GEOG 101S cannot be used)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
GEOG 101S	Environmental Geography	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3

Nature of Science I (OEAS 106N, OEAS 108N, OEAS 111N, or OEAS 112N is recommended)		4
Philosophy and Ethics		3
Language and Culture III		3
GEOG 300	Maps and Geographic Information	3
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
Impact of Technology (Can be met with GEOG 306T)		3
Language and Culture IV		3
GEOG 308	Research Design (Grade of C- or better required; meets Information Literacy and Research)	3
Credit Hours		16
Junior		
Fall		
GEOG Major Course		3
GEOG Major Course		3
GEOG-300/400-level elective		3
GEOG-300/400-level elective		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
Select one of the following: ¹		3
GEOG 400W	Seminar in Geography	
GEOG 422W	Coastal Geography	
GEOG 454W	Latin America	
GEOG 480W	Senior Seminar in International Studies	
GEOG Major course		3
GEOG Major course		3
GEOG-300/400-level elective		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
GEOG Major course		3
GEOG-300/400-level elective		3
GEOG 400-level elective		3
Minor or Elective		3
Elective Course		3
Credit Hours		15
Spring		
GEOG Major Course		3
GEOG 400-level elective		3
GEOG 400-level elective		3
Elective course		1

Minor or Elective	3
Credit Hours	13
Total Credit Hours	120

¹ Grade of C or better required

Linked BA/BS in Geography and MA in Humanities

The linked BA/BS program in geography and the MA in humanities makes it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Please refer to the Humanities section of this Catalog for additional information on the linked program.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Geography (BS)

Jennifer L Whytlaw, Geography Program Director

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Mathematics: BS students must earn C- or better in STAT 130M.

Language and Culture: BS students' competence must be at the 102 level. BA students must have competence through the 202 level. Competence is not met by the associate degree for BA students.

Information Literacy and Research requirement satisfied in the major with GEOG 308.

The Nature of Science: OEAS 106N, OEAS 108N, OEAS 111N, or OEAS 112N is recommended for one of the two nature of science courses.

Impact of Technology requirement can be met with GEOG 306T.

Human Behavior: GEOG 100S and GEOG 101S cannot be used to satisfy this requirement.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Geography Major

General Education

Complete lower-division requirements	35-44
Complete upper-division requirements (minimum of 6 credit hours)	6

Geography Coursework

GEOG 100S	Human Geography	3
GEOG 101S	Environmental Geography	3
GEOG 300	Maps and Geographic Information	3
GEOG 308	Research Design *	3
GEOG 418	Quantitative Methods **	3
Select one of the following: ***		3
GEOG 400W	Seminar in Geography	
GEOG 422W	Coastal Geography	
GEOG 454W	Latin America	
GEOG 480W	Senior Seminar in International Studies	

General Geography Major

Geography 300-400 level electives ****	
GEOG: 300-400 level electives	9
GEOG 400-level electives	9

Total Credit Hours	77-86

- * C- or better. Meets information literacy and research requirement.
- ** GEOG 402 and GEOG 404 may be substituted for GEOG 418.
- *** C or better required.
- **** At least nine credit hours must be taken at the 400 level. Those wishing to pursue coursework in physical geography may substitute the following ocean, earth and atmospheric science courses for up to 12 credit hours of geography credit: OEAS 306, OEAS 310, OEAS 344W, OEAS 412.

Three hours of internship count toward the 36 hours of geography courses. All majors must complete a capstone paper in the junior or senior year.

Options

As an option to the general geography curriculum, students may select one of the following majors to substitute for 12 credit hours of geography credit: urban planning and emergency/hazards management, environment and resources, or geographic information systems.

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Honors Program in Geography

The requirements are as follows:

1. Attain an overall grade point average of 3.25.
2. Attain a grade point average in the major of 3.50.
3. Earn honors in nine hours of courses in the major at the 300/400 level, excluding internship and independent study courses, with no more than six hours taken from the same instructor.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work

and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 101M	An Introduction to Mathematics for Critical Thinking (if needed before STAT 130M)	3
Oral Communication		3
Elective or Language and Culture I (May be waived; See requirement details)		3
GEOG 100S	Human Geography	3
Credit Hours		15
Spring		
Human Creativity		3
Interpreting the Past		3
Mathematical Skills:		
STAT 130M	Elementary Statistics (with a C- or better required)	3
Elective or Language and Culture II (May be waived; See requirement details)		3
GEOG 101S	Environmental Geography	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I - Recommended:		4
OEAS 106N	Introductory Oceanography	
OEAS 108N	Understanding Global Climate Change	
OEAS 111N	Physical Geology	
OEAS 112N	Historical Geology	
Philosophy and Ethics		3
Human Behavior (GEOG 100S and GEOG 101S cannot be used)		3
GEOG 308	Research Design (Grade of C- or better required; meets Information Literacy and Research)	3
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
Impact of Technology (Can be met with GEOG 306T)		3
GEOG 300	Maps and Geographic Information	3
GEOG Major Course		3
Credit Hours		16

Junior

Fall

GEOG Major Course	3
GEOG Major Course	3
GEOG-300/400-level elective	3
GEOG-300/400-level elective	3
Upper-Division General Education Course or Minor	3
Credit Hours	15

Spring

Select one of the following: ¹	3
GEOG 400W	Seminar in Geography
GEOG 422W	Coastal Geography
GEOG 454W	Latin America
GEOG 480W	Senior Seminar in International Studies
GEOG Major course	3
GEOG Major course	3
GEOG-300/400-level elective	3
Upper-Division General Education Course Minor	3
Credit Hours	15

Senior

Fall

GEOG Major Course	3
GEOG 400-level elective	3
GEOG 418	Quantitative Methods (GEOG 402 or GEOG 404 may be substituted)
Elective course	3
Minor or Elective	3
Credit Hours	15

Spring

GEOG 400-level elective	3
GEOG 400-level elective	3
Elective course	3
Elective course	1
Minor or Elective	3
Credit Hours	13
Total Credit Hours	120

¹ Grade of C or better required

Linked BA/BS in Geography and MA in Humanities

The linked BA/BS program in geography and the MA in humanities makes it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Please refer to the Humanities section of this Catalog for additional information on the linked program.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Geography with a Major in Environment and Resources (BA)

Jennifer L. Whytlaw, Geography Program Director

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3

Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Mathematics: BS students must earn C- or better in STAT 130M.

Language and Culture: BS students' competence must be at the 102 level. BA students must have competence through the 202 level. Competence is not met by the associate degree for BA students.

Information Literacy and Research requirement satisfied in the major with GEOG 308.

The Nature of Science: OEAS 106N, OEAS 108N, OEAS 111N, or OEAS 112N is recommended for one of the two nature of science courses.

Impact of Technology requirement can be met with GEOG 306T.

Human Behavior: GEOG 100S and GEOG 101S cannot be used to satisfy this requirement.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Environment and Resources Major

General Education

Complete lower-division requirements	35-44
Complete upper-division requirements (minimum of 6 credit hours)	6
Complete foreign language coursework through the 202 level	0-6

Geography Coursework

GEOG 100S	Human Geography	3
GEOG 101S	Environmental Geography	3

GEOG 300	Maps and Geographic Information	3
GEOG 308	Research Design *	3
Select one of the following: **		3
GEOG 400W	Seminar in Geography	
GEOG 422W	Coastal Geography	
GEOG 454W	Latin America	
GEOG 480W	Senior Seminar in International Studies	
Geography 300-400 level electives ***		
GEOG: 300-400 level electives		12
GEOG 400-level electives		9
Environment and Resources Major		
Students substitute the following courses for 12 elective Geography credit hours.		
GEOG 305	World Resources	
GEOG 401	Global Environmental Policy	
Select two of the following:		
POLS 335	Environmental Politics	
GEOG 405	Seminar in International Resource Management	
GEOG 420	Marine Geography	
GEOG 422W	Coastal Geography	
GEOG 424	Weather, Climate and Society	
GEOG 464	Advanced Environmental Geography Seminar	
Total Credit Hours		77-92

*	C- or better. Meets information literacy and research requirement.
**	C or better required.
***	At least nine credit hours must be taken at the 400 level. Those wishing to pursue coursework in physical geography may substitute the following ocean, earth and atmospheric science courses for up to 12 hours of Geography credit: OEAS 306, OEAS 310, OEAS 344W, OEAS 412.

Three hours of internship count toward the 36 hours of geography courses. All majors must complete a capstone paper in the junior or senior year.

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Honors Program in Geography

The requirements are as follows:

1. Attain an overall grade point average of 3.25.
2. Attain a grade point average in the major of 3.50.
3. Earn honors in nine hours of courses in the major at the 300/400 level, excluding internship and independent study courses, with no more than six hours taken from the same instructor.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3

Human Creativity		3
Oral Communication		3
Elective or Language and Culture I (May be waived; See requirement details)		3
GEOG 100S	Human Geography	3
Credit Hours		15
Spring		
Interpreting the Past		3
Mathematical Skills		3
Human Behavior (GEOG 100S and GEOG 101S cannot be used)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
GEOG 101S	Environmental Geography	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I (OEAS 106N, OEAS 108N, OEAS 111N, or OEAS 112N is recommended)		4
Philosophy and Ethics		3
Language and Culture III		3
GEOG 300	Maps and Geographic Information	3
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
Impact of Technology (Can be met with GEOG 306T)		3
Language and Culture IV		3
GEOG 308	Research Design (Grade of C- or better required; meets Information Literacy and Research)	3
Credit Hours		16
Junior		
Fall		
GEOG Major Course		3
GEOG Major Course		3
GEOG-300/400-level elective		3
GEOG-300/400-level elective		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
Select one of the following: ¹		3
GEOG 400W	Seminar in Geography	
GEOG 422W	Coastal Geography	
GEOG 454W	Latin America	
GEOG 480W	Senior Seminar in International Studies	
GEOG Major course		3
GEOG Major course		3

GEOG-300/400-level elective	3
Upper-Division General Education Course or Minor	3
Credit Hours	15
Senior	
Fall	
GEOG Major course	3
GEOG-300/400-level elective	3
GEOG 400-level elective	3
Minor or Elective	3
Elective Course	3
Credit Hours	15
Spring	
GEOG Major Course	3
GEOG 400-level elective	3
GEOG 400-level elective	3
Elective course	1
Minor or Elective	3
Credit Hours	13
Total Credit Hours	120

¹ Grade of C or better required

Linked BA/BS in Geography and MA in Humanities

The linked BA/BS program in geography and the MA in humanities makes it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Please refer to the Humanities section of this Catalog for additional information on the linked program.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking

to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Geography with a Major in Environment and Resources (BS)

Jennifer L. Whytlaw, Geography Program Director

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Mathematics: BS students must earn C- or better in STAT 130M.

Language and Culture: BS students' competence must be at the 102 level. BA students must have competence through the 202 level. Competence is not met by the associate degree for BA students.

Information Literacy and Research requirement satisfied in the major with GEOG 308.

The Nature of Science: OEAS 106N, OEAS 108N, OEAS 111N, or OEAS 112N is recommended for one of the two nature of science courses.

Impact of Technology requirement can be met with GEOG 306T.

Human Behavior: GEOG 100S and GEOG 101S cannot be used to satisfy this requirement.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Environment and Resources Major

General Education		
Complete lower-division requirements		35-44
Complete upper-division requirements (minimum of 6 credit hours)		6
Geography Coursework		
GEOG 100S	Human Geography	3
GEOG 101S	Environmental Geography	3
GEOG 300	Maps and Geographic Information	3
GEOG 308	Research Design *	3
GEOG 418	Quantitative Methods **	3
Select one of the following: ***		3
GEOG 400W	Seminar in Geography	
GEOG 422W	Coastal Geography	
GEOG 454W	Latin America	
GEOG 480W	Senior Seminar in International Studies	
Geography 300-400 level electives ****		
GEOG: 300-400 level electives		9
GEOG 400-level electives		9
Environment and Resources Major		
Students substitute the following courses for 12 elective Geography credit hours.		
GEOG 305	World Resources	
GEOG 401	Global Environmental Policy	
Select two of the following:		
POLS 335	Environmental Politics	
GEOG 405	Seminar in International Resource Management	
GEOG 420	Marine Geography	
GEOG 422W	Coastal Geography	
GEOG 424	Weather, Climate and Society	

GEOG 464	Advanced Environmental Geography Seminar	
Total Credit Hours		77-86
*	C- or better. Meets information literacy and research requirement.	
**	GEOG 402 and GEOG 404 may be substituted for GEOG 418.	
***	C or better required.	
****	At least nine credit hours must be taken at the 400 level. Those wishing to pursue coursework in physical geography may substitute the following ocean, earth and atmospheric science courses for up to 12 credit hours of geography credit: OEAS 306, OEAS 310, OEAS 344W, OEAS 412.	

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Honors Program in Geography

The requirements are as follows:

1. Attain an overall grade point average of 3.25.
2. Attain a grade point average in the major of 3.50.
3. Earn honors in nine hours of courses in the major at the 300/400 level, excluding internship and independent study courses, with no more than six hours taken from the same instructor.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 101M	An Introduction to Mathematics for Critical Thinking (if needed before STAT 130M)	3
Oral Communication		3
Elective or Language and Culture I (May be waived; See requirement details)		3
GEOG 100S	Human Geography	3
Credit Hours		15
Spring		
Human Creativity		3
Interpreting the Past		3
Mathematical Skills:		
STAT 130M	Elementary Statistics (with a C- or better required)	3
Elective or Language and Culture II (May be waived; See requirement details)		3
GEOG 101S	Environmental Geography	3
Credit Hours		15

Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I - Recommended:		4
OEAS 106N	Introductory Oceanography	
OEAS 108N	Understanding Global Climate Change	
OEAS 111N	Physical Geology	
OEAS 112N	Historical Geology	
Philosophy and Ethics		3
Human Behavior (GEOG 100S and GEOG 101S cannot be used)		3
GEOG 308	Research Design (Grade of C- or better required; meets Information Literacy and Research)	3
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
Impact of Technology (Can be met with GEOG 306T)		3
GEOG 300	Maps and Geographic Information	3
GEOG Major Course		3
Credit Hours		16
Junior		
Fall		
GEOG Major Course		3
GEOG Major Course		3
GEOG-300/400-level elective		3
GEOG-300/400-level elective		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
Select one of the following: ¹		3
GEOG 400W	Seminar in Geography	
GEOG 422W	Coastal Geography	
GEOG 454W	Latin America	
GEOG 480W	Senior Seminar in International Studies	
GEOG Major course		3
GEOG Major course		3
GEOG-300/400-level elective		3
Upper-Division General Education Course Minor		3
Credit Hours		15
Senior		
Fall		
GEOG Major Course		3
GEOG 400-level elective		3
GEOG 418	Quantitative Methods (GEOG 402 or GEOG 404 may be substituted)	3

Elective course	3
Minor or Elective	3
Credit Hours	15
Spring	
GEOG 400-level elective	3
GEOG 400-level elective	3
Elective course	3
Elective course	1
Minor or Elective	3
Credit Hours	13
Total Credit Hours	120

¹ Grade of C or better required

Linked BA/BS in Geography and MA in Humanities

The linked BA/BS program in geography and the MA in humanities makes it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Please refer to the Humanities section of this Catalog for additional information on the linked program.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Geography with a Major in Geographic Information Systems (BS)

Jennifer L. Whytlaw, Geography Program Director

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Mathematics: BS students must earn C- or better in STAT 130M.

Language and Culture: BS students' competence must be at the 102 level. BA students must have competence through the 202 level. Competence is not met by the associate degree for BA students.

Information Literacy and Research requirement satisfied in the major with GEOG 308.

The Nature of Science: OEAS 106N, OEAS 108N, OEAS 111N, or OEAS 112N is recommended for one of the two nature of science courses.

Impact of Technology requirement can be met with GEOG 306T.

Human Behavior: GEOG 100S and GEOG 101S cannot be used to satisfy this requirement.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.

- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Geographic Information Systems Major

General Education

Complete lower-division requirements	35-44
Complete upper-division requirements (minimum of 6 credit hours)	6

Geography Coursework

GEOG 100S	Human Geography	3
GEOG 101S	Environmental Geography	3
GEOG 300	Maps and Geographic Information	3
GEOG 308	Research Design *	3
GEOG 418	Quantitative Methods **	3
Select one of the following: ***		3

GEOG 400W	Seminar in Geography
GEOG 422W	Coastal Geography
GEOG 454W	Latin America
GEOG 480W	Senior Seminar in International Studies

Geography 300-400 level electives ****

GEOG: 300-400 level electives	9
GEOG 400-level electives	9

Geographic Information Systems Major

Students substitute the following courses for 12 elective Geography credit hours.

GEOG 402	Geographic Information Systems
GEOG 404	Digital Techniques for Remote Sensing
GEOG 419	Spatial Analysis of Coastal Environments
GEOG 432	Advanced GIS
GEOG 490	Applied Cartography/GIS

Total Credit Hours	77-86

- * C- or better. Meets information literacy and research requirement.
- ** GEOG 402 and GEOG 404 may be substituted for GEOG 418.
- *** C or better required.
- **** At least nine credit hours must be taken at the 400 level. Those wishing to pursue coursework in physical geography may substitute the following ocean, earth and atmospheric science courses for up to 12 credit hours of geography credit: OEAS 306, OEAS 310, OEAS 344W, OEAS 412.

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Honors Program in Geography

The requirements are as follows:

1. Attain an overall grade point average of 3.25.
2. Attain a grade point average in the major of 3.50.
3. Earn honors in nine hours of courses in the major at the 300/400 level, excluding internship and independent study courses, with no more than six hours taken from the same instructor.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 101M	An Introduction to Mathematics for Critical Thinking (if needed before STAT 130M)	3
Oral Communication		3
Elective or Language and Culture I (May be waived; See requirement details)		3
GEOG 100S	Human Geography	3
Credit Hours		15
Spring		
Human Creativity		3
Interpreting the Past		3
Mathematical Skills:		
STAT 130M	Elementary Statistics (with a C- or better required)	3
Elective or Language and Culture II (May be waived; See requirement details)		3
GEOG 101S	Environmental Geography	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I - Recommended:		4
OEAS 106N	Introductory Oceanography	
OEAS 108N	Understanding Global Climate Change	
OEAS 111N	Physical Geology	
OEAS 112N	Historical Geology	
Philosophy and Ethics		3
Human Behavior (GEOG 100S and GEOG 101S cannot be used)		3

GEOG 308	Research Design (Grade of C- or better required; meets Information Literacy and Research)	3
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
Impact of Technology (Can be met with GEOG 306T)		3
GEOG 300	Maps and Geographic Information	3
GEOG Major Course		3
Credit Hours		16
Junior		
Fall		
GEOG Major Course		3
GEOG Major Course		3
GEOG-300/400-level elective		3
GEOG-300/400-level elective		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
Select one of the following: ¹		3
GEOG 400W	Seminar in Geography	
GEOG 422W	Coastal Geography	
GEOG 454W	Latin America	
GEOG 480W	Senior Seminar in International Studies	
GEOG Major course		3
GEOG Major course		3
GEOG-300/400-level elective		3
Upper-Division General Education Course Minor		3
Credit Hours		15
Senior		
Fall		
GEOG Major Course		3
GEOG 400-level elective		3
GEOG 418	Quantitative Methods (GEOG 402 or GEOG 404 may be substituted)	3
Elective course		3
Minor or Elective		3
Credit Hours		15
Spring		
GEOG 400-level elective		3
GEOG 400-level elective		3
Elective course		3
Elective course		1
Minor or Elective		3
Credit Hours		13
Total Credit Hours		120

Linked BA/BS in Geography and MA in Humanities

The linked BA/BS program in geography and the MA in humanities makes it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Please refer to the Humanities section of this Catalog for additional information on the linked program.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Geography with a Major in Urban Planning & Emergency/Hazards Management (BA)

Jennifer L. Whytlaw, Geography Program Director

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Mathematics: BS students must earn C- or better in STAT 130M.

Language and Culture: BS students' competence must be at the 102 level. BA students must have competence through the 202 level. Competence is not met by the associate degree for BA students.

Information Literacy and Research requirement satisfied in the major with GEOG 308.

The Nature of Science: OEAS 106N, OEAS 108N, OEAS 111N, or OEAS 112N is recommended for one of the two nature of science courses.

Impact of Technology requirement can be met with GEOG 306T.

Human Behavior: GEOG 100S and GEOG 101S cannot be used to satisfy this requirement.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Urban Planning and Emergency/Hazards Management Major

General Education		
Complete lower-division requirements		35-44
Complete upper-division requirements (minimum of 6 credit hours)		6
Complete foreign language coursework through the 202 level		0-6
Geography Coursework		
GEOG 100S	Human Geography	3
GEOG 101S	Environmental Geography	3
GEOG 300	Maps and Geographic Information	3
GEOG 308	Research Design *	3
Select one of the following: **		3
GEOG 400W	Seminar in Geography	
GEOG 422W	Coastal Geography	
GEOG 454W	Latin America	
GEOG 480W	Senior Seminar in International Studies	
Geography 300-400 level electives ***		
GEOG: 300-400 level electives		12
GEOG 400-level electives		9
Urban Planning and Emergency/Hazards Management Major		
Students substitute the following courses for 12 elective Geography credit hours.		
GEOG 310	Geography of the City	
GEOG 306T	Hazards: Natural and Technological	
Select two of the following:		
GEOG 411	Urban and Regional Planning	
GEOG 412	Cities of the World	
GEOG 370	Introduction to Emergency Management	
GEOG 475	Urban Resiliency	
Total Credit Hours		77-92

*	C- or better. Meets information literacy and research requirement.
**	C or better required.
***	At least nine credit hours must be taken at the 400 level. Those wishing to pursue coursework in physical geography may substitute the following ocean, earth and atmospheric science courses for up to 12 hours of Geography credit: OEAS 306, OEAS 310, OEAS 344W, OEAS 412.

Three hours of internship count toward the 36 hours of geography courses. All majors must complete a capstone paper in the junior or senior year.

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Honors Program in Geography

The requirements are as follows:

1. Attain an overall grade point average of 3.25.
2. Attain a grade point average in the major of 3.50.
3. Earn honors in nine hours of courses in the major at the 300/400 level, excluding internship and independent study courses, with no more than six hours taken from the same instructor.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity		3
Oral Communication		3
Elective or Language and Culture I (May be waived; See requirement details)		3
GEOG 100S	Human Geography	3
Credit Hours		15
Spring		
Interpreting the Past		3
Mathematical Skills		3
Human Behavior (GEOG 100S and GEOG 101S cannot be used)		3
Elective or Language and Culture II (May be waived; See requirement details)		3
GEOG 101S	Environmental Geography	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I (OEAS 106N, OEAS 108N, OEAS 111N, or OEAS 112N is recommended)		4
Philosophy and Ethics		3
Language and Culture III		3
GEOG 300	Maps and Geographic Information	3
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
Impact of Technology (Can be met with GEOG 306T)		3
Language and Culture IV		3
GEOG 308	Research Design (Grade of C- or better required; meets Information Literacy and Research)	3
Credit Hours		16
Junior		
Fall		
GEOG Major Course		3
GEOG Major Course		3
GEOG-300/400-level elective		3
GEOG-300/400-level elective		3

Upper-Division General Education Course or Minor	3
Credit Hours	15
Spring	
Select one of the following: ¹	3
GEOG 400W Seminar in Geography	
GEOG 422W Coastal Geography	
GEOG 454W Latin America	
GEOG 480W Senior Seminar in International Studies	
GEOG Major course	3
GEOG Major course	3
GEOG-300/400-level elective	3
Upper-Division General Education Course or Minor	3
Credit Hours	15
Senior	
Fall	
GEOG Major course	3
GEOG-300/400-level elective	3
GEOG 400-level elective	3
Minor or Elective	3
Elective Course	3
Credit Hours	15
Spring	
GEOG Major Course	3
GEOG 400-level elective	3
GEOG 400-level elective	3
Elective course	1
Minor or Elective	3
Credit Hours	13
Total Credit Hours	120

¹ Grade of C or better required

Linked BA/BS in Geography and MA in Humanities

The linked BA/BS program in geography and the MA in humanities makes it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Please refer to the Humanities section of this Catalog for additional information on the linked program.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course

of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Geography with a Major in Urban Planning & Emergency/Hazards Management (BS)

Jennifer L. Whytlaw, Geography Program Director

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Mathematics: BS students must earn C- or better in STAT 130M.

Language and Culture: BS students' competence must be at the 102 level. BA students must have competence through the 202 level. Competence is not met by the associate degree for BA students.

Information Literacy and Research requirement satisfied in the major with GEOG 308.

The Nature of Science: OEAS 106N, OEAS 108N, OEAS 111N, or OEAS 112N is recommended for one of the two nature of science courses.

Impact of Technology requirement can be met with GEOG 306T.

Human Behavior: GEOG 100S and GEOG 101S cannot be used to satisfy this requirement.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Urban Planning and Emergency/Hazards Management Major

General Education

Complete lower-division requirements 35-44

Complete upper-division requirements (minimum of 6 credit hours) 6

Geography Coursework

GEOG 100S Human Geography 3

GEOG 101S Environmental Geography 3

GEOG 300 Maps and Geographic Information 3

GEOG 308 Research Design * 3

GEOG 418 Quantitative Methods ** 3

Select one of the following: *** 3

GEOG 400W Seminar in Geography

GEOG 422W Coastal Geography

GEOG 454W Latin America

GEOG 480W Senior Seminar in International Studies

Geography 300-400 level electives ****

GEOG: 300-400 level electives 9

GEOG 400-level electives 9

Urban Planning and Emergency/Hazards Management Major

Students substitute the following courses for 12 elective Geography credit hours.

GEOG 310 Geography of the City

GEOG 306T Hazards: Natural and Technological

Select two of the following:

GEOG 411 Urban and Regional Planning

GEOG 412 Cities of the World

GEOG 370 Introduction to Emergency Management

GEOG 475 Urban Resiliency

Total Credit Hours 77-86

* C- or better. Meets information literacy and research requirement.

** GEOG 402 and GEOG 404 may be substituted for GEOG 418.

*** C or better required.

**** At least nine credit hours must be taken at the 400 level. Those wishing to pursue coursework in physical geography may substitute the following ocean, earth and atmospheric science courses for up to 12 credit hours of geography credit: OEAS 306, OEAS 310, OEAS 344W, OEAS 412.

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Honors Program in Geography

The requirements are as follows:

1. Attain an overall grade point average of 3.25.
2. Attain a grade point average in the major of 3.50.
3. Earn honors in nine hours of courses in the major at the 300/400 level, excluding internship and independent study courses, with no more than six hours taken from the same instructor.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity		3
Oral Communication		3
Elective or Language and Culture I (May be waived; See requirement details)		3
GEOG 100S	Human Geography	3
Credit Hours		15
Spring		
Interpreting the Past		3
Mathematical Skills:		
STAT 130M	Elementary Statistics (with a C- or better required)	3
Human Behavior (GEOG 100S and GEOG 101S cannot be used)		3

Elective or Language and Culture II (May be waived; See requirement details)		3
GEOG 101S	Environmental Geography	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I (OEAS 106N, OEAS 108N, OEAS 111N, or OEAS 112N is recommended)		4
Philosophy and Ethics		3
Language and Culture III		3
GEOG 300	Maps and Geographic Information	3
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
Impact of Technology (Can be met with GEOG 306T)		3
Language and Culture IV		3
GEOG 308	Research Design (Grade of C- or better required; meets Information Literacy and Research)	3
Credit Hours		16
Junior		
Fall		
GEOG Major Course		3
GEOG Major Course		3
GEOG-300/400-level elective		3
GEOG-300/400-level elective		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
Select one of the following: ¹		3
GEOG 400W	Seminar in Geography	
GEOG 422W	Coastal Geography	
GEOG 454W	Latin America	
GEOG 480W	Senior Seminar in International Studies	
GEOG Major course		3
GEOG Major course		3
GEOG-300/400-level elective		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
GEOG Major course		3
GEOG-300/400-level elective		3
GEOG 400-level elective		3
Minor or Elective		3

Elective Course	3
Credit Hours	15
Spring	
GEOG Major Course	3
GEOG 400-level elective	3
GEOG 400-level elective	3
Elective course	1
Minor or Elective	3
Credit Hours	13
Total Credit Hours	120

¹ Grade of C or better required

Linked BA/BS in Geography and MA in Humanities

The linked BA/BS program in geography and the MA in humanities makes it possible for exceptional students to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Please refer to the Humanities section of this Catalog for additional information on the linked program.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://>

catalog.odu.edu/graduate/business/public-service/). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor

Geography Minor

One general minor, a minor with a specialization in environment and resources, and a minor in political geography are offered in geography. Each requires an introductory course as a prerequisite and 12 hours of 300/400-level courses. For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Requirements

GEOG 100S or GEOG 101S is a prerequisite for the minor and is not included in the calculation of the grade point average for the minor. The minor requires 12 hours of 300/400-level geography electives.

Minor

Environment and Resources Minor

One general minor, a minor with a specialization in environment and resources, and a minor in political geography are offered in geography. Each requires an introductory course as a prerequisite and 12 hours of 300/400-level courses. For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Requirements

GEOG 100S or GEOG 101S is a prerequisite for the minor and is not included in the calculation of the grade point average for the minor. Requirements for the minor are:

GEOG 305	World Resources	3
GEOG 405	Seminar in International Resource Management	3
Select two of the following:		6
GEOG 306T	Hazards: Natural and Technological	
GEOG 420	Marine Geography	
GEOG 422W	Coastal Geography	
Total Credit Hours		12

Certificate

Environmental Resources and Policy Certificate

The undergraduate certificate in environmental resources and policy is designed to educate students in the distribution and accessibility of environmental resources (i.e., fresh water and fossil fuels). The certificate is an affidavit of academic proficiency and is administered by the Department of Political Science and Geography. The certificate is available to undergraduates and non-degree seeking professionals who meet the requirements. Students with comparable professional experience may be able to satisfy competencies in selected courses through prior learning assessment.

For completion of the certificate, students must have a minimum cumulative grade point average of 2.00 in all courses specified as a requirement for the certificate and complete a minimum of six hours in upper-level courses required for the certificate through courses offered by Old Dominion University.

Requirements

Course requirements are as follows.

Core Courses		
GEOG 305	World Resources	3
GEOG 401	Global Environmental Policy	3
GEOG 464	Advanced Environmental Geography Seminar	3
Select two of the following:		6
POLS 335	Environmental Politics	
GEOG 405	Seminar in International Resource Management	
GEOG 420	Marine Geography	
GEOG 424	Weather, Climate and Society	
GEOG 422W	Coastal Geography	
GEOG 495	Topics in Geography (Study Abroad)	
Total Credit Hours		15

Certificate

Geographic Information Science Certificate

The certificate in geographic information science (GISci) provides a program for students and professionals pursuing careers in geographic information systems (GIS) and related spatial technologies (remote sensing, global positioning systems, cartography, and spatial data handling and analysis). Awarded upon completion of the requirements, the certificate is an affidavit of academic proficiency and is administered by the Department of Political Science and Geography. Students must take courses in the areas listed below and complete them with a cumulative GPA of 3.00 or higher and no grade below a C (2.00). Students must complete a minimum of six hours in upper-level courses required for the certificate through courses offered by Old Dominion University.

The certificate is available to undergraduate students and non-degree seeking professionals who meet the requirements. Students with comparable professional experience may be able to satisfy competencies in selected courses through examination.

Requirements

Students must complete the following courses:

Core Courses		
GEOG 300	Maps and Geographic Information	3
GEOG 402	Geographic Information Systems	3
GEOG 404	Digital Techniques for Remote Sensing	3
Developmental Courses		
Select two of the following:		6
GEOG 330	Field Methods (Prior Approval Required)	
GEOG 368	Internship in Geography (Prior Approval Required)	
GEOG 408	Cartography	
GEOG 419	Spatial Analysis of Coastal Environments	
GEOG 425	Internet Geographic Information Systems	
GEOG 432	Advanced GIS	
GEOG 463	GIS Programming	
GEOG 473	Geographic Information Systems for Emergency Management	
GEOG 490	Applied Cartography/GIS	
GEOG 495	Topics in Geography (Prior Approval Required)	

GEOG 497	Independent Research in Geography (Prior Approval Required)	
Total Credit Hours		15

Certificate

Hazards and Emergency Management Certificate

The undergraduate certificate in hazards and emergency management provides a program for students and professionals pursuing careers in emergency management and related hazards analysis. The certificate is an affidavit of academic proficiency and is administered by the Department of Political Science and Geography. The certificate is available to undergraduates and non-degree seeking professionals who meet the requirements. Students with comparable professional experience may be able to satisfy competencies in selected courses through prior learning assessment.

For completion of the certificate, students must have a minimum cumulative grade point average of 2.00 in all courses specified as a requirement for the certificate and complete a minimum of six hours in upper-level courses required for the certificate through courses offered by Old Dominion University.

Requirements

Students must complete the following courses:

Core Courses		
GEOG 306T	Hazards: Natural and Technological	3
GEOG 370	Introduction to Emergency Management	3
GEOG 475	Urban Resiliency	3
Select two of the following:		6
GEOG 368	Internship in Geography	
GEOG 419	Spatial Analysis of Coastal Environments	
GEOG 424	Weather, Climate and Society	
GEOG 460	Medical Geography	
GEOG 473	Geographic Information Systems for Emergency Management	
Total Credit Hours		15

Certificate

Spatial Analysis of Coastal Environments Certificate

The certificate in spatial analysis of coastal environments provides an interdisciplinary program for students wishing to pursue careers in coastal management or research, remote sensing, or geographic information systems (GIS) applications. Rendered upon completion of the requirements, the certificate is an academic affidavit comprised of courses in geography and ocean, earth and atmospheric sciences and is administered by the two departments. Students must take courses in the areas listed below and complete them with a cumulative GPA of 3.00 or higher and no grade below a C (2.00). Students must complete a minimum of six hours in upper-level courses required for the certificate through courses offered by Old Dominion University.

The certificate is available to postgraduate professionals who meet the requirements. Students with comparable professional experience may be able to show competence in selected courses through examination.

Students seeking graduate certification should refer to the Graduate Catalog.

Requirements

Core Courses		
GEOG 404	Digital Techniques for Remote Sensing	3

GEOG 462	Advanced Spatial Analysis	3
Interpretive Analysis Courses		
Select two of the following:		6
BIOL 404	Conservation Biology and Sustainable Development	
GEOG 420	Marine Geography	
GEOG 422W	Coastal Geography	
GEOG 490	Applied Cartography/GIS *	
GEOG 495	Topics in Geography *	
OEAS 306	Oceanography	
OEAS 344W	Geomorphology	
OEAS 495	Special Topics *	
Capstone Seminar		
GEOG 419	Spatial Analysis of Coastal Environments	3
or OEAS 419	Spatial Analysis of Coastal Environments	
Total Credit Hours		15

* Advanced approval required

Certificate

Urban Studies and Planning Certificate

The undergraduate certificate in urban studies and planning is a program for students and professionals pursuing careers in urban and adaptation planning, city or county management, and community resilience building. The certificate is an affidavit of academic proficiency and is administered by the Department of Political Science and Geography. The certificate is available to undergraduates and non-degree seeking professionals who meet the requirements. Students with comparable professional experience may be able to satisfy competencies in selected courses through prior learning assessment.

For completion of the certificate, students must have a minimum cumulative grade point average of 2.00 in all courses specified as a requirement for the certificate and complete a minimum of six hours in upper-level courses required for the certificate through courses offered by Old Dominion University.

Requirements

Course requirements are as follows.

Core Courses		
GEOG 310	Geography of the City	3
GEOG 411	Urban and Regional Planning	3
GEOG 412	Cities of the World	3
Select two of the following:		6
GEOG 320	Political Geography	
GEOG 321	World Economic Geography	
GEOG 417	GIS for Planning and Public Policy	
GEOG 475	Urban Resiliency	
POLS 300	Introduction to Public Policy	
POLS 331	State and Local Government	
Total Credit Hours		15

Bachelor of Arts

Political Science (BA)

Joshua Zingher, Chief Departmental Advisor

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Mathematics: BS requires C- or better in STAT 130M. STAT 130M is also recommended for the BA degree though MATH 102M, MATH 103M or MATH 162M are also acceptable.

Language and Culture: BS students' competence must be at the 102 level. BA students must have competence through the 202 level. Competence is not met by the associate degree for BA students.

Information Literacy and Research requirement satisfied in the major with POLS 308.

Human Behavior: ECON 201S is required and is not met by the associate degree.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.

- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Political Science Core

Foundation Courses

POLS 100S	Introduction to International Politics	3
POLS 101S	Introduction to American Politics	3
POLS 102S	Introduction to Comparative Government and Politics	3
POLS 308	Research Design (C- or better) *	3
ECON 202S	Principles of Microeconomics	3
or GEOG 100S	Human Geography	
Total Credit Hours		15

* Meets information literacy and research requirement.

Political Science 300-400 level electives

The BA program requires that at least nine hours are at the 400 level and a minimum of nine hours in each of two areas of study: American politics/public law and international relations/comparative politics. The BA in International Affairs and Global Politics requires students to take a different set of elective requirements tailored to that major. For the BA in Political Science and the BA in International Affairs and Global Politics, no more than three hours can be taken from POLS 367 and POLS 368 and no more than three hours can be taken from POLS 497. One elective must be writing intensive. All majors must complete and submit to the department a capstone paper in the junior or senior year.

POLS: 300-400 level electives	12
POLS: 300-400 level writing intensive (W) course *	3
POLS: 400-level electives	9
Total Credit Hours	24

* C or better required.

See course listings in this Catalog for elective choices.

Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6
Complete foreign language coursework through the 202 level	0-6

Political Science Core

Complete political science core	15

Political Science 300-400 Level Electives

Complete political science 300-400 level electives	24

Total Credit Hours	83-95

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Honors Program in Political Science

The requirements are as follows:

1. Attain an overall grade point average of 3.25.
2. Attain a grade point average in the major of 3.50.
3. Earn honors in nine hours of courses in the major at the 300/400 level, excluding internship and independent study courses, with no more than six hours taken from the same instructor.

Double Majoring in Philosophy and Political Science

The departments of Political Science and Geography and Philosophy and Religious Studies have established an arrangement that makes it possible to complete a double major in as few as 60 hours, only 9 credits more than the 51 required to major in Political Science and minor in Philosophy.

Political Science majors double majoring in Philosophy will be allowed to count any two of the following Philosophy courses as Political Science electives:

PHIL 365	Race & Power	3
PHIL 410	Social and Political Philosophy	3
PHIL 411	Post-Modernism and Post-Structuralism	3
PHIL 412	Philosophy of Law	3
PHIL 430	Marx and Hegel	3

These courses will not count toward the requirement to take a specific number of hours in the American politics/public law and international relations/comparative politics areas. Philosophy "topics" courses and PHIL 442E may also be counted as Political Science electives when the topic covered is appropriate; prior approval is required from the chief departmental advisor of Political Science and Geography.

Philosophy majors double majoring in political science may count any two of the following Political Science courses toward their philosophy major:

POLS 309	Race, Culture and Public Policy	3
POLS 310	Political Theory	3
POLS 312	American Political Thought	3
POLS 403	American Constitutional Law: First Amendment	3
POLS 408	American Constitutional Law: Individual Rights	3
POLS 409	American Constitutional Law: Powers of Government	3
POLS 419	Jurisprudence: History of Legal Theory	3

These courses will count as Political-Legal electives; students will still be required to take 6 hours of Political-Legal core courses. Students doing the linked BA/MA in Philosophy and Humanities can count only one 500-level Political Science course as a "bridge" course. Certain Political Science "topics" courses may be counted as Philosophy electives with prior approval from the Philosophy and Religious Studies Department.

Students interested in double majoring in philosophy and a subject other than political science should consult the chief departmental advisor for Philosophy and Religious Studies; there may be some opportunity for double counting at least one class.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills (STAT 130M recommended; MATH 102M/ MATH 103M or higher acceptable)		3
Oral Communication		3
Elective or Language and Culture I (May be waived; See requirement details)		3

POLS 101S	Introduction to American Politics	3
Credit Hours		15
Spring		
Human Behavior:		
ECON 201S	Principles of Macroeconomics	3
Interpreting the Past		3
Human Creativity		3
Elective or Language and Culture II (May be waived; See requirement details)		3
POLS 100S	Introduction to International Politics	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Philosophy and Ethics		3
ECON 202S or GEOG 100S	Principles of Microeconomics or Human Geography	3
Credit Hours		16
Spring		
Impact of Technology		3
Nature of Science II		4
Language and Culture IV		3
Literature		3
POLS 102S	Introduction to Comparative Government and Politics	3
Credit Hours		16
Junior		
Fall		
POLS 308	Research Design (Grade of C- or better required - Meets Information Literacy and Research)	3
POLS-300/400-level course		3
POLS-300/400-level course		3
POLS-300/400-level course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
POLS-300/400-level course		3
POLS-400-level course		3
POLS-300/400-level "W" course (Grade of C or better required)		3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
POLS-400-level course		3

Elective course	3
Elective course	3
Elective course	3
Minor or Elective	3
Credit Hours	15
Spring	
POLS-400-level course	3
Elective course	3
Elective course	3
Elective course	1
Minor or Elective	3
Credit Hours	13
Total Credit Hours	120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Political Science (BS)

Joshua Zingher, Chief Departmental Advisor

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Mathematics: BS requires C- or better in STAT 130M. STAT 130M is also recommended for the BA degree though MATH 102M, MATH 103M or MATH 162M are also acceptable.

Language and Culture: BS students' competence must be at the 102 level. BA students must have competence through the 202 level. Competence is not met by the associate degree for BA students.

Information Literacy and Research requirement satisfied in the major with POLS 308.

Human Behavior: ECON 201S is required and is not met by the associate degree.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.

- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Political Science Core

Foundation Courses

POLS 100S	Introduction to International Politics	3
POLS 101S	Introduction to American Politics	3
POLS 102S	Introduction to Comparative Government and Politics	3
POLS 308	Research Design (C- or better) *	3
POLS 418	Quantitative Methods	3
ECON 202S	Principles of Microeconomics	3
or GEOG 100S	Human Geography	
Total Credit Hours		18

* Meets information literacy and research requirement.

Political Science 300-400 level electives

The BS program requires that at least nine hours are at the 400 level. The BS in Political Science requires a minimum of nine hours in each of two areas of study: American politics/public law and international relations/comparative politics. The BS in International Affairs and Global Politics and the BS in Analytics, Institutions, and Public Policy require students to take a different set of elective requirements tailored to those majors. For the BS in Political Science, International Affairs and Global Politics, and Analytics, Institutions, and Public Policy majors, no more than three hours can be taken from POLS 367 and POLS 368 and no more than three hours can be taken from POLS 497. One elective must be writing intensive. All majors must complete and submit to the department a capstone paper in the junior or senior year.

POLS: 300-400 level electives	9
POLS: 300-400 level writing intensive (W) course *	3
POLS: 400-level electives	9
Total Credit Hours	21

* C or better required.

See course listings in this Catalog for elective choices.

Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6

Political Science Core

Complete political science core	18

Political Science 300-400 Level Electives

Complete political science 300-400 level electives	21

Total Credit Hours	83-89

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Honors Program in Political Science

The requirements are as follows:

1. Attain an overall grade point average of 3.25.
2. Attain a grade point average in the major of 3.50.

3. Earn honors in nine hours of courses in the major at the 300/400 level, excluding internship and independent study courses, with no more than six hours taken from the same instructor.

Double Majoring in Philosophy and Political Science

The departments of Political Science and Geography and Philosophy and Religious Studies have established an arrangement that makes it possible to complete a double major in as few as 60 hours, only 9 credits more than the 51 required to major in Political Science and minor in Philosophy.

Political Science majors double majoring in Philosophy will be allowed to count any two of the following Philosophy courses as Political Science electives:

PHIL 365	Race & Power	3
PHIL 410	Social and Political Philosophy	3
PHIL 411	Post-Modernism and Post-Structuralism	3
PHIL 412	Philosophy of Law	3
PHIL 430	Marx and Hegel	3

These courses will not count toward the requirement to take a specific number of hours in the American politics/public law and international relations/comparative politics areas. Philosophy "topics" courses and PHIL 442E may also be counted as Political Science electives when the topic covered is appropriate; prior approval is required from the chief departmental advisor of Political Science and Geography.

Philosophy majors double majoring in political science may count any two of the following Political Science courses toward their philosophy major:

POLS 309	Race, Culture and Public Policy	3
POLS 310	Political Theory	3
POLS 312	American Political Thought	3
POLS 403	American Constitutional Law: First Amendment	3
POLS 408	American Constitutional Law: Individual Rights	3
POLS 409	American Constitutional Law: Powers of Government	3
POLS 419	Jurisprudence: History of Legal Theory	3

These courses will count as Political-Legal electives; students will still be required to take 6 hours of Political-Legal core courses. Students doing the linked BA/MA in Philosophy and Humanities can count only one 500-level Political Science course as a "bridge" course. Certain Political Science "topics" courses may be counted as Philosophy electives with prior approval from the Philosophy and Religious Studies Department.

Students interested in double majoring in philosophy and a subject other than political science should consult the chief departmental advisor for Philosophy and Religious Studies; there may be some opportunity for double counting at least one class.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3

MATH 101M	An Introduction to Mathematics for Critical Thinking (If needed before STAT 130M)	3
Oral Communication		3
Elective or Language and Culture I (May be waived; See requirement details)		3
POLS 101S	Introduction to American Politics	3
Credit Hours		15
Spring		
Human Behavior:		
ECON 201S	Principles of Macroeconomics	3
STAT 130M	Elementary Statistics (Grade of C- or better required)	3
Human Creativity		3
Elective or Language and Culture II (May be waived; See requirement details)		3
POLS 100S	Introduction to International Politics	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Interpreting the Past		3
Philosophy and Ethics		3
POLS 102S	Introduction to Comparative Government and Politics	3
Credit Hours		16
Spring		
Impact of Technology		3
Nature of Science II		4
Literature		3
ECON 202S or GEOG 100S	Principles of Microeconomics or Human Geography	3
POLS-300/400-level course		3
Credit Hours		16
Junior		
Fall		
POLS 308	Research Design (Grade of C- or better required - Meets Information Literacy and Research)	3
POLS-300/400-level course		3
Elective course		3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
POLS-300/400-level "W" course (Grade of C or better required)		3
POLS 418	Quantitative Methods	3
Elective course		3

Elective course	3
Upper-Division General Education Course or Minor	3
Credit Hours	15
Senior	
Fall	
POLS-300/400-level course	3
POLS-400-level course	3
Elective course	3
Elective course	3
Minor or Elective	3
Credit Hours	15
Spring	
POLS-400-level course	3
POLS-400-level course	3
Elective course	3
Elective course	1
Minor or Elective	3
Credit Hours	13
Total Credit Hours	120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional

information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Political Science with a Major in Analytics, Institutions, and Public Policy (BS)

Joshua Zingher, Chief Departmental Advisor

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Mathematics: BS requires C- or better in STAT 130M. STAT 130M is also recommended for the BA degree though MATH 102M, MATH 103M or MATH 162M are also acceptable.

Language and Culture: BS students' competence must be at the 102 level. BA students must have competence through the 202 level. Competence is not met by the associate degree for BA students.

Information Literacy and Research requirement satisfied in the major with POLS 308.

Human Behavior: ECON 201S is required and is not met by the associate degree.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Political Science Core

Foundation Courses

POLS 100S	Introduction to International Politics	3
POLS 101S	Introduction to American Politics	3
POLS 102S	Introduction to Comparative Government and Politics	3
POLS 308	Research Design (C- or better) *	3
POLS 418	Quantitative Methods	3
ECON 202S	Principles of Microeconomics	3
or GEOG 100S	Human Geography	
Total Credit Hours		18

* Meets information literacy and research requirement.

Political Science 300-400 level electives

The BS program requires that at least nine hours are at the 400 level. The BS in Political Science requires a minimum of nine hours in each of two areas of study: American politics/public law and international relations/comparative politics. The BS in International Affairs and Global Politics and the BS in Analytics, Institutions, and Public Policy require students to take a different set of elective requirements tailored to those majors. For the BS in Political Science, International Affairs and Global Politics, and Analytics, Institutions, and Public Policy majors, no more than three hours can be taken from POLS 367 and POLS 368 and no more than three hours can be taken from POLS 497. One elective must be writing intensive. All majors must complete and submit to the department a capstone paper in the junior or senior year.

POLS: 300-400 level electives	9
POLS: 300-400 level writing intensive (W) course *	3
POLS: 400-level electives	9
Total Credit Hours	21

* C or better required.

See course listings in this Catalog for elective choices.

Analytics, Institutions, and Public Policy Major

As an alternative to the traditional political science curriculum, students may major in one of the following areas: 1) International Affairs and Global Politics or 2) Analytics, Institutions, and Public Policy. The requirements for the major in Analytics, Institutions and Public Policy are outlined below. All core requirements are unchanged from the traditional BA and BS programs in political science, but the elective requirements differ as specified below.

General Education	
Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6
Political Science Core	
Complete Political Science core requirements	18
Political Science Coursework	
Select a minimum of five courses from the following three areas	15
Political Institutions	
Select at least one of the following:	
POLS 306	Judicial Process and Behavior
POLS 311	Virginia Politics and Government
POLS 331	State and Local Government
POLS 400	Congress
POLS 407	American Presidency
Public Policy	
Select at least three of the following:	
POLS 300	Introduction to Public Policy
POLS 309	Race, Culture and Public Policy
POLS 326W	American Foreign Policy
POLS 327W	Politics of National Security
POLS 335	Environmental Politics
POLS 410	African American Politics
POLS 414	Politics of Education
POLS 425W	Cybersecurity Strategy and Policy
Political Behavior	
Select at least one of the following:	
POLS 319	Lobbies and Interest Groups
POLS 333	Media and Politics
POLS 334	Electoral Politics
POLS 434	Political Behavior and Public Opinion in the United States
POLS: 300-400 Level Electives	6
Total Credit Hours	83-89

Students can apply POLS 481 American Politics Seminar, or POLS 368 Internship, or an additional advanced analytics class toward the total number of major classes.

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Honors Program in Political Science

The requirements are as follows:

1. Attain an overall grade point average of 3.25.
2. Attain a grade point average in the major of 3.50.
3. Earn honors in nine hours of courses in the major at the 300/400 level, excluding internship and independent study courses, with no more than six hours taken from the same instructor.

Double Majoring in Philosophy and Political Science

The departments of Political Science and Geography and Philosophy and Religious Studies have established an arrangement that makes it possible to complete a double major in as few as 60 hours, only 9 credits more than the 51 required to major in Political Science and minor in Philosophy.

Political Science majors double majoring in Philosophy will be allowed to count any two of the following Philosophy courses as Political Science electives:

PHIL 365	Race & Power	3
PHIL 410	Social and Political Philosophy	3
PHIL 411	Post-Modernism and Post-Structuralism	3
PHIL 412	Philosophy of Law	3
PHIL 430	Marx and Hegel	3

These courses will not count toward the requirement to take a specific number of hours in the American politics/public law and international relations/comparative politics areas. Philosophy "topics" courses and PHIL 442E may also be counted as Political Science electives when the topic covered is appropriate; prior approval is required from the chief departmental advisor of Political Science and Geography.

Philosophy majors double majoring in political science may count any two of the following Political Science courses toward their philosophy major:

POLS 309	Race, Culture and Public Policy	3
POLS 310	Political Theory	3
POLS 312	American Political Thought	3
POLS 403	American Constitutional Law: First Amendment	3
POLS 408	American Constitutional Law: Individual Rights	3
POLS 409	American Constitutional Law: Powers of Government	3
POLS 419	Jurisprudence: History of Legal Theory	3

These courses will count as Political-Legal electives; students will still be required to take 6 hours of Political-Legal core courses. Students doing the linked BA/MA in Philosophy and Humanities can count only one 500-level Political Science course as a "bridge" course. Certain Political Science "topics" courses may be counted as Philosophy electives with prior approval from the Philosophy and Religious Studies Department.

Students interested in double majoring in philosophy and a subject other than political science should consult the chief departmental advisor for Philosophy and Religious Studies; there may be some opportunity for double counting at least one class.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 101M	An Introduction to Mathematics for Critical Thinking (If needed before STAT 130M)	3
Oral Communication		3
Elective or Language and Culture I (May be waived; See requirement details)		3
POLS 101S	Introduction to American Politics	3
Credit Hours		15
Spring		
Human Behavior: ECON 201S		3
STAT 130M	Elementary Statistics (Grade of C- or better required)	3
Human Creativity		3

Elective or Language and Culture II (May be waived; See requirement details)		3
POLS 100S	Introduction to International Politics	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Interpreting the Past		3
Philosophy and Ethics		3
POLS 102S	Introduction to Comparative Government and Politics	3
Credit Hours		16
Spring		
Impact of Technology		3
Nature of Science II		4
Literature		3
ECON 202S or GEOG 100S	Principles of Microeconomics or Human Geography	3
POLS-300/400-level course		3
Credit Hours		16
Junior		
Fall		
POLS 308	Research Design (Grade of C- or better required - Meets Information Literacy and Research)	3
POLS-300/400-level course		3
Elective course		3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
POLS-300/400-level "W" course (Grade of C or better required)		3
POLS 418	Quantitative Methods	3
Elective course		3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
POLS-300/400-level course		3
POLS-400-level course		3
Elective course		3
Elective course		3
Minor or Elective		3
Credit Hours		15
Spring		
POLS-400-level course		3
POLS-400-level course		3

Elective course	3
Elective course	1
Minor or Elective	3
Credit Hours	13
Total Credit Hours	120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Political Science with a Major in International Affairs and Global Politics (BA)

Joshua Zingher, Chief Departmental Advisor

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3

Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Mathematics: BS requires C- or better in STAT 130M. STAT 130M is also recommended for the BA degree though MATH 102M, MATH 103M or MATH 162M are also acceptable.

Language and Culture: BS students' competence must be at the 102 level. BA students must have competence through the 202 level. Competence is not met by the associate degree for BA students.

Information Literacy and Research requirement satisfied in the major with POLS 308.

Human Behavior: ECON 201S is required and is not met by the associate degree.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Political Science Core

Foundation Courses

POLS 100S	Introduction to International Politics	3
POLS 101S	Introduction to American Politics	3
POLS 102S	Introduction to Comparative Government and Politics	3
POLS 308	Research Design (C- or better) *	3
ECON 202S	Principles of Microeconomics	3
or GEOG 100S	Human Geography	
Total Credit Hours		15

* Meets information literacy and research requirement.

Political Science 300-400 level electives

The BA program requires that at least nine hours are at the 400 level and a minimum of nine hours in each of two areas of study: American politics/public law and international relations/comparative politics. The BA in International Affairs and Global Politics requires students to take a different set of elective requirements tailored to that major. For the BA in Political Science and the BA in International Affairs and Global Politics, no more than three hours can be taken from POLS 367 and POLS 368 and no more than three hours can be taken from POLS 497. One elective must be writing intensive. All majors must complete and submit to the department a capstone paper in the junior or senior year.

POLS: 300-400 level electives	12
POLS: 300-400 level writing intensive (W) course *	3
POLS: 400-level electives	9
Total Credit Hours	24

* C or better required.

See course listings in this Catalog for elective choices.

International Affairs and Global Politics Major

As an alternative to the traditional political science curriculum, students may major in one of the following areas: 1) International Affairs and Global Politics or 2) Analytics, Institutions, and Public Policy. The requirements for the major in International Affairs and Global Politics are outlined below. All foundational courses are unchanged from the traditional BA and BS programs in political science, although the elective requirements differ as specified below.

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6
Complete foreign language coursework through the 202 level	0-6

Political Science Core

Complete Political Science core requirements	15

Political Science Coursework

Select a minimum of six courses from the following three areas	18

International Relations and Foreign Policy

Select at least two of the following:

POLS 313	United Nations Seminar
POLS 320	United Nations
POLS 321W	International Organizations
POLS 323	International Political Economy
POLS 324	International Relations Theory
POLS 326W	American Foreign Policy
POLS 327W	Politics of National Security

POLS 332W	Europe in World Affairs
POLS 421	International Law
POLS 424	International Organization
POLS 437	International Relations in East Asia
POLS 439	International Relations of African States
POLS 470	African Americans and Foreign Affairs

Comparative Politics

Select at least two of the following:

POLS 314	European Politics
POLS 316	Politics of Africa
POLS 328	Russian Politics
POLS 336	South Asia Since Independence
POLS 337	Latin American Politics
POLS 338W	Politics of East Asia
POLS 435	Chinese Politics
POLS 436	Japanese Politics
POLS 442	Twentieth Century Dictatorships
POLS 461	Seminar in European Politics
POLS 466	Politics of the Middle East

Global Public Policy

Select at least one of the following:

POLS 325W	World Politics
POLS 350T	Technology and War
POLS 401	Global Environmental Policy
POLS 425W	Cybersecurity Strategy and Policy
POLS 445	Globalization: Dynamics and Implications
POLS 455	The Politics of Climate Change
POLS 458T	Weapons of Mass Destruction in Global Security
POLS 480W	Senior Seminar in International Studies

POLS: 300-400 Level Electives 6

Total Credit Hours 83-95

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Honors Program in Political Science

The requirements are as follows:

1. Attain an overall grade point average of 3.25.
2. Attain a grade point average in the major of 3.50.
3. Earn honors in nine hours of courses in the major at the 300/400 level, excluding internship and independent study courses, with no more than six hours taken from the same instructor.

Double Majoring in Philosophy and Political Science

The departments of Political Science and Geography and Philosophy and Religious Studies have established an arrangement that makes it possible to complete a double major in as few as 60 hours, only 9 credits more than the 51 required to major in Political Science and minor in Philosophy.

Political Science majors double majoring in Philosophy will be allowed to count any two of the following Philosophy courses as Political Science electives:

PHIL 365	Race & Power	3
PHIL 410	Social and Political Philosophy	3
PHIL 411	Post-Modernism and Post-Structuralism	3
PHIL 412	Philosophy of Law	3
PHIL 430	Marx and Hegel	3

These courses will not count toward the requirement to take a specific number of hours in the American politics/public law and international relations/comparative politics areas. Philosophy "topics" courses and PHIL 442E may also be counted as Political Science electives when the topic covered is appropriate; prior approval is required from the chief departmental advisor of Political Science and Geography.

Philosophy majors double majoring in political science may count any two of the following Political Science courses toward their philosophy major:

POLS 309	Race, Culture and Public Policy	3
POLS 310	Political Theory	3
POLS 312	American Political Thought	3
POLS 403	American Constitutional Law: First Amendment	3
POLS 408	American Constitutional Law: Individual Rights	3
POLS 409	American Constitutional Law: Powers of Government	3
POLS 419	Jurisprudence: History of Legal Theory	3

These courses will count as Political-Legal electives; students will still be required to take 6 hours of Political-Legal core courses. Students doing the linked BA/MA in Philosophy and Humanities can count only one 500-level Political Science course as a "bridge" course. Certain Political Science "topics" courses may be counted as Philosophy electives with prior approval from the Philosophy and Religious Studies Department.

Students interested in double majoring in philosophy and a subject other than political science should consult the chief departmental advisor for Philosophy and Religious Studies; there may be some opportunity for double counting at least one class.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills (STAT 130M recommended; MATH 102M/ MATH 103M or higher acceptable)		3
Oral Communication		3
Elective or Language and Culture I (May be waived; See requirement details)		3
POLS 101S	Introduction to American Politics	3
Credit Hours		15
Spring		
Human Behavior:		
ECON 201S	Principles of Macroeconomics	3
Interpreting the Past		3
Human Creativity		3
Elective or Language and Culture II (May be waived; See requirement details)		3
POLS 100S	Introduction to International Politics	3
Credit Hours		15

Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Philosophy and Ethics		3
ECON 202S or GEOG 100S	Principles of Microeconomics or Human Geography	3
Credit Hours		16
Spring		
Impact of Technology		3
Nature of Science II		4
Language and Culture IV		3
Literature		3
POLS 102S	Introduction to Comparative Government and Politics	3
Credit Hours		16
Junior		
Fall		
POLS 308	Research Design (Grade of C- or better required - Meets Information Literacy and Research)	3
POLS-300/400-level course		3
POLS-300/400-level course		3
POLS-300/400-level course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
POLS-300/400-level course		3
POLS-400-level course		3
POLS-300/400-level "W" course (Grade of C or better required)		3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
POLS-400-level course		3
Elective course		3
Elective course		3
Elective course		3
Minor or Elective		3
Credit Hours		15
Spring		
POLS-400-level course		3
Elective course		3
Elective course		3
Elective course		1

Minor or Elective	3
Credit Hours	13
Total Credit Hours	120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Political Science with a Major in International Affairs and Global Politics (BS)

Joshua Zingher, Chief Departmental Advisor

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3

Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Mathematics: BS requires C- or better in STAT 130M. STAT 130M is also recommended for the BA degree though MATH 102M, MATH 103M or MATH 162M are also acceptable.

Language and Culture: BS students' competence must be at the 102 level. BA students must have competence through the 202 level. Competence is not met by the associate degree for BA students.

Information Literacy and Research requirement satisfied in the major with POLS 308.

Human Behavior: ECON 201S is required and is not met by the associate degree.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Political Science Core

Foundation Courses

POLS 100S	Introduction to International Politics	3
POLS 101S	Introduction to American Politics	3

POLS 102S	Introduction to Comparative Government and Politics	3
POLS 308	Research Design (C- or better) *	3
POLS 418	Quantitative Methods	3
ECON 202S or GEOG 100S	Principles of Microeconomics Human Geography	3
Total Credit Hours		18

* Meets information literacy and research requirement.

Political Science 300-400 level electives

The BS program requires that at least nine hours are at the 400 level. The BS in Political Science requires a minimum of nine hours in each of two areas of study: American politics/public law and international relations/comparative politics. The BS in International Affairs and Global Politics and the BS in Analytics, Institutions, and Public Policy require students to take a different set of elective requirements tailored to those majors. For the BS in Political Science, International Affairs and Global Politics, and Analytics, Institutions, and Public Policy majors, no more than three hours can be taken from POLS 367 and POLS 368 and no more than three hours can be taken from POLS 497. One elective must be writing intensive. All majors must complete and submit to the department a capstone paper in the junior or senior year.

POLS: 300-400 level electives	9
POLS: 300-400 level writing intensive (W) course *	3
POLS: 400-level electives	9
Total Credit Hours	21

* C or better required.

See course listings in this Catalog for elective choices.

International Affairs and Global Politics Major

As an alternative to the traditional political science curriculum, students may major in one of the following areas: 1) International Affairs and Global Politics or 2) Analytics, Institutions, and Public Policy. The requirements for the major in International Affairs and Global Politics are outlined below. All foundational courses are unchanged from the traditional Political Science major, but the elective requirements differ as outlined below.

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6

Political Science Core

Complete Political Science core requirements	18

Political Science Coursework

Select a minimum of five courses from the following three areas	15

International Relations and Foreign Policy

Select at least two of the following:

POLS 313	United Nations Seminar
POLS 320	United Nations
POLS 321W	International Organizations
POLS 323	International Political Economy
POLS 324	International Relations Theory
POLS 326W	American Foreign Policy
POLS 327W	Politics of National Security
POLS 332W	Europe in World Affairs
POLS 421	International Law
POLS 424	International Organization
POLS 437	International Relations in East Asia

POLS 439	International Relations of African States
POLS 470	African Americans and Foreign Affairs

Comparative Politics

Select at least two of the following:

POLS 314	European Politics
POLS 316	Politics of Africa
POLS 328	Russian Politics
POLS 336	South Asia Since Independence
POLS 337	Latin American Politics
POLS 338W	Politics of East Asia
POLS 435	Chinese Politics
POLS 436	Japanese Politics
POLS 442	Twentieth Century Dictatorships
POLS 461	Seminar in European Politics
POLS 466	Politics of the Middle East

Global Public Policy

Select at least one of the following:

POLS 325W	World Politics
POLS 350T	Technology and War
POLS 401	Global Environmental Policy
POLS 425W	Cybersecurity Strategy and Policy
POLS 445	Globalization: Dynamics and Implications
POLS 455	The Politics of Climate Change
POLS 458T	Weapons of Mass Destruction in Global Security
POLS 480W	Senior Seminar in International Studies

POLS: 300-400 Level Electives 6

Total Credit Hours 83-89

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Honors Program in Political Science

The requirements are as follows:

1. Attain an overall grade point average of 3.25.
2. Attain a grade point average in the major of 3.50.
3. Earn honors in nine hours of courses in the major at the 300/400 level, excluding internship and independent study courses, with no more than six hours taken from the same instructor.

Double Majoring in Philosophy and Political Science

The departments of Political Science and Geography and Philosophy and Religious Studies have established an arrangement that makes it possible to complete a double major in as few as 60 hours, only 9 credits more than the 51 required to major in Political Science and minor in Philosophy.

Political Science majors double majoring in Philosophy will be allowed to count any two of the following Philosophy courses as Political Science electives:

PHIL 365	Race & Power	3
PHIL 410	Social and Political Philosophy	3
PHIL 411	Post-Modernism and Post-Structuralism	3
PHIL 412	Philosophy of Law	3
PHIL 430	Marx and Hegel	3

These courses will not count toward the requirement to take a specific number of hours in the American politics/public law and international relations/comparative politics areas. Philosophy "topics" courses and PHIL 442E may also be counted as Political Science electives when the

topic covered is appropriate; prior approval is required from the chief departmental advisor of Political Science and Geography.

Philosophy majors double majoring in political science may count any two of the following Political Science courses toward their philosophy major:

POLS 309	Race, Culture and Public Policy	3
POLS 310	Political Theory	3
POLS 312	American Political Thought	3
POLS 403	American Constitutional Law: First Amendment	3
POLS 408	American Constitutional Law: Individual Rights	3
POLS 409	American Constitutional Law: Powers of Government	3
POLS 419	Jurisprudence: History of Legal Theory	3

These courses will count as Political-Legal electives; students will still be required to take 6 hours of Political-Legal core courses. Students doing the linked BA/MA in Philosophy and Humanities can count only one 500-level Political Science course as a "bridge" course. Certain Political Science "topics" courses may be counted as Philosophy electives with prior approval from the Philosophy and Religious Studies Department.

Students interested in double majoring in philosophy and a subject other than political science should consult the chief departmental advisor for Philosophy and Religious Studies; there may be some opportunity for double counting at least one class.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 101M	An Introduction to Mathematics for Critical Thinking (If needed before STAT 130M)	3
Oral Communication		3
Elective or Language and Culture I (May be waived; See requirement details)		3
POLS 101S	Introduction to American Politics	3
Credit Hours		15
Spring		
Human Behavior: ECON 201S		3
STAT 130M	Elementary Statistics (Grade of C- or better required)	3
Human Creativity		3
Elective or Language and Culture II (May be waived; See requirement details)		3
POLS 100S	Introduction to International Politics	3
Credit Hours		15

Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Interpreting the Past		3
Philosophy and Ethics		3
POLS 102S	Introduction to Comparative Government and Politics	3
Credit Hours		16
Spring		
Impact of Technology		3
Nature of Science II		4
Literature		3
ECON 202S or GEOG 100S	Principles of Microeconomics or Human Geography	3
POLS-300/400-level course		3
Credit Hours		16
Junior		
Fall		
POLS 308	Research Design (Grade of C- or better required - Meets Information Literacy and Research)	3
POLS-300/400-level course		3
Elective course		3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
POLS-300/400-level "W" course (Grade of C or better required)		3
POLS 418	Quantitative Methods	3
Elective course		3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
POLS-300/400-level course		3
POLS-400-level course		3
Elective course		3
Elective course		3
Minor or Elective		3
Credit Hours		15
Spring		
POLS-400-level course		3
POLS-400-level course		3
Elective course		3
Elective course		1

Minor or Elective	3
Credit Hours	13
Total Credit Hours	120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Political Science Minor

The Department offers three minors in political science: 1) a general minor, 2) a minor in political geography, and (3) a minor in public law, Each requires a specified introductory course as a prerequisite and 12 hours of 300/400-level courses. For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University. The requirements for each of these minors are listed below.

Requirements

POLS 100S, POLS 101S or POLS 102S is a prerequisite for the minor and is not included in the calculation of the grade point average for the minor. The minor requires 12 hours of 300/400-level political science electives. No

more than a total of three credit hours will be counted toward the minor from POLS 367, POLS 368 and POLS 497.

Minor

Political Geography Minor

The Department offers three minors in political science: 1) a general minor, 2) a minor in political geography, and (3) a minor in public law. Each requires a specified introductory course as a prerequisite and 12 hours of 300/400-level courses. For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University. The requirements for each of these minors are listed below.

Requirements

POLS 100S, POLS 101S or POLS 102S is a prerequisite for the minor and is not included in the calculation of the grade point average for the minor. The minor has one required course and nine credit hours of 300/400-level political science and geography electives. The requirements are as follows.

GEOG 320	Political Geography	3
Select two political science courses from the following:		6
POLS 314	European Politics	
POLS 316	Politics of Africa	
POLS 323	International Political Economy	
POLS 324	International Relations Theory	
POLS 336	South Asia Since Independence	
POLS 350T	Technology and War	
POLS 401	Global Environmental Policy	
POLS 421	International Law	
POLS 455	The Politics of Climate Change	
POLS 466	Politics of the Middle East	
Select one geography course from the following:		3
GEOG 300	Maps and Geographic Information	
GEOG 306T	Hazards: Natural and Technological	
GEOG 321	World Economic Geography	
GEOG 412	Cities of the World	
GEOG 420	Marine Geography	
GEOG 422W	Coastal Geography	
Total Credit Hours		12

Minor

Public Law Minor

The Department offers three minors in political science: 1) a general minor, 2) a minor in political geography, and (3) a minor in public law. Each requires a specified introductory course as a prerequisite and 12 hours of 300/400-level courses. For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Requirements

POLS 101S is a prerequisite for the minor and is not included in the calculation of the grade point average for the minor. The minor requires 12 hours from the following:

Select four of the following:		12
POLS 301W	Introduction to Public Law	
POLS 306	Judicial Process and Behavior	

POLS 307	Constitutional Criminal Procedure	
POLS 403	American Constitutional Law: First Amendment	
POLS 408	American Constitutional Law: Individual Rights	
POLS 409	American Constitutional Law: Powers of Government	
POLS 419	Jurisprudence: History of Legal Theory	
POLS 421	International Law	
POLS 438	Law in Literature and Film	
Public law topics courses such as:		
POLS 495/496	Topics in Political Science	
Total Credit Hours		12

Bachelor of Arts

International Studies (BA)

Timothy Kidd, Director and Chief Program Advisor

The Bachelor of Arts in international studies (BAIS) is an interdisciplinary program that offers students a chance to explore the interrelations among nations and peoples and to study world affairs from a variety of perspectives. The BAIS major and minor center on studies in world languages and cultures, geography, history, and political science. Students have considerable flexibility to structure their academic programs to meet their particular needs and interests or to focus in a variety of geographical or topical fields.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Language and Culture requirement is satisfied in the major.

Information Literacy and Research requirement is met with GEOG 308 or HIST 201 or POLS 308.

Interpreting the Past requirement is satisfied in the major.

Literature: WCS 100L is required.

Human Behavior requirement is satisfied in the major.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours, 3 of which may be in the major area of study; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours). IS courses and any course listed as an elective choice for the major cannot be used to meet this option.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

International Studies Major

General Education

Complete lower-division requirements	32-41
Complete upper-division requirements (minimum of 6 credit hours)	6

Foundation Courses

GEOG 250	World Regional Geography ***	3
or GEOG 100S	Human Geography	
ECON 201S	Principles of Macroeconomics	3
Select one of the following: ***		3
HIST 100H	Interpreting the World Past Since 1500	
HIST 101H	Interpreting the Asian Past	
HIST 102H	Interpreting the European Past	
HIST 103H	Interpreting the Latin America Past	
HIST 105H	Interpreting the African Past	
HIST 127H	Honors: Interpreting the European Past	
POLS 100S	Introduction to International Politics ***	3
or POLS 102S	Introduction to Comparative Government and Politics	

Foreign Language +

Complete foreign language courses	18-21

Methods Course Work

Select one of the following:		3
GEOG 308	Research Design	
HIST 201	Introduction to Historical Methods	
POLS 308	Research Design	

Required Courses

GEOG 305	World Resources	3
or GEOG 320	Political Geography	
POLS 323	International Political Economy	3
or POLS 324	International Relations Theory	
Select one of the following:		3

HIST 415	Empire, Nations, and Industrialization: Evolution of the State System, 1815-1914
HIST 416	States, Territories and International Organization: Evolution of the State System Since 1914
HIST 414	Freedom, Rights and Revolution: Evolution of the State System 1648-1815

Senior Seminar ***

Select one of the following:	3
GEOG 480W	Senior Seminar in International Studies
HIST 480W	Senior Seminar in International Studies
POLS 480W	Senior Seminar in International Studies
WLC 480W	Senior Seminar in International Studies
Other approved course	

Upper-Division Electives **

GEOG 300- or 400-level elective	3
HIST 300- or 400-level elective	3
POLS 300- or 400-level elective	3
300- or 400-level electives	6

Total Credit Hours	98-110

- ***
- Grade of C or better required.
- +
- A minimum of six credits in the same language beyond the 12 credit hours required for the Bachelor of Arts or demonstrated proficiency to that level as approved by the chair of the Department of World Languages and Cultures. Only when the additional six credit hours (third year) are not available at Old Dominion University will a student be allowed to take these six hours in a different language. *Native speakers of languages other than English are not required to fulfill the language requirement upon presentation of a passing TOEFL score.*
- ++
- 15 credit hours of 300- or 400-level approved electives. Three hours must be taken in a discipline other than geography, history or political science. Approved courses appear on the "Approved List of Courses for International Studies" available from the program director at tkidd@odu.edu. Additional courses with an international focus may be approved by the program director. Up to six credits may be taken through participation in a model international organization (Model United Nations). Three hours of an approved practicum may count toward the major.

Elective Credit

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Study Abroad/International Experience

Study abroad or international experience is encouraged for international studies majors, and Old Dominion University credit is available for study abroad programs. The Office of Study Abroad offers information, advising services and scholarships for enrolled students.

Honors Program in International Studies

Students may earn honors in the major by fulfilling all the degree requirements and meeting the honors requirements indicated below. The requirements for honors do not increase the credit hours necessary for the major. The requirements are as follows:

1. Attain an overall grade point average of 3.25.
2. Attain a grade point average in the major of 3.5.
3. Earn honors in nine hours of courses in the major at the 300/400 level, with no more than six hours taken from the same instructor.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Oral Communication		3
Elective or Language and Culture I (May be waived; See requirement details)		3
POLS 100S or POLS 102S	Introduction to International Politics (Grade of C or better required) or Introduction to Comparative Government and Politics	3
Credit Hours		15
Spring		
Literature:		
WCS 100L	Introduction to World Literatures and Cultures (required)	3
Select one of the following: (Grade of C or better required; meets Interpreting the Past)		3
HIST 100H	Interpreting the World Past Since 1500	
HIST 101H	Interpreting the Asian Past	
HIST 102H	Interpreting the European Past	
HIST 103H	Interpreting the Latin America Past	
HIST 105H	Interpreting the African Past	
HIST 127H	Honors: Interpreting the European Past	
Elective or Language and Culture II (May be waived; See requirement details)		3
GEOG 100S or GEOG 250	Human Geography (Grade of C or better required) or World Regional Geography	3
ECON 201S	Principles of Macroeconomics	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Human Creativity		3
Elective		3
Credit Hours		16
Spring		
Philosophy and Ethics		3

Nature of Science II		4
Language and Culture IV		3
Impact of Technology		3
Elective		3
Credit Hours		16
Junior		
Fall		
300-level Foreign Language		3
300/400-level elective		3
POLS 323 or POLS 324	International Political Economy or International Relations Theory	3
Select one of the following: (meets Information Literacy and Research)		3
GEOG 308	Research Design	
HIST 201	Introduction to Historical Methods	
POLS 308	Research Design	
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
300-level Foreign Language		3
GEOG 305 or GEOG 320	World Resources or Political Geography	3
HIST 300/400-level elective		3
Upper-Division General Education Course or Minor		3
Elective		3
Credit Hours		15
Senior		
Fall		
Select one of the following: (Grade of C or better required)		3
GEOG 480W	Senior Seminar in International Studies	
HIST 480W	Senior Seminar in International Studies	
POLS 480W	Senior Seminar in International Studies	
WLC 480W	Senior Seminar in International Studies	
POLS-300/400-level elective		3
GEOG-300/400-level elective		3
Elective		3
Minor or Elective		3
Credit Hours		15
Spring		
Select one of the following:		3
HIST 414	Freedom, Rights and Revolution: Evolution of the State System 1648-1815	
HIST 415	Empire, Nations, and Industrialization: Evolution of the State System, 1815-1914	
HIST 416	States, Territories and International Organization: Evolution of the State System Since 1914	

300/400-level elective	3
Elective	3
Elective	1
Minor or Elective	3
Credit Hours	13
Total Credit Hours	120

Linked BA/MA Program in International Studies

Qualified students can apply for admission to the linked BA/MA graduate degree program in international studies. The program allows exceptional students to count up to 12 credit hours of international studies courses toward both an undergraduate and graduate degree. Students must earn a minimum of 150 credit hours (120 discrete credits for the undergraduate degree and 30 discrete credits for the graduate degree).

Requirements for Admission

Requirements for admission are:

1. A declared major in the BA program in international studies (BAIS).
2. A minimum of 60 hours completed, including at least six hours of 300/400 courses in the major.
3. A minimum GPA of 3.5 at the time of application.
4. Application to the linked BA/MA program in international studies, approved by both the BA and MA directors.
5. Take the GRE during the last semester of BAIS work with an expected minimum score of 1100 (verbal and quantitative totals).
6. Complete an application form for Old Dominion University graduate admission. Students specializing in a region (e.g. Asia, Latin America, etc.) are encouraged to complete a minor at the undergraduate level.

Program Requirements

Students pursuing the linked BA/MA program will fulfill all lower-level General Education requirements that have been approved for the BAIS and meet the requirements to earn a BA in international studies.

Method Courses

Select one of the following:	3
GEOG 308	Research Design
POLS 308	Research Design
HIST 201	Introduction to Historical Methods

Foreign Language *

Complete foreign language requirements	18-21

Core Courses in Geography, History, Political Science, and Cultural Studies

Five of the following six courses are required:	15
GEOG 305	World Resources
GEOG 320	Political Geography
HIST 415	Empire, Nations, and Industrialization: Evolution of the State System, 1815-1914
or HIST 416	States, Territories and International Organization: Evolution of the State System Since 1914
or HIST 414	Freedom, Rights and Revolution: Evolution of the State System 1648-1815
POLS 323	International Political Economy
POLS 324	International Relations Theory

Cultural Studies: **

BAIS Senior Seminar	3
Select one of the following:	3
GEOG 480W	Senior Seminar in International Studies
HIST 480W	Senior Seminar in International Studies
POLS 480W	Senior Seminar in International Studies

WLC 480W	Senior Seminar in International Studies	
Other approved course		
Bridge Courses (to be taken during Senior Year) ***		
IS 600	Research Methods in International Studies	3
IS 601	Seminar in International Relations Theory	3
IS 726	American Foreign Policy and World Order	3
ECON 650	International Economics	3
Total Credit Hours		54-57

- * A minimum of six credits beyond the requirement for the Bachelor of Arts (preferably in the language pursued for the BA) or demonstrated proficiency to that level as approved by the chair of the Department of World Languages and Cultures. Current language offerings include: Arabic, Chinese, French, German, Hebrew, Italian, Japanese, Latin, Russian, and Spanish. Native speakers of a language other than English may ask for a waiver. To be considered a native speaker, a student must be admitted to Old Dominion University with a passing TOEFL score.
- ** Students select one course that links culture to other aspects of international studies in an integrative, interdisciplinary way. Examples are World Cultural Studies (WCS) literature and film courses, English World Literature courses, and other culturally focused, international, interdisciplinary courses, and those from disciplines other than GEOG, HIST, and POLS as available and approved by the BAIS director.
- *** An overall GPA of at least 3.00 is required in these courses.

The BA in international studies will be awarded on completion of 120 credit hours including all the preceding courses and other University requirements for graduation.

Master of Arts Requirements

After obtaining the BA in international studies, students must complete the following:

1. Four graduate courses in one of the following fields of concentration (instead of the three required for MA students): international relations/ U.S. foreign policy; conflict and cooperation; international political economy and development; and interdependence and transnationalism.
2. Two electives at the 600 level or above. At least one should have a regional focus (e.g. Europe, Asia, Middle East, Latin America).

The MA in international studies requires 18 credits beyond the four Bridge Courses (the MAIS core courses). It is anticipated that a student who has completed the BAIS could thus take three courses in the fall and spring semesters. There will be no thesis option.

Additional Requirements

Students in the linked BA/MA program must also complete the following:

1. Fulfill the BAIS language requirement (which also fulfills MAIS requirements).
2. Take the GRE during the last semester of BAIS work with a minimum expected score of 1100 (verbal and quantitative totals).
3. Have an overall GPA of 3.00 in the seven core undergraduate courses and at least a GPA of 3.00 in the four Bridge courses (MAIS core courses).
4. Maintain an overall GPA of 3.00. (Students failing to maintain a 3.00 GPA may revert to the regular BAIS degree and count up to 12 hours of completed graduate core courses toward the BAIS.)
5. Complete an application form for Old Dominion University graduate admission. Students specializing in a region (e.g. Asia, Latin America, etc.) are encouraged to complete a minor at the undergraduate level.

Additional Explanations

- 1. Students interested in the BA/MA program will be advised as early as possible, and admitted students will start the program during their Junior year in order to meet all the requirements. Thus, students may apply for admission to the linked program after they have earned 60 credits (including at least six hours of 300/400 courses in the major). Applications can be filed with the undergraduate director on or before April 1 for admission in the following Fall semester and on or before November 1 for admission in the following Spring semester. Notifications of acceptance to students will be forwarded by May 1 and December 1, respectively.
- 2. Students fulfill the BAIS language requirement (which also fulfills MAIS requirements).
- 3. Students will receive the BA degree after fulfilling all the requirements for the undergraduate degree. Students whose overall GPA drops below a 3.00 before attaining the BA degree can revert to the regular BAIS program and count any graduate credits they may have earned toward the BAIS. Students with a GPA of less than 3.00 at the end of their fourth year will not be permitted to continue toward the MA degree.
- 4. Students in the linked program must meet the BAIS requirement that students must receive a minimum grade of C (2.00) in the following undergraduate courses:

ENGL 110C	English Composition	3
ENGL 211C	Writing, Rhetoric, and Research	3
GEOG 100S	Human Geography	3
POLS 100S	Introduction to International Politics	3
or POLS 102S	Introduction to Comparative Government and Politics	
ECON 201S	Principles of Macroeconomics	3
Select one of the following:		3
HIST 100H	Interpreting the World Past Since 1500	
HIST 101H	Interpreting the Asian Past	
HIST 102H	Interpreting the European Past	
HIST 103H	Interpreting the Latin America Past	
HIST 105H	Interpreting the African Past	
Not accepted for the major:		
HIST 104H	Interpreting the American Past	
- 5. Please refer to the Graduate Catalog for additional information on the MA in international studies as well as the doctoral program in international studies.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's

degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor International Studies Minor Requirements

- The minor in international studies requires 15 credit hours including:
- 1. GEOG 100S or GEOG 250 or POLS 100S or POLS 102S is a prerequisite course for the minor and is not included in the calculation of the grade point average for the minor.
 - 2. Twelve hours of upper-division approved electives to include:

GEOG 300-400 level elective	3
HIST 300-400 level elective	3
POLS 300-400 level elective	3
300-400 level elective	3

Approved courses appear on the "Approved List of Courses for International Studies" available from the program director. Additional courses with an international focus may be approved by the program director. Up to three credits may be taken through participation in a model international organization (Model United Nations).

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Sociology and Criminal Justice

Ruth Triplett, Chair
Jessica Huffman, Chief Department Advisor

The Department of Sociology and Criminal Justice offers courses in anthropology, criminal justice, sociology and social welfare. Students may earn a Bachelor of Arts or a Bachelor of Science with a major in sociology, social welfare or criminal justice. The department also offers a PhD in criminology and criminal justice. Please refer to the graduate catalog for more information on the PhD program.

Advanced Placement

Students interested in credit by examination should consult with the department chair. Information on credit awarded for qualifying scores on AP and IB subject examinations can be found on the equivalency charts on the Office of Undergraduate Admissions website at <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Programs

Bachelor of Arts Programs

- Criminal Justice (BA) (p. 315)
- Sociology (BA) (p. 322)
- Sociology with a Major in Social Welfare (BA) (p. 328)

Bachelor of Science Programs

- Criminal Justice (BS) (p. 318)
- Sociology (BS) (p. 325)
- Sociology with a Major in Social Welfare (BS) (p. 331)

Certificate Program

- Diversity Studies Certificate (p. 336)

Minor Programs

- Children's Rights Minor (p. 335)
- Criminal Justice Minor (p. 322)
- Health Equity and Social Justice Minor (p. 336)
- Sociology Minor (p. 335)

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Criminal Justice (BA)

Students are urged to take elective courses or to consider minoring in psychology, sociology, political science, computer science, information systems, or management.

Students interested in careers in corrections work including probation and parole are urged to take courses in the social welfare sequence (SOC 320, SOC 325, SOC 402) and/or minor in either sociology with a social welfare specialization or human services.

Advanced Placement

Students interested in credit by examination should consult with the department chair. Information on credit awarded for qualifying scores on AP and IB subject examinations can be found on the equivalency charts on the Office of Undergraduate Admissions website at <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major

STAT 130M is required for Mathematics

Language and Culture: BS students' competence must be at the 102 level. BA students must have competence through the 202 level and BA competence is not met by the associate degree.

SOC 201S is required for Human Behavior

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.

- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Criminal Justice Major

BA and BS students must complete PSYC 201S. BS students must also complete three credits from the Human Behavior Way of Knowing category in addition to the general education course selected (CRJS 215S cannot be used to meet this requirement).

General Education

Complete lower-division requirements	41-47
Complete upper-division requirements (minimum of 6 credit hours)	6
Complete foreign language coursework through the 202 level	0-6
PSYC 201S Introduction to Psychology	3

Foundation Courses

CRJS 215S Introduction to Criminology	3
CRJS 222 The Criminal Justice System	3
CRJS 262 Law and the Criminal Justice System	3
SOC 337 Social Research Methods	3
CRJS 426W Criminological Theory *	3
CRJS 436 Capstone Research Project	3

Stratification Course

Select one of the following:	3
SOC 320 Social Inequality	
SOC 323 Sociology of Minority Families	
SOC 340 Sociology of Women	
SOC 343 Sexualities in Society	
SOC 402 Sociology of Child Welfare	
SOC 426 Minority Group Relations	

Upper-Level Law Component

Select one of the following:	3
CRJS 320 Law and Social Control	
CRJS 406 Cyber Law	
CRJS 408 Children's Rights and the Law	
CRJS 448 Women, Sex Discrimination and the Law	
CRJS 462 Substantive Criminal Law	
or other approved course	

Criminal Justice 300-400 Level Electives **

Complete electives	18
Total Credit Hours	92-104

* Course must be completed with a C or better

**

Any 300-400 level criminal justice course may satisfy the elective requirements. Up to six hours of internship course work may also be used.

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Double Major or Major and Minor in Criminal Justice and Sociology

Students double majoring in criminal justice and sociology (or vice versa) may use a maximum of five cross-listed courses for both majors. Students with a major in criminal justice and a minor in sociology (or vice versa) cannot use any cross-listed course to meet requirements for both the major and minor.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity		3
Human Behavior: SOC 201S Required		3
Elective or Language and Culture I (May be waived; See requirement details)		3
CRJS 215S	Introduction to Criminology	3
Credit Hours		15
Spring		
Interpreting the Past		3
Mathematical Skills: STAT 130M Required		3
Elective or Language and Culture II (May be waived; See requirement details)		3
CRJS 222	The Criminal Justice System	3
PSYC 201S	Introduction to Psychology	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Oral Communication		3
CRJS 262	Law and the Criminal Justice System	3
Credit Hours		16
Spring		
Information Literacy and Research		3
Nature of Science II		4

Language and Culture IV		3
Philosophy and Ethics		3
Stratification course		3
Credit Hours		16
Junior		
Fall		
Literature		3
Upper-level Law Component		3
CRJS 426W	Criminological Theory (Grade of C or better required)	3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
Impact of Technology		3
CRJS 300/400-level elective		3
SOC 337	Social Research Methods	3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
CRJS 436	Capstone Research Project (Can be taken Fall or Spring)	3
CRJS 300/400-level elective		3
CRJS 300/400-level elective		3
Elective course		3
Minor or Elective		3
Credit Hours		15
Spring		
CRJS 300/400-level elective		3
CRJS 300/400-level elective		3
CRJS 300/400-level elective		3
Elective course		1
Minor or Elective		3
Credit Hours		13
Total Credit Hours		120

Criminal Justice and Sociology Double Major- Bachelor of Arts

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity		3
Human Behavior: SOC 201S Required		3
Elective or Language and Culture I (May be waived; See requirement details)		3
CRJS 215S	Introduction to Criminology	3
Credit Hours		15

Spring		
Interpreting the Past		3
Mathematical Skills: STAT 130M Required		3
Elective or Language and Culture II (May be waived; See requirement details)		3
CRJS 222	The Criminal Justice System	3
PSYC 201S	Introduction to Psychology	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Philosophy and Ethics		3
CRJS 262	Law and the Criminal Justice System	3
Credit Hours		16
Spring		
Information Literacy and Research		3
Nature of Science II		4
Language and Culture IV		3
SOC-300/400-level course		3
Stratification course		3
Credit Hours		16
Junior		
Fall		
Impact of Technology		3
Oral Communication		3
Upper-level Law Component		3
CRJS 426W	Criminological Theory (Grade of C or better required)	3
SOC-300/400-level elective		3
Credit Hours		15
Spring		
Literature		3
SOC 337	Social Research Methods	3
SOC 409W	Sociological Theory (Grade of C or better required)	3
CRJS 300/400-level elective		3
Elective course		3
Credit Hours		15
Senior		
Fall		
CRJS 436	Capstone Research Project (Can be taken Fall or Spring)	3
CRJS 300/400-level elective		3
CRJS 300/400-level elective		3
SOC-300/400-level elective		3
SOC/CRJS cross-listed 300/400-level elective		3
Credit Hours		15

Spring	
CRJS 300/400-level elective	3
SOC-300/400-level elective	3
SOC-300/400-level elective	3
SOC/CRJS cross-listed 300/400-level elective	3
Elective course	1
Credit Hours	13
Total Credit Hours	120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Criminal Justice (BS)

Students are urged to take elective courses or to consider minoring in psychology, sociology, political science, computer science, information systems, or management.

Students interested in careers in corrections work including probation and parole are urged to take courses in the social welfare sequence (SOC 320, SOC 325, SOC 402) and/or minor in either sociology with a social welfare specialization or human services.

Advanced Placement

Students interested in credit by examination should consult with the department chair. Information on credit awarded for qualifying scores on AP and IB subject examinations can be found on the equivalency charts on the Office of Undergraduate Admissions website at <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major

STAT 130M is required for Mathematics

Language and Culture: BS students' competence must be at the 102 level. BA students must have competence through the 202 level and BA competence is not met by the associate degree.

SOC 201S is required for Human Behavior

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Criminal Justice Major

BA and BS students must complete PSYC 201S. BS students must also complete three credits from the Human Behavior Way of Knowing category in addition to the general education course selected (CRJS 215S cannot be used to meet this requirement).

General Education

Complete lower-division requirements	41-47
Complete upper-division requirements (minimum of 6 credit hours)	6
PSYC 201S Introduction to Psychology	3
Human Behavior Way of Knowing course *	3

Foundation Courses

CRJS 215S Introduction to Criminology	3
CRJS 222 The Criminal Justice System	3
CRJS 262 Law and the Criminal Justice System	3
SOC 337 Social Research Methods	3
CRJS 426W Criminological Theory **	3
CRJS 436 Capstone Research Project	3

Stratification Course

Select one of the following:	3
SOC 320 Social Inequality	
SOC 323 Sociology of Minority Families	
SOC 340 Sociology of Women	
SOC 343 Sexualities in Society	
SOC 402 Sociology of Child Welfare	
SOC 426 Minority Group Relations	

Upper-Level Law Component

Select one of the following:	3
CRJS 320 Law and Social Control	
CRJS 406 Cyber Law	
CRJS 408 Children's Rights and the Law	
CRJS 448 Women, Sex Discrimination and the Law	
CRJS 462 Substantive Criminal Law	
or other approved course	

Criminal Justice 300-400 Level Electives ***

Complete electives	18
Total Credit Hours	95-101

- * CRJS 215S cannot be used to meet this requirement
- ** Course must be completed with a C or better
- *** Any 300-400 level criminal justice course may satisfy the elective requirements. Up to six hours of internship course work may also be used.

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Double Major in Criminal Justice and Human Services

The Department of Sociology and Criminal Justice and the Department of Counseling and Human Services have created an opportunity for undergraduate students to major in both criminal justice and human services. Combining interest areas between two majors allows more versatility for

students' future through enhanced opportunities to pursue graduate school and strengthening employability. Both majors can be earned within the 120 credit hours required for an undergraduate degree. Within this double major, students have an opportunity to pursue a certificate in addiction prevention and treatment. Students who select the addiction prevention and treatment option will graduate with a certificate in addiction prevention and treatment.

Students interested in the double major option should contact the Chief Departmental Advisor.

Double Major or Major and Minor in Criminal Justice and Sociology

Students double majoring in criminal justice and sociology (or vice versa) may use a maximum of five cross-listed courses for both majors. Students with a major in criminal justice and a minor in sociology (or vice versa) cannot use any cross-listed course to meet requirements for both the major and minor.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Criminal Justice (BS)

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
	Human Creativity	3
	Human Behavior: SOC 201S required	3
	Elective or Language and Culture I (May be waived; See requirement details)	3
CRJS 215S	Introduction to Criminology	3
Credit Hours		15
Spring		
	Interpreting the Past	3
	Mathematical Skills: STAT 130M required	3
	Elective or Language and Culture II (May be waived; See requirement details)	3
CRJS 222	The Criminal Justice System	3
PSYC 201S	Introduction to Psychology	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
	Nature of Science I	4
	Philosophy and Ethics	3
	Oral Communication	3
CRJS 262	Law and the Criminal Justice System	3
Credit Hours		16
Spring		
	Literature	3

Nature of Science II		4
Impact of Technology		3
Human Behavior (In addition to PSYC 201S, CRJS 215S and SOC 201S)		3
Stratification course		3
Credit Hours		16
Junior		
Fall		
Upper-level Law Component		3
CRJS 426W	Criminological Theory (Grade of C or better required)	3
Elective course		3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
Information Literacy and Research		3
CRJS 300/400-level elective		3
SOC 337	Social Research Methods	3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
CRJS 436	Capstone Research Project (Can be taken Fall or Spring)	3
CRJS 300/400-level elective		3
CRJS 300/400-level elective		3
Elective course		3
Minor or Elective		3
Credit Hours		15
Spring		
CRJS 300/400-level elective		3
CRJS 300/400-level elective		3
CRJS 300/400-level elective		3
Elective course		1
Minor or Elective		3
Credit Hours		13
Total Credit Hours		120

Criminal Justice and Sociology Double Major - Bachelor of Science

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity		3
Human Behavior: SOC 201S required		3
Elective or Language and Culture I (May be waived; See requirement details)		3

CRJS 215S	Introduction to Criminology	3
Credit Hours		15
Spring		
Interpreting the Past		3
Mathematical Skills: STAT 130M required		3
Elective or Language and Culture II (May be waived; See requirement details)		3
CRJS 222	The Criminal Justice System	3
PSYC 201S	Introduction to Psychology	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Philosophy and Ethics		3
Oral Communication		3
CRJS 262	Law and the Criminal Justice System	3
Credit Hours		16
Spring		
Information Literacy and Research		3
Nature of Science II		4
Impact of Technology		3
Human Behavior (In addition to PSYC 201S, CRJS 215S and SOC 201S)		3
Stratification course		3
Credit Hours		16
Junior		
Fall		
Upper-level Law Component		3
CRJS 426W	Criminological Theory (Grade of C or better required)	3
SOC-300/400-level elective		3
CRJS 300/400-level elective		3
Elective course		3
Credit Hours		15
Spring		
Literature		3
SOC 337	Social Research Methods	3
SOC 409W	Sociological Theory (Grade of C or better required)	3
CRJS 300/400-level elective		3
CRJS/SOC cross-listed 300/400-level elective		3
Credit Hours		15
Senior		
Fall		
CRJS 436	Capstone Research Project (Can be taken Fall or Spring)	3
SOC-300/400-level elective		3
SOC-300/400-level elective		3

CRJS/SOC cross-listed 300/400-level elective	3
Elective course	3
Credit Hours	15
Spring	
CRJS 300/400-level elective	3
CRJS 300/400-level elective	3
SOC-300/400-level elective	3
SOC-300/400-level elective	3
Elective course	1
Credit Hours	13
Total Credit Hours	120

Criminal Justice and Human Services Double Major with Addiction Prevention and Treatment Certificate - Bachelor of Science

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (C or better required)	3
SOC 201S	Introduction to Sociology (C or better required)	3
Mathematics (STAT 130M preferred)		3
Interpreting the Past		3
Elective or Foreign Language (if required)		3
Credit Hours		15
Second Semester		
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
Impact of Technology		3
Philosophy and Ethics		3
Information Literacy and Research		3
Elective or Foreign Language (if required)		3
Credit Hours		15
Sophomore		
First Semester		
Nature of Science		4
Literature		3
CRJS 215S	Introduction to Criminology	3
HMSV 339	Interpersonal Relations (C or better required)	3
HMSV 341	Introduction to Human Services (C or better required)	3
Credit Hours		16
Second Semester		
Nature of Science		4
Human Creativity		3
CRJS 222	The Criminal Justice System	3
CRJS 262	Law and the Criminal Justice System	3

HMSV 343	Human Services Methods (C or better required)	3
Credit Hours		16
Junior		
First Semester		
Elective		3
SOC 337	Social Research Methods	3
HMSV 344	Career Development and Appraisal (C or better required)	3
HMSV 346 or SOC 320	Diversity Issues in Human Services (C or better required) or Social Inequality	3
HMSV 447 or HMSV 448	Introduction to Substance Abuse (C or better required) or Interventions and Advocacy with Children	3
Credit Hours		15
Second Semester		
Elective		3
CRJS 426W	Criminological Theory	3
HMSV 440W	Program Development, Implementation, and Funding (C or better required)	3
HMSV 444	Psycho-educational Groups (C or better required)	3
Select one of the following:		3
HMSV 452	Substance Abuse Treatment and Research	
HMSV 494	Entrepreneurship in Human Services and Non-Profit Fundraising	
SOC 494	Entrepreneurship in Sociology/ Criminal Justice	
Credit Hours		15
Senior		
First Semester		
CRJS 436	Capstone Research Project	3
HMSV 368	Case Management & Crisis Techniques through Field Observation (C or better required)	3
HMSV 449	Crisis Intervention, Prevention and Ethics (C or better required)	3
HMSV 491	Family Guidance (C or better required)	3
Elective		3
Elective		1
Credit Hours		16
Second Semester		
HMSV 468	Internship in Human Services (C or better required)	12
Credit Hours		12
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program

prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Criminal Justice Minor Requirements

CRJS 215S and CRJS 222 are prerequisites for the minor and are not included in the calculation of the grade point average for the minor. Required courses are:

Four 300/400-level Criminal Justice courses *	12
Total Credit Hours	12

* Excluding CRJS 368

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor through courses offered by Old Dominion University.

Bachelor of Arts Sociology (BA)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6

Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

STAT 130M is required for Mathematics

Language and Culture: BS students' competence must be at the 102 level; BA students must have competence through the 202 level and BA competency is not met by the associate degree.

Human Behavior: SOC 201S cannot be used to satisfy this requirement.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Sociology Core

BA students must complete three credits from the Human Behavior Way of Knowing category in addition to the general education course selected, and BS students must complete an additional six credits.

Human Behavior Way of Knowing Coursework			3-6
Foundation Courses			
SOC 201S	Introduction to Sociology		3
SOC 337	Social Research Methods		3
SOC 409W	Sociological Theory ¹		3
SOC 436	Capstone Research Project		3
Total Credit Hours			15-18

¹ Must be completed with a C or better

General Sociology Major

General Education			
Complete lower-division requirements			41-47
Complete upper-division requirements (minimum of 6 credit hours)			6
Complete foreign language coursework through the 202 level			0-6
Sociology Core			
Complete sociology core			15
General Sociology			
SOC 300-400 Level Electives ¹			24
Total Credit Hours			86-98

¹ See course descriptions for choices. Up to six hours of internship coursework may be used.

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Double Major in Sociology and Human Services

The Department of Sociology and Criminal Justice and the Department of Counseling and Human Services have created an opportunity for undergraduate students to major in both sociology and human services. Combining interest areas between two majors allows more versatility for students' future through enhanced opportunities to pursue graduate school and strengthening employability. Both majors can be earned within the 120 credit hours required for an undergraduate degree. Within this double major, students have an opportunity to pursue a certificate in addiction prevention and treatment. Students who select the addiction prevention and treatment option will graduate with a certificate in addiction prevention and treatment.

Students interested in the double major option should contact the Chief Departmental Advisor.

Double Major or Major and Minor in Criminal Justice and Sociology

Students double majoring in criminal justice and sociology (or vice versa) may use a maximum of five cross-listed courses for both majors. Students with a major in criminal justice and a minor in sociology (or vice versa) cannot use any cross-listed course to meet requirements for both the major and minor.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity		3
Human Behavior (SOC 201S cannot be used)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
SOC 201S	Introduction to Sociology	3
Credit Hours		15
Spring		
Interpreting the Past		3
Mathematical Skills: STAT 130M required		3
Information Literacy and Research		3
Elective or Language and Culture II (May be waived; See requirement details)		3
Additional Human Behavior (not SOC 201S)		3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Oral Communication		3
Philosophy and Ethics		3
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
Language and Culture IV		3
Impact of Technology		3
SOC-300/400-level elective		3
Credit Hours		16
Junior		
Fall		
SOC-300/400-level elective		3
SOC-300/400-level elective (Choose SOC 320 for Social Welfare Major)		3
SOC-300/400-level elective (Choose SOC 325 for Social Welfare Major)		3
SOC 409W	Sociological Theory (Grade of C or better required)	3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
SOC-300/400-level elective		3
SOC-300/400-level elective (Choose SOC 402 for Social Welfare Major)		3
SOC 337	Social Research Methods	3
Elective course		3

Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
SOC 436	Capstone Research Project	3
SOC-300/400-level elective		3
Elective course		3
Elective course		3
Minor or Elective		3
Credit Hours		15
Spring		
SOC-300/400-level elective		3
Elective course		3
Elective course		3
Elective course		1
Minor or Elective		3
Credit Hours		13
Total Credit Hours		120

Criminal Justice and Sociology Double Major- Bachelor of Arts

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity		3
Human Behavior: SOC 201S Required		3
Elective or Language and Culture I (May be waived; See requirement details)		3
CRJS 215S	Introduction to Criminology	3
Credit Hours		15
Spring		
Interpreting the Past		3
Mathematical Skills: STAT 130M Required		3
Elective or Language and Culture II (May be waived; See requirement details)		3
CRJS 222	The Criminal Justice System	3
PSYC 201S	Introduction to Psychology	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Philosophy and Ethics		3
CRJS 262	Law and the Criminal Justice System	3
Credit Hours		16

Spring		
Information Literacy and Research		3
Nature of Science II		4
Language and Culture IV		3
SOC-300/400-level course		3
Stratification course		3
Credit Hours		16
Junior		
Fall		
Impact of Technology		3
Oral Communication		3
Upper-level Law Component		3
CRJS 426W	Criminological Theory (Grade of C or better required)	3
SOC-300/400-level elective		3
Credit Hours		15
Spring		
Literature		3
SOC 337	Social Research Methods	3
SOC 409W	Sociological Theory (Grade of C or better required)	3
CRJS 300/400-level elective		3
Elective course		3
Credit Hours		15
Senior		
Fall		
CRJS 436	Capstone Research Project (Can be taken Fall or Spring)	3
CRJS 300/400-level elective		3
CRJS 300/400-level elective		3
SOC-300/400-level elective		3
SOC/CRJS cross-listed 300/400-level elective		3
Credit Hours		15
Spring		
CRJS 300/400-level elective		3
SOC-300/400-level elective		3
SOC-300/400-level elective		3
SOC/CRJS cross-listed 300/400-level elective		3
Elective course		1
Credit Hours		13
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider

their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Sociology (BS)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

STAT 130M is required for Mathematics

Language and Culture: BS students' competence must be at the 102 level; BA students must have competence through the 202 level and BA competency is not met by the associate degree.

Human Behavior: SOC 201S cannot be used to satisfy this requirement.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Sociology Core

BA students must complete three credits from the Human Behavior Way of Knowing category in addition to the general education course selected, and BS students must complete an additional six credits.

Human Behavior Way of Knowing Coursework			3-6
Foundation Courses			
SOC 201S	Introduction to Sociology		3
SOC 337	Social Research Methods		3
SOC 409W	Sociological Theory ¹		3
SOC 436	Capstone Research Project		3
Total Credit Hours			15-18

¹ Must be completed with a C or better

General Sociology Major

General Education	
Complete lower-division requirements	41-47
Complete upper-division requirements (minimum of 6 credit hours)	6
Sociology Core	
Complete sociology core	18
General Sociology	
SOC 300-400 Level Electives ¹	24
Total Credit Hours	89-95

¹ See course descriptions for choices. Up to six hours of internship coursework may be used.

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Double Major in Sociology and Human Services

The Department of Sociology and Criminal Justice and the Department of Counseling and Human Services have created an opportunity for undergraduate students to major in both sociology and human services. Combining interest areas between two majors allows more versatility for students' future through enhanced opportunities to pursue graduate school and strengthening employability. Both majors can be earned within the 120 credit hours required for an undergraduate degree. Within this double major, students have an opportunity to pursue a certificate in addiction prevention and treatment. Students who select the addiction prevention and treatment option will graduate with a certificate in addiction prevention and treatment.

Students interested in the double major option should contact the Chief Departmental Advisor.

Double Major or Major and Minor in Criminal Justice and Sociology

Students double majoring in criminal justice and sociology (or vice versa) may use a maximum of five cross-listed courses for both majors. Students with a major in criminal justice and a minor in sociology (or vice versa) cannot use any cross-listed course to meet requirements for both the major and minor.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Sociology (BS)

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity		3
Human Behavior (SOC 201S cannot be used)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
SOC 201S	Introduction to Sociology	3
Credit Hours		15
Spring		
Mathematical Skills: STAT 130M Required		3
Oral Communication		3
Information Literacy and Research		3
Elective or Language and Culture II (May be waived; See requirement details)		3
Additional Human Behavior (not SOC 201S)		3
Credit Hours		15

Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Impact of Technology		3
Philosophy and Ethics		3
Elective course		3
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
SOC-300/400-level elective		3
SOC-300/400-level elective (Choose SOC 320 for Social Welfare major)		3
Additional Human Behavior (not SOC 201S)		3
Credit Hours		16
Junior		
Fall		
Interpreting the Past		3
SOC-300/400-level elective (Choose SOC 325 for Social Welfare major)		3
SOC 409W	Sociological Theory (Grade of C or better required)	3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
SOC-300/400-level elective		3
SOC-300/400-level elective (Choose SOC 402 for Social Welfare major)		3
SOC 337	Social Research Methods	3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
SOC 436	Capstone Research Project	3
SOC-300/400-level elective		3
Elective course		3
Elective course		3
Minor or Elective		3
Credit Hours		15
Spring		
SOC-300/400-level elective		3
SOC-300/400-level elective		3
Elective course		3
Elective course		1

Minor or Elective	3
Credit Hours	13
Total Credit Hours	120

Sociology and Human Services Double Major with Addiction Prevention and Treatment Certificate - Bachelor of Science

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (C or better required)	3
SOC 201S	Introduction to Sociology (C or better required)	3
Mathematics (STAT 130M preferred)		3
Interpreting the Past		3
Elective or Foreign Language (if required)		3
Credit Hours		15
Second Semester		
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
Impact of Technology		3
Philosophy and Ethics		3
Information Literacy and Research		3
Elective or Foreign Language (if required)		3
Credit Hours		15
Sophomore		
First Semester		
Nature of Science		4
Literature		3
SOC 337	Social Research Methods	3
HMSV 339	Interpersonal Relations (C or better required)	3
HMSV 341	Introduction to Human Services (C or better required)	3
Credit Hours		16
Second Semester		
Nature of Science		4
Human Creativity		3
SOC 426	Minority Group Relations	3
HMSV 343	Human Services Methods (C or better required)	3
SOC Elective		3
Credit Hours		16
Junior		
First Semester		
SOC Elective		3
HMSV 344	Career Development and Appraisal (C or better required)	3
HMSV 346	Diversity Issues in Human Services (C or better required)	3

HMSV 447	Introduction to Substance Abuse (C or better required)	3
SOC 409W	Sociological Theory	3
Credit Hours		15
Second Semester		
HMSV 440W	Program Development, Implementation, and Funding (C or better required)	3
HMSV 444	Psycho-educational Groups (C or better required)	3
HMSV 494 or SOC 494	Entrepreneurship in Human Services and Non-Profit Fundraising or Entrepreneurship in Sociology/Criminal Justice	3
SOC Elective		3
SOC Elective		3
Credit Hours		15
Senior		
First Semester		
SOC 436	Capstone Research Project	3
HMSV 368	Case Management & Crisis Techniques through Field Observation (C or better required)	3
HMSV 449	Crisis Intervention, Prevention and Ethics (C or better required)	3
HMSV 491	Family Guidance (C or better required)	3
SOC Elective		1
HMSV 452	Substance Abuse Treatment and Research	3
Credit Hours		16
Second Semester		
HMSV 468	Internship in Human Services (C or better required)	12
Credit Hours		12
Total Credit Hours		120

Criminal Justice and Sociology Double Major - Bachelor of Science

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity		3
Human Behavior: SOC 201S Required		3
Elective or Language and Culture I (May be waived; See requirement details)		3
CRJS 215S	Introduction to Criminology	3
Credit Hours		15
Spring		
Interpreting the Past		3
Mathematical Skills: STAT 130M Required		3
Elective or Language and Culture II (May be waived; See requirement details)		3

CRJS 222	The Criminal Justice System	3
PSYC 201S	Introduction to Psychology	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Philosophy and Ethics		3
Oral Communication		3
CRJS 262	Law and the Criminal Justice System	3
Credit Hours		16
Spring		
Information Literacy and Research		3
Nature of Science II		4
Impact of Technology		3
Human Behavior (In addition to PSYC 201S, CRJS 215S and SOC 201S)		3
Stratification course		3
Credit Hours		16
Junior		
Fall		
Upper-level Law Component		3
CRJS 426W	Criminological Theory (Grade of C or better required)	3
SOC-300/400-level elective		3
CRJS 300/400-level elective		3
Elective course		3
Credit Hours		15
Spring		
Literature		3
SOC 337	Social Research Methods	3
SOC 409W	Sociological Theory (Grade of C or better required)	3
CRJS 300/400-level elective		3
CRJS/SOC cross-listed 300/400-level elective		3
Credit Hours		15
Senior		
Fall		
CRJS 436	Capstone Research Project (Can be taken Fall or Spring)	3
SOC-300/400-level elective		3
SOC-300/400-level elective		3
CRJS/SOC cross-listed 300/400-level elective		3
Elective course		3
Credit Hours		15
Spring		
CRJS 300/400-level elective		3
CRJS 300/400-level elective		3
SOC-300/400-level elective		3

SOC-300/400-level elective	3
Elective course	1
Credit Hours	13
Total Credit Hours	120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts Sociology with a Major in Social Welfare (BA)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6

Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

STAT 130M is required for Mathematics

Language and Culture: BS students' competence must be at the 102 level; BA students must have competence through the 202 level and BA competency is not met by the associate degree.

Human Behavior: SOC 201S cannot be used to satisfy this requirement.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Sociology Core

BA students must complete three credits from the Human Behavior Way of Knowing category in addition to the general education course selected, and BS students must complete an additional six credits.

Human Behavior Way of Knowing Coursework		3-6
Foundation Courses		
SOC 201S	Introduction to Sociology	3
SOC 337	Social Research Methods	3
SOC 409W	Sociological Theory ¹	3

SOC 436	Capstone Research Project	3
Total Credit Hours		15-18

¹ Must be completed with a C or better

Social Welfare Major

General Education

Complete lower-division requirements	41-47
Complete upper-division requirements (minimum of 6 credit hours)	6
Complete foreign language coursework through the 202 level	0-6

Sociology Core

Complete sociology core	15

Social Welfare

SOC 320	Social Inequality	3
SOC 325	Social Welfare	3
SOC 402	Sociology of Child Welfare	3
Five SOC 300-400 Level Electives ¹		15

Total Credit Hours		86-98

¹ See course descriptions for choices.

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Double Major in Sociology and Human Services

The Department of Sociology and Criminal Justice and the Department of Counseling and Human Services have created an opportunity for undergraduate students to major in both sociology and human services. Combining interest areas between two majors allows more versatility for students' future through enhanced opportunities to pursue graduate school and strengthening employability. Both majors can be earned within the 120 credit hours required for an undergraduate degree. Within this double major, students have an opportunity to pursue a certificate in addiction prevention and treatment. Students who select the addiction prevention and treatment option will graduate with a certificate in addiction prevention and treatment.

Students interested in the double major option should contact the Chief Departmental Advisor.

Double Major or Major and Minor in Criminal Justice and Sociology

Students double majoring in criminal justice and sociology (or vice versa) may use a maximum of five cross-listed courses for both majors. Students with a major in criminal justice and a minor in sociology (or vice versa) cannot use any cross-listed course to meet requirements for both the major and minor.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Sociology with a Major in Social Welfare (BA)

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity		3
Human Behavior (SOC 201S cannot be used)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
SOC 201S	Introduction to Sociology	3
Credit Hours		15
Spring		
Interpreting the Past		3
Mathematical Skills: STAT 130M required		3
Information Literacy and Research		3
Elective or Language and Culture II (May be waived; See requirement details)		3
Additional Human Behavior (not SOC 201S)		3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Oral Communication		3
Philosophy and Ethics		3
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
Language and Culture IV		3
Impact of Technology		3
SOC-300/400-level elective		3
Credit Hours		16
Junior		
Fall		
SOC-300/400-level elective		3
SOC-300/400-level elective (Choose SOC 320 for Social Welfare major)		3
SOC-300/400-level elective (Choose SOC 325 for Social Welfare major)		3
SOC 409W	Sociological Theory (Grade of C or better required)	3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
SOC-300/400-level elective		3

SOC-300/400-level elective (Choose SOC 402 for Social Welfare major)		3
SOC 337	Social Research Methods	3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
SOC 436	Capstone Research Project	3
SOC-300/400-level elective		3
Elective course		3
Elective course		3
Minor or Elective		3
Credit Hours		15
Spring		
SOC-300/400-level elective		3
Elective course		3
Elective course		3
Elective course		1
Minor or Elective		3
Credit Hours		13
Total Credit Hours		120

Criminal Justice and Sociology Double Major- Bachelor of Arts

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity		3
Human Behavior: SOC 201S Required		3
Elective or Language and Culture I (May be waived; See requirement details)		3
CRJS 215S	Introduction to Criminology	3
Credit Hours		15
Spring		
Interpreting the Past		3
Mathematical Skills: STAT 130M Required		3
Elective or Language and Culture II (May be waived; See requirement details)		3
CRJS 222	The Criminal Justice System	3
PSYC 201S	Introduction to Psychology	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3

Philosophy and Ethics		3
CRJS 262	Law and the Criminal Justice System	3
Credit Hours		16
Spring		
Information Literacy and Research		3
Nature of Science II		4
Language and Culture IV		3
SOC-300/400-level course		3
Stratification course		3
Credit Hours		16
Junior		
Fall		
Impact of Technology		3
Oral Communication		3
Upper-level Law Component		3
CRJS 426W	Criminological Theory (Grade of C or better required)	3
SOC-300/400-level elective		3
Credit Hours		15
Spring		
Literature		3
SOC 337	Social Research Methods	3
SOC 409W	Sociological Theory (Grade of C or better required)	3
CRJS 300/400-level elective		3
Elective course		3
Credit Hours		15
Senior		
Fall		
CRJS 436	Capstone Research Project (Can be taken Fall or Spring)	3
CRJS 300/400-level elective		3
CRJS 300/400-level elective		3
SOC-300/400-level elective		3
SOC/CRJS cross-listed 300/400-level elective		3
Credit Hours		15
Spring		
CRJS 300/400-level elective		3
SOC-300/400-level elective		3
SOC-300/400-level elective		3
SOC/CRJS cross-listed 300/400-level elective		3
Elective course		1
Credit Hours		13
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as

three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Sociology with a Major in Social Welfare (BS)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8

Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

STAT 130M is required for Mathematics

Language and Culture: BS students' competence must be at the 102 level; BA students must have competence through the 202 level and BA competency is not met by the associate degree.

Human Behavior: SOC 201S cannot be used to satisfy this requirement.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Sociology Core

BA students must complete three credits from the Human Behavior Way of Knowing category in addition to the general education course selected, and BS students must complete an additional six credits.

Human Behavior Way of Knowing Coursework		3-6
Foundation Courses		
SOC 201S	Introduction to Sociology	3
SOC 337	Social Research Methods	3
SOC 409W	Sociological Theory ¹	3
SOC 436	Capstone Research Project	3
Total Credit Hours		15-18

¹ Must be completed with a C or better

Social Welfare Major

General Education		
Complete lower-division requirements		41-47
Complete upper-division requirements (minimum of 6 credit hours)		6
Sociology Core		
Complete sociology core		18
Social Welfare		
SOC 320	Social Inequality	3
SOC 325	Social Welfare	3

SOC 402	Sociology of Child Welfare	3
Five SOC 300-400 Level Electives ¹		15

Total Credit Hours **89-95**

¹ See course descriptions for choices.

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Double Major in Sociology and Human Services

The Department of Sociology and Criminal Justice and the Department of Counseling and Human Services have created an opportunity for undergraduate students to major in both sociology and human services. Combining interest areas between two majors allows more versatility for students' future through enhanced opportunities to pursue graduate school and strengthening employability. Both majors can be earned within the 120 credit hours required for an undergraduate degree. Within this double major, students have an opportunity to pursue a certificate in addiction prevention and treatment. Students who select the addiction prevention and treatment option will graduate with a certificate in addiction prevention and treatment.

Students interested in the double major option should contact the Chief Departmental Advisor.

Double Major or Major and Minor in Criminal Justice and Sociology

Students double majoring in criminal justice and sociology (or vice versa) may use a maximum of five cross-listed courses for both majors. Students with a major in criminal justice and a minor in sociology (or vice versa) cannot use any cross-listed course to meet requirements for both the major and minor.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Sociology with a Major in Social Welfare (BS)

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity		3
Human Behavior (SOC 201S cannot be used)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
SOC 201S	Introduction to Sociology	3
Credit Hours		15
Spring		
Mathematical Skills: STAT 130M Required		3
Oral Communication		3
Information Literacy and Research		3
Elective or Language and Culture II (May be waived; See requirement details)		3

Additional Human Behavior (not SOC 201S)		3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Impact of Technology		3
Philosophy and Ethics		3
Elective course		3
Credit Hours		16
Spring		
Literature		3
Nature of Science II		4
SOC-300/400-level elective		3
SOC-300/400-level elective (Choose SOC 320 for Social Welfare major)		3
Additional Human Behavior (not SOC 201S)		3
Credit Hours		16
Junior		
Fall		
Interpreting the Past		3
SOC-300/400-level elective (Choose SOC 325 for Social Welfare major)		3
SOC 409W	Sociological Theory (Grade of C or better required)	3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
SOC-300/400-level elective		3
SOC-300/400-level elective (Choose SOC 402 for Social Welfare major)		3
SOC 337	Social Research Methods	3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
SOC 436	Capstone Research Project	3
SOC-300/400-level elective		3
Elective course		3
Elective course		3
Minor or Elective		3
Credit Hours		15
Spring		
SOC-300/400-level elective		3
SOC-300/400-level elective		3
Elective course		3
Elective course		1

Minor or Elective	3
Credit Hours	13
Total Credit Hours	120

Sociology, Social Welfare Major and Human Services Double Major with Addiction Prevention and Treatment Certificate - Bachelor of Science

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (C or better required)	3
SOC 201S	Introduction to Sociology (C or better required)	3
Mathematics (STAT 130M preferred)		3
Interpreting the Past		3
Elective or Foreign Language (if required)		3
Credit Hours		15
Second Semester		
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research	3
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
Impact of Technology		3
Philosophy and Ethics		3
Information Literacy and Research		3
Elective or Foreign Language (if required)		3
Credit Hours		15
Sophomore		
First Semester		
Nature of Science		4
Literature		3
SOC 337	Social Research Methods	3
HMSV 339	Interpersonal Relations (C or better required)	3
HMSV 341	Introduction to Human Services (C or better required)	3
Credit Hours		16
Second Semester		
Nature of Science		4
Human Creativity		3
HMSV 343	Human Services Methods (C or better required)	3
SOC 320	Social Inequality	3
SOC 325	Social Welfare	3
Credit Hours		16
Junior		
First Semester		
HMSV 344	Career Development and Appraisal (C or better required)	3
SOC 409W	Sociological Theory	3

HMSV 346	Diversity Issues in Human Services (C or better required)	3
HMSV 448	Interventions and Advocacy with Children	3
SOC Elective		3
Credit Hours		15
Second Semester		
SOC 323	Sociology of Minority Families	3
SOC 402	Sociology of Child Welfare	3
HMSV 440W	Program Development, Implementation, and Funding (C or better required)	3
HMSV 494 or SOC 494	Entrepreneurship in Human Services and Non-Profit Fundraising or Entrepreneurship in Sociology/Criminal Justice	3
HMSV 444	Psycho-educational Groups (C or better required)	3
Credit Hours		15
Senior		
First Semester		
HMSV 368	Case Management & Crisis Techniques through Field Observation (C or better required)	3
SOC 436	Capstone Research Project	3
HMSV 449	Crisis Intervention, Prevention and Ethics (C or better required)	3
HMSV 491	Family Guidance (C or better required)	3
SOC 426	Minority Group Relations	3
SOC Elective		1
Credit Hours		16
Second Semester		
HMSV 468	Internship in Human Services (C or better required)	12
Credit Hours		12
Total Credit Hours		120

Criminal Justice and Sociology Double Major- Bachelor of Science

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Human Creativity		3
Human Behavior: SOC 201S Required		3
Elective or Language and Culture I (May be waived; See requirement details)		3
CRJS 215S	Introduction to Criminology	3
Credit Hours		15
Spring		
Interpreting the Past		3
Mathematical Skills: STAT 130M Required		3

Elective or Language and Culture II (May be waived; See requirement details)		3
CRJS 222	The Criminal Justice System	3
PSYC 201S	Introduction to Psychology	3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Philosophy and Ethics		3
Oral Communication		3
CRJS 262	Law and the Criminal Justice System	3
Credit Hours		16
Spring		
Information Literacy and Research		3
Nature of Science II		4
Impact of Technology		3
Human Behavior (In addition to PSYC 201S, CRJS 215S and SOC 201S)		3
Stratification course		3
Credit Hours		16
Junior		
Fall		
Upper-level Law Component		3
CRJS 426W	Criminological Theory (Grade of C or better required)	3
SOC-300/400-level elective		3
CRJS 300/400-level elective		3
Elective course		3
Credit Hours		15
Spring		
Literature		3
SOC 337	Social Research Methods	3
SOC 409W	Sociological Theory (Grade of C or better required)	3
CRJS 300/400-level elective		3
CRJS/SOC cross-listed 300/400-level elective		3
Credit Hours		15
Senior		
Fall		
CRJS 436	Capstone Research Project (Can be taken Fall or Spring)	3
SOC-300/400-level elective		3
SOC-300/400-level elective		3
CRJS/SOC cross-listed 300/400-level elective		3
Elective course		3
Credit Hours		15
Spring		
CRJS 300/400-level elective		3

CRJS 300/400-level elective	3
SOC-300/400-level elective	3
SOC-300/400-level elective	3
Elective course	1
Credit Hours	13
Total Credit Hours	120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Sociology Minor Requirements

SOC 201S is a prerequisite for the minor and is not included in the calculation of the grade point average for the minor. Required courses are:

Select one of the following:	3
SOC 320	Social Inequality
SOC 337	Social Research Methods
SOC 409W	Sociological Theory

300/400 Level Sociology Courses *	9
Total Credit Hours	12

* Excluding SOC 320 and SOC 368

A maximum of one topics course (SOC 395/SOC 396 or SOC 495/SOC 496) may be included. If SOC 320 or SOC 337 is used to satisfy another requirement, it cannot be used for the minor.

Sociology (Social Welfare Specialization)

SOC 201S is a prerequisite for the minor and is not included in the calculation of the grade point average for the minor. Required courses are:

SOC 325	Social Welfare	3
SOC 402	Sociology of Child Welfare	3
SOC 320	Social Inequality	3
One 300/400-level SOC course *		3
Total Credit Hours		12

* Excluding SOC 368

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor through courses offered by Old Dominion University.

Minor Children's Rights Minor

Jeehye Kang, Coordinator

This interdisciplinary minor is focused on the exploration of child rights within and across diverse disciplines and in the U.S. and internationally. This perspective challenges approaches in the various disciplines that have in their study of children traditionally denied or failed to recognize children's human rights and dignity. In place of the traditional perspectives, courses in this interdisciplinary minor frame the study of children within the larger framework of human rights, more specifically, children's rights and status as a group within society in social science research and theory, literature, the arts, humanities, education, counseling, law and public policy.

Requirements

Course options are as follows:

Select four of the following.	12
COMM 427	Children's Communication Theory and Research
CRJS/SOC 403	Violence in the World of Children
CRJS/SOC 408	Children's Rights and the Law
HMSV 448	Interventions and Advocacy with Children
PSYC 351	Child Psychology
SOC 402	Sociology of Child Welfare
SOC 407	Violence Against Children Internationally
SOC 440	Health, Illness, and Society
PUBH 360	Introduction to Global Health
Total Credit Hours	12

The children's rights interdisciplinary minor requires 12 credit hours of 300/400-level courses selected from at least two different disciplines with a maximum of six credits from any one discipline. For completion of the interdisciplinary minor, students must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses. At least six hours of 300/400 upper-level courses must be taken through courses offered by Old Dominion University. Three credit hours may be in the major, if a

major course is listed as an option for the interdisciplinary minor. As such, it will be credited toward both the major and the interdisciplinary minor.

Minor Health Equity and Social Justice Minor

This minor explores social determinants of health, including how social factors such as race, ethnicity, class, gender, sexuality, culture, and location impact community health. Particular attention will be paid to structural causes of health disparities, sources of resilience, and health policies.

For more information about the minor, please contact - Kathleen Slauson-Blevins, Minor Coordinator, at kslauson@odu.edu (%20kslauson@odu.edu).

Requirements

SOC 201S and PUBH 200 are prerequisites for the minor and are not included in the calculation of the grade point average for the minor. Required courses are:

SOC 440	Health, Illness, and Society	3
PUBH 422	Health, Culture and Diversity-Reducing Disparities in Public Health	3
Select two of the following:		6
HLSC 320 or PUBH 320	Health Equity and Disability Culture	3
PUBH 403W	Social and Behavioral Aspects of Public Health	3
PUBH 335	Population Health	3
PUBH 465	Policy and Politics of Health	3
SOC 402	Sociology of Child Welfare	3
SOC 423	Women, Health and Healing	3
Total Credit Hours		30

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses, and complete a minimum of six hours in upper-level courses in the minor through courses offered by Old Dominion University.

Certificate Diversity Studies Certificate

Jessica Huffman, Coordinator

This interdisciplinary certificate program offers a focus on diversity and addresses relationships between majority and minority groups throughout multiple societies around the globe. Class, social structures, cultural differences and related topics will be explored, along with ways to promote understanding and acceptance among those who differ in race, religion, culture, ethnicity, or other characteristics. Humanities, public administration, psychology and other courses are available to students who obtain the certificate. Graduates will gain a heightened understanding of the diversity among various people from differing countries, cultures, religions, genders and/or ethnicities, thus enhancing their approach to those who differ in various aspects of humanity. This program will serve such completers in multiple work settings, regardless of career selection.

Requirements

Students will be required to take three courses that cover areas of diversity from among the following lists. The required course, SOC 320 Social Inequality, introduces students to differences in stratification and social class both in the U.S. and throughout the world. Other classes may be selected based on student interest in the focus areas. After taking the courses required for the certificate, the student should send the coordinator a portfolio including at least one assignment from each class and their response to the following question: "Based on what you learned in the three courses

you took for the diversity certificate, how will you interact with people differently in your chosen career?"

Requirements for the award of the certificate are an overall grade point average of 2.0 or above in all courses specified as a requirement for the certificate and completion of a minimum of six hours in upper-level courses required for the certificate through courses offered by Old Dominion University.

Required

SOC 320	Social Inequality	3

Restricted Electives

Select two courses from two different areas:		6

AAST 410	Africana Intellectual Thought and Economic Development
AAST 420W	African American Political and Social Thought
COMM 400W	Intercultural Communication
CRJS 450	Blacks, Crime and Justice
CRJS 452	Diversity in Criminal Justice Organizations
ENGL 371W	Language and Culture
GEOG 325	Ethnic Minorities
GEOG 412	Cities of the World
HIST 475	Global Africa
HLSC 405	Interprofessional Study Abroad on Global Health
HMSV 346	Diversity Issues in Human Services
NURS 458	Studies in Professional Nursing
PAS 409	Leadership and Cultural Competence
PHIL 381 or PHIL 482 or REL 352	Buddhist Traditions Chinese Religion and Philosophy Islam
POLS 309	Race, Culture and Public Policy
PSYC 420	Cross-Cultural Psychology
SOC 203S	Diversity and Society
SOC 323	Sociology of Minority Families
SOC 343	Sexualities in Society
SOC 426	Minority Group Relations
WCS 312W	Writing Around the World
WCS 323	World Cultures and Contexts
WCS 400	Global Cultural Studies
WGS 302W	Dimensions of Diversity: Intersectionality Among Women
WGS 303	Queer Studies
WGS 390T	Women, Gender, and Technology Worldwide

Total Credit Hours	9

Women's and Gender Studies

Elizabeth Groeneveld, Chair

egroenev@odu.edu

<https://ww1.odu.edu/womens-gender-studies> (<https://ww1.odu.edu/womens-gender-studies/>).

Women's and Gender Studies is a multi- and interdisciplinary field of study that examines gender in historical and contemporary contexts with an emphasis on women's lives and perspectives. The department values the complex intersections of gender, race, class, sexuality, ability, nation, and other identities.

Both the Bachelor of Arts and Bachelor of Science degrees are offered through this department. Students in any discipline can also earn a graduate certificate in Women's Studies. These degrees enhance career opportunities in governmental and non-governmental agencies, law, criminal justice,

public relations, journalism, counseling, the health professions, business, social welfare, education, and many other fields. They also provide a strong foundation for students interested in pursuing graduate work.

Advising

To declare a Women's Studies major or minor, students must see an advisor in the Women's and Gender Studies Department. All Women's Studies majors are required to have a conference with their advisor before each semester (preferably during preregistration).

Programs

Bachelor of Arts Program

- Women's Studies (BA) (p. 337)

Bachelor of Science Program

- Women's Studies (BS) (p. 340)

Minor Programs

- Queer Studies Minor (p. 342)
- Women's Studies Minor (p. 342)

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Linked BA/BS in Women's Studies and MA in Humanities

The linked program in Women's and Gender Studies and Humanities makes it possible for exceptional Women's Studies majors to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree.

Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). For more information consult the Humanities section of this Catalog.

Bachelor of Arts Women's Studies (BA)

Women's and Gender Studies is a multi- and interdisciplinary field of study that examines gender in historical and contemporary contexts with an emphasis on women's perspectives. We value the complex intersections of gender, race, class, sexuality, ability, nation, and other identities. We are committed to a social justice-based approach, and seek to bridge academic and community work. Contact the Women's and Gender Studies Department to speak with the Departmental Advisor, 757-683-3823.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both ENGL 110C and the second written communication course before declaring a major.

Language and Culture: Proficiency through 102 level-BS only; Proficiency through 202 level-BA only and not met by associate degree.

Impact of Technology requirement is satisfied in the major by WGS 390T.

WGS 201S cannot be used to satisfy the Human Behavior requirement.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.

- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Women's Studies Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6
Complete foreign language coursework through the 202 level	0-6

Women's Studies

WGS 201S	Introduction to Women's, Gender, and Sexuality Studies	3
WGS 301	Feminist Foundations	3
WGS 302W	Dimensions of Diversity: Intersectionality Among Women	3
or QUST 302W	Dimensions of Diversity: Intersectionality Among Women	
WGS 390T	Women, Gender, and Technology Worldwide	3
WGS 400	History of U.S. Women's Activism	3
or HIST 363	Women in U.S. History	
WGS 401W	Women: A Global Perspective	3
WGS 460W	Feminist and Queer Theory	3
or QUST 460W	Feminist and Queer Theory	
ENGL 463W	Women Writers	3
or ENGL 477	Language, Gender and Power	
Select four of the following:		12
WGS 303	Queer Studies	
or QUST 303	Queer Studies	
WGS 304	Gender and Sexuality in Film	
WGS 305	Queer Literature	
or QUST 305	Queer Literature	
WGS 306	Women, the Environment, and Climate Change	
WGS 368	Internship	
WGS 395	Topics in Women's, Gender, and Sexuality Studies	
or QUST 395	Topics in Queer Studies	
WGS 396	Topics in Women's, Gender, and Sexuality Studies	
WGS 402	Feminisms and Sexualities	
or QUST 402	Feminisms and Sexualities	
WGS 405	Gender and Media	
WGS 406	Gender, Fashion & the Body	
WGS 410	Sexing the Body	

WGS 415	Migration and Refugee Studies
WGS 470	Feminist Research Methods
WGS 495	Topics in Women's, Gender, and Sexuality Studies
or QUST 495	Topics in Queer Studies
WGS 497	Independent Study
WGS 498	Independent Study
Courses other than WGS approved by the department	

Total Credit Hours **80-92**

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Women's Studies as a Second Major

Students interested in Women's and Gender Studies but who already have a major may be able to fulfill their upper-division general education requirements by selecting Women's Studies as a second major. Such students must complete the same departmental requirements as those majoring solely in Women's Studies, but may count up to three Women's and Gender Studies approved courses taken for their other major toward their Women's Studies major as well. For instance, a student majoring in both Sociology and Women's Studies may count three courses (such as SOC 340 (<http://catalog.odu.edu/search/?P=SOC%20340>), SOC 343 (<http://catalog.odu.edu/search/?P=SOC%20343>), and SOC 427 (<http://catalog.odu.edu/search/?P=SOC%20427>)) taken toward their sociology requirements as three electives for their major in Women's Studies.

Double Majoring in Philosophy and Women's Studies

The Departments of Women's and Gender Studies and Philosophy and Religious Studies have established an arrangement that makes it possible to complete a double major in as few as 57 hours, only 9 credits more than the 48 hours needed for a major in Women's Studies and minor in Philosophy. Any four of the following courses, totaling no more than 12 credit hours, may count toward both majors. Courses "double-counted" from one major will be considered electives in the other major.

PHIL 365	Race & Power	3
PHIL 402	Gender and Philosophy	3
REL 403	Gender and Sexuality in Islam	3
WGS 302W	Dimensions of Diversity: Intersectionality Among Women	3
WGS 303	Queer Studies	3
WGS 460W	Feminist and Queer Theory	3

With prior approval other courses from PHIL, REL, or WGS, such as topics courses, may be counted toward both majors.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Interpreting the Past		3
Elective or Language and Culture I (May be waived; See requirement details)		3

WGS 201S	Introduction to Women's, Gender, and Sexuality Studies	3
Credit Hours		15
Spring		
Human Behavior (WGS 201S may not be used)		3
Literature		3
Human Creativity		3
Elective or Language and Culture II (May be waived; See requirement details)		3
Information Literacy and Research		3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
WGS 390T	Women, Gender, and Technology Worldwide (Meets Impact of Technology)	3
WGS 301		3
Credit Hours		16
Spring		
Philosophy and Ethics		3
Nature of Science II		4
Language and Culture IV		3
Oral Communication		3
WGS 302W or QUST 302W	Dimensions of Diversity: Intersectionality Among Women (C or better required in one of W courses) or Dimensions of Diversity: Intersectionality Among Women	3
Credit Hours		16
Junior		
Fall		
WGS 460W or QUST 460W	Feminist and Queer Theory or Feminist and Queer Theory	3
WGS 300/400-level course		3
WGS 300/400-level course		3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
ENGL 463W or ENGL 477	Women Writers or Language, Gender and Power	3
Elective course		3
WGS 400 or HIST 363	History of U.S. Women's Activism or Women in U.S. History	3
Elective course		3

Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
WGS 401W	Women: A Global Perspective	3
WGS 300/400-level course		3
Elective course		3
Elective course		3
Minor or Elective		3
Credit Hours		15
Spring		
WGS 300/400-level course		3
Elective course		3
Elective course		3
Elective course		1
Minor or Elective		3
Credit Hours		13
Total Credit Hours		120

Linked BA/BS in Women's Studies and MA in Humanities

The linked program in Women's and Gender Studies and Humanities makes it possible for exceptional Women's Studies majors to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree.

Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). For more information consult the Humanities section of this Catalog.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the

undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Women's Studies (BS)

Overview

Women's and Gender Studies is a multi- and interdisciplinary field of study that examines gender in historical and contemporary contexts with an emphasis on women's perspectives. We value the complex intersections of gender, race, class, sexuality, ability, nation, and other identities. We are committed to a social justice-based approach, and seek to bridge academic and community work. Contact the Women's and Gender Studies Department to speak with the Departmental Advisor, 757-683-3823.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both ENGL 110C and the second written communication course before declaring a major.

Language and Culture: Proficiency through 102 level-BS only; Proficiency through 202 level-BA only and not met by associate degree.

Impact of Technology requirement is satisfied in the major by WGS 390T.

WGS 201S cannot be used to satisfy the Human Behavior requirement.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.

- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Arts and Humanities Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Women's Studies Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6

Women's Studies

WGS 201S	Introduction to Women's, Gender, and Sexuality Studies	3
WGS 301	Feminist Foundations	3
WGS 302W	Dimensions of Diversity: Intersectionality Among Women	3
or QUST 302W	Dimensions of Diversity: Intersectionality Among Women	
WGS 390T	Women, Gender, and Technology Worldwide	3
WGS 400	History of U.S. Women's Activism	3
or HIST 363	Women in U.S. History	
WGS 401W	Women: A Global Perspective	3
WGS 460W	Feminist and Queer Theory	3
or QUST 460W	Feminist and Queer Theory	
WGS 470	Feminist Research Methods	3
Select four of the following:		12
WGS 303	Queer Studies	
or QUST 303	Queer Studies	
WGS 304	Gender and Sexuality in Film	
WGS 305	Queer Literature	
or QUST 305	Queer Literature	
WGS 306	Women, the Environment, and Climate Change	
WGS 368	Internship	
WGS 395	Topics in Women's, Gender, and Sexuality Studies	
or QUST 395	Topics in Queer Studies	
WGS 396	Topics in Women's, Gender, and Sexuality Studies	
WGS 402	Feminisms and Sexualities	
or QUST 402	Feminisms and Sexualities	
WGS 405	Gender and Media	
WGS 406	Gender, Fashion & the Body	

WGS 410	Sexing the Body
WGS 415	Migration and Refugee Studies
WGS 495	Topics in Women's, Gender, and Sexuality Studies
or QUST 495	Topics in Queer Studies
WGS 497	Independent Study
WGS 498	Independent Study
Courses approved by WGS	
Total Credit Hours	
80-86	

Electives

Elective courses may be taken for the remainder of the minimum 120 credits required for the degree.

Women's Studies as a Second Major

Students interested in Women's and Gender Studies but who already have a major may be able to fulfill their upper-division general education requirements by selecting Women's Studies as a second major. Such students must complete the same departmental requirements as those majoring solely in Women's Studies, but may count up to three Women's and Gender Studies approved courses taken for their other major toward their Women's Studies major as well. For instance, a student majoring in both Sociology and Women's Studies may count three courses (such as SOC 340 (<http://catalog.odu.edu/search/?P=SOC%20340>), SOC 343 (<http://catalog.odu.edu/search/?P=SOC%20343>), and SOC 427 (<http://catalog.odu.edu/search/?P=SOC%20427>)) taken toward their sociology requirements as three electives for their major in Women's Studies.

Double Majoring in Philosophy and Women's Studies

The Departments of Women's and Gender Studies and Philosophy and Religious Studies have established an arrangement that makes it possible to complete a double major in as few as 57 hours, only 9 credits more than the 48 hours needed for a major in Women's Studies and minor in Philosophy. Any four of the following courses, totaling no more than 12 credit hours, may count toward both majors. Courses "double-counted" from one major will be considered electives in the other major.

PHIL 365	Race & Power	3
PHIL 402	Gender and Philosophy	3
REL 403	Gender and Sexuality in Islam	3
WGS 302W	Dimensions of Diversity: Intersectionality Among Women	3
WGS 303	Queer Studies	3
WGS 460W	Feminist and Queer Theory	3

With prior approval other courses from PHIL, REL, or WGS, such as topics courses, may be counted toward both majors.

Degree Program Guide

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Oral Communication		3
Elective or Language and Culture I (May be waived; See requirement details)		3
WGS 201S	Introduction to Women's, Gender, and Sexuality Studies	3
Credit Hours		15

Spring		
Human Behavior (WGS 201S may not be used)		3
Literature		3
Human Creativity		3
Elective or Language and Culture II (May be waived; See requirement details)		3
Information Literacy and Research		3
Credit Hours		15

Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Interpreting the Past		3
Elective course		3
WGS 301	Feminist Foundations	3
Credit Hours		16

Spring		
Philosophy and Ethics		3
Nature of Science II		4
Elective course		3
Elective course		3
WGS 302W or QUST 302W	Dimensions of Diversity: Intersectionality Among Women (C or better required in one of W courses) or Dimensions of Diversity: Intersectionality Among Women	3
Credit Hours		16

Junior		
Fall		
WGS 300/400-level course		3
WGS 390T	Women, Gender, and Technology Worldwide (Meets Impact of Technology)	3
Elective course		3
Upper-Division General Education Course or Minor		3
WGS 460W or QUST 460W	Feminist and Queer Theory or Feminist and Queer Theory	3
Credit Hours		15

Spring		
WGS 400 or HIST 363	History of U.S. Women's Activism or Women in U.S. History	3
WGS 300/400-level course		3
WGS 300/400-level course		3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15

Senior		
Fall		
WGS 401W	Women: A Global Perspective	3

Elective course	3	
Elective course	3	
Elective course	3	
Minor or Elective	3	
Credit Hours	15	
Spring		
WGS 470	Feminist Research Methods	3
WGS 300/400-level course		3
Elective course		3
Elective course		1
Minor or Elective		3
Credit Hours		13
Total Credit Hours		120

Linked BA/BS in Women's Studies and MA in Humanities

The linked program in Women's and Gender Studies and Humanities makes it possible for exceptional Women's Studies majors to count up to 12 hours of graduate courses toward both an undergraduate and graduate degree.

Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). For more information consult the Humanities section of this Catalog.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Women's Studies Minor

Requirements

WGS 201S is a prerequisite for the minor and is not included in the grade point average for the minor. Required courses are:

WGS 301	Feminist Foundations	3
or WGS 302W	Dimensions of Diversity: Intersectionality Among Women	
WGS 390T	Women, Gender, and Technology Worldwide*	3
Two additional WGS courses (at least one at the 400 level)		6
Total Credit Hours		12

* Meets impact of technology requirement.

Students must maintain a minimum cumulative grade point average of 2.0 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor through courses offered by Old Dominion University. Completion of the undergraduate Women's Studies minor will fulfill the upper-division General Education requirements.

Minor Queer Studies Minor

Cathleen Rhodes, Advisor

Queer Studies explores the social, historical, and cultural construction of gender and sexuality, and the diverse experiences of LGBTQ+ people. Students will examine how these experiences are shaped by race, class, disability, and other identity categories, with a focus on social equality.

Requirements

QUST 303	Queer Studies	3
or WGS 303	Queer Studies	
Select three of the following: *		9
QUST 302W	Dimensions of Diversity: Intersectionality Among Women	
or WGS 302W	Dimensions of Diversity: Intersectionality Among Women	
QUST 305	Queer Literature	
or WGS 305	Queer Literature	
QUST 460W	Feminist and Queer Theory	
or WGS 460W	Feminist and Queer Theory	
CRJS 326	LGBTQ People, Crime, and Justice	
SOC 343	Sexualities in Society	
Total Credit Hours		12

* QUST 395/WGS 395 and QUST 495/WGS 495 may be used toward the minor with approval of the minor advisor.

Students must maintain a minimum cumulative grade point average of 2.0 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor through courses offered by Old Dominion

University. Completion of the undergraduate Queer Studies minor will fulfill the upper-division General Education requirements.

World Languages and Cultures

Web Site: <http://www.odu.edu/languages> (<http://www.odu.edu/languages/>)

Elizabeth Black, Chair

Peter Schulman, Departmental Advisor for French

Kerstin Steitz, Departmental Advisor for German

Minori Marken, Departmental Advisor for Japanese

Andrew Gordus, Chief Departmental Advisor; Departmental Advisor for Spanish

Lee Slater, Departmental Advisor for World Cultural Studies

Maria Gomez-Periago, Director of K-12 Teaching Licensure Programs (French, German, Spanish)

Angelica Huizar, Director of Latin American Studies

Betty Rose Facer, Director of the Language Learning Center

Foreign Language in High School

Students may be exempt from the General Education Foreign Language requirement (without credit) in one of the following ways:

1. presentation of three high school credits in one foreign language or American Sign Language (ASL);
2. presentation of two high school credits in each of two foreign languages or one foreign language and American Sign Language (ASL); or
3. presentation of an appropriate passing score on the CEEB Foreign Language Achievement Test, internal ODU placement test, or its equivalent. Appropriate passing scores can be found below and on the Office of Admissions website.

Students who have studied a foreign language in high school for three or more years must take a placement exam before continuing in the same language. Students with less than three years of foreign language study in high school may take the placement test if they wish to begin higher than 101F or 111F; otherwise, they must begin with the 101F or 111F course. This policy does not apply to students who have advanced placement credit. Contact the Testing Center for additional information.

The **General Education Foreign Language requirement** as well as the foreign language proficiency requirement for the BA degree in the College of Arts and Letters (<http://catalog.odu.edu/undergraduate/collegeofartsletters/>) may be exempted through acceptable scores in the CEEB Achievement Test in French, German or Spanish or departmentally administered examinations in other languages. Contact the Testing Center for additional information. Credit is granted for scores of 3, 4 and 5 on Advanced Placement (AP) language exams in Chinese, French, German, Italian, Japanese, and Spanish and literature exams in French, Latin and Spanish. No more than nine credits will be awarded if both AP language and literature exams are submitted. Credit is also granted for scores of 4, 5, 6 and 7 on the A2 and B exams in French, German, Latin and Spanish of the International Baccalaureate (IB). Contact the department for additional information. Additional information can be found on the equivalency charts on the ODU website at <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Students with a documented accommodation regarding language processing should consult with the Office of Accessibility to determine whether substitute classes may be appropriate to replace language classes to fulfill their language requirement.

Native and heritage speakers: Foreign language courses below the 300 level are not open to native speakers; native speakers are not eligible to earn credit for foreign language courses below the 300 level through coursework or external testing services such as CLEP. Heritage speakers may be eligible to take language courses below the 300 level. Both native and heritage speakers wishing to take language classes at any level should consult a foreign language faculty member for advising.

Foreign Language Requirements for Undergraduate Degrees

The College of Arts and Letters requires foreign language or ASL proficiency at the fourth-semester level for students pursuing Bachelor of Arts degrees. Students pursuing all other undergraduate degrees must meet the lower-level Language and Culture general education requirement of proficiency at the second-semester level.

Students whose native language is not English are exempt from taking a foreign language for General Education. Students pursuing degrees that require proficiency beyond the 100 level must be certified by the World Languages and Cultures Department to obtain a waiver of the 200-300 level courses.

To receive the waiver (102F or 111F level for BS; 202 or 212 level for BA; 311 & 312 level for Bachelor of Arts in International Studies), the student would need one of the following:

1. a TOEFL exam at the time of ODU admission;
2. a high school transcript showing that the student's education was primarily in another language;
3. for those languages not commonly taught in the World Languages and Cultures Department, a translation exam evaluated by a faculty member indicating the student would pass the appropriate level.

Special emphasis at all levels of language instruction is placed on oral proficiency through dialogues, oral reports, class discussions and assignments in the Language Learning Center.

Language Learning Center

The goal of the Language Learning Center is to serve the needs of faculty, students and the Hampton Roads community in promoting the study of foreign languages offered at Old Dominion University through the use of technology-enhanced methods and materials. The center has been an integral part of the World Languages and Cultures Department since its inception in 1992. Serving over 1,200 students each semester from the Department of World Languages and Cultures and the English Language Center, the center is committed to instructional technology for foreign language learning and quality instruction.

Programs

Bachelor of Arts Programs

- World Languages and Cultures with a Major in French (BA) (p. 344)
- World Languages and Cultures with a Major in German (BA) (p. 349)
- World Languages and Cultures with a Major in Japanese (BA) (p. 354)
- World Languages and Cultures with a Major in PreK-12 French Education (BA) (p. 346)
- World Languages and Cultures with a Major in PreK-12 German Education (BA) (p. 351)
- World Languages and Cultures with a Major in PreK-12 Spanish Education (BA) (p. 358)
- World Languages and Cultures with a Major in Spanish (BA) (p. 356)
- World Languages and Cultures with a Major in World Cultural Studies (BA) (p. 361)

Minor Programs

- Arabic Minor (p. 364)
- Chinese Studies Minor (p. 364)
- European Studies Minor (p. 364)
- French Minor (p. 365)
- German Minor (p. 365)
- Japanese Minor (p. 365)
- Latin American Studies Minor (p. 365)

- Spanish Minor (p. 366)
- World Cultures: Values and Visions Minor (p. 366)

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts World Languages and Cultures with a Major in French (BA) Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3

Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Oral Communication (satisfied in the major for French, German, Japanese, and Spanish by one of the following: FR 311, GER 311, JAPN 311, SPAN 311. Students in the World Cultural Studies major must complete a general education oral communication course.)

Language and Culture: satisfied by the major for French, German, Japanese, and Spanish. Students in the World Cultural Studies major must demonstrate foreign language proficiency at the fourth-semester level.

Interpreting the Past: HIST 104H may not be used to satisfy the requirement.

Literature: WCS 100L is required

Impact of Technology requirement is satisfied by TLED 430W for teacher licensure students.

Human Behavior: GEOG 100S is required

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program, such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

World Languages and Cultures Core

Select one of the following:	6
Option A: Another foreign language at any level or	
Option B: Area Studies. Consult the department for a list of approved courses each semester.	

Total Credit Hours	6

French Major

General Education		
Complete lower-division requirements		38-50
Complete upper-division requirements (minimum of 6 credit hours)		6
World Languages and Cultures Core		
Complete world languages and cultures core requirements		6
French		
FR 311	Global Conversations *	3
FR 312W	Writing Around the World **	3
FR 323	World Cultures and Contexts	3
FR 331	French Literary Forms: Prose	3
or FR 332	French Literary Forms: Theatre	
or FR 333	French Literary Forms: Poetry	
FR 407	Advanced Grammar and Syntax	3
Two FR 400-level electives		6
Three FR 300- or 400-level electives		9
Total Credit Hours		80-92

- * Satisfies oral communication requirement
** Grade of C or better required

Elective Credit

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements

Transfer Credits

Students who have received an AA, AS or AA and S from a Virginia community college, Richard Bland College or an equivalent associate degree approved by Transfer Evaluation Services have met all lower-division general education requirements. However, completion of ENGL 211C and either six hours of a second foreign language or six hours of area studies (which may include WCS 100L) are major requirements and are not automatically met by completion of an associate degree. Transfer students who have taken a different general education course in the same perspective area should consult the chief departmental advisor to determine if substitutions are possible.

All majors must complete the Lower-Division General Education requirements and the core requirements and select one of the following majors. A cumulative grade point average of 2.00 is required for the 30 hours of upper-division courses in French, German, Japanese, or Spanish. No more than two FR/GER/JAPN/SPAN courses taught in English can be counted for the major. At least 12 hours in the major must be taken at Old Dominion University.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
FR 101F	Beginning French I	3
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity		3

Interpreting the Past (HIST 104H may not be used to meet the requirement)		3
Credit Hours		15
Spring		
FR 102F	Beginning French II	3
Human Behavior:		
GEOG 100S	Human Geography (required)	3
Information Literacy and Research		3
Literature:		
WCS 100L	Introduction to World Literatures and Cultures (required)	3
Impact of Technology		3
Credit Hours		15
Sophomore		
Fall		
FR 201	Intermediate French I	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Elective course		3
Elective course		3
Credit Hours		16
Spring		
FR 202	Intermediate French II	3
Philosophy and Ethics		3
Nature of Science II		4
Elective course		3
Elective course		3
Credit Hours		16
Junior		
Fall		
FR 311	Global Conversations (Satisfies Oral Communication)	3
FR 323	World Cultures and Contexts	3
FR 300/400-level course		3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
FR 312W	Writing Around the World (Grade of C or better required)	3
FR 331 or FR 332 or FR 333	French Literary Forms: Prose or French Literary Forms: Theatre or French Literary Forms: Poetry	3
FR 400-level course		3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15

Senior		
Fall		
FR 407	Advanced Grammar and Syntax	3
FR 300/400-level course		3
Core Requirement course		3
Elective course		3
Minor or Elective		3
Credit Hours		15
Spring		
FR 300/400-level course		3
FR 400-level course		3
Core Requirement course		3
Elective course		1
Minor or Elective		3
Credit Hours		13
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts World Languages and Cultures with a Major in PreK-12 French Education (BA)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Oral Communication (satisfied in the major for French, German, Japanese, and Spanish by one of the following: FR 311, GER 311, JAPN 311, SPAN 311. Students in the World Cultural Studies major must complete a general education oral communication course.)

Language and Culture: satisfied by the major for French, German, Japanese, and Spanish. Students in the World Cultural Studies major must demonstrate foreign language proficiency at the fourth-semester level.

Interpreting the Past: HIST 104H may not be used to satisfy the requirement.

Literature: WCS 100L is required

Impact of Technology requirement is satisfied by TLED 430W for teacher licensure students.

Human Behavior: GEOG 100S is required

Upper-Division General Education

Satisfied by the professional education core.

Requirements for Graduation

Requirements for graduation include completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better; completion of the Senior Assessment; a minimum cumulative 2.75 GPA in the major area and in the professional education core with no grade less than a C in the major/content and with no grade less than a C- in the professional education core; successful completion of the Teacher Candidate Internship, and a minimum of 120 credit hours, which must include both a minimum of 30 credit hours overall

and 12 credit hours of upper-level courses in the major program from Old Dominion University.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the teacher education programs in the College of Arts and Letters are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information from their advisors and from the Office of Clinical Experiences website at www.odu.edu/oce (<http://www.odu.edu/oce/>).

Students holding a baccalaureate degree in French, German, or Spanish (or its accepted equivalent) may enroll in the program leading to licensure. Students seeking licensure only must see an advisor before enrolling. A maximum of nine hours in the language, to be selected with the help of the major advisor, may also be required.

Students seeking licensure in pre-K through grade 12 complete the lower-division General Education requirements listed under the Bachelor of Arts-World Languages and Cultures major.

PreK-12 French Education Major

General Education

Complete lower-division requirements	35-47

Complete upper-division requirements (satisfied by professional education coursework)

World Languages and Cultures Core

Complete world languages and cultures core requirements	6

PreK-12 French Education

FR 311	Global Conversations *	3
FR 312W	Writing Around the World	3
FR 323	World Cultures and Contexts	3
FR 331	French Literary Forms: Prose	3
or FR 332	French Literary Forms: Theatre	
or FR 333	French Literary Forms: Poetry	
FR 407	Advanced Grammar and Syntax	3
Five FR 300/400-level electives **		15

Professional Education Sequence

TLED 301	Foundations and Introduction to Assessment of Education	3
TLED 360	Classroom Management and Discipline	2
TLED 408	Reading and Writing in Content Areas	3
TLED 430W	PK-12 Instructional Technology ***	3
TLED 485	Teacher Candidate Internship ****	12
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
WLC 452	Methods for Teaching World Languages in Pre-K through Grade 12	3
WLC 456	Seminar in World Languages Teacher Education	1

Total Credit Hours	104-116

- * Satisfies oral communication requirement.
- ** At least three credits must be in literature at the 400 level.
- *** Satisfies impact of technology requirement.
- **** Student teaching.

Elective Credit

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Information

Admission

All students must apply for and be admitted into the approved foreign language PreK-12 teacher education program for French, German or Spanish. Students must meet the required criteria for admission by earning the minimum required grade point averages (GPA).

Prescribed Virginia Board of Education Assessment for Admission to an Approved Teacher Education Program

Old Dominion University students seeking admission to an approved teacher education program must satisfy the Virginia Board of Education required assessment for admission into an approved teacher education program.

For the most current information on the prescribed Virginia Board of Education admission assessment, visit the Office of Clinical Experiences website, <http://www.odu.edu/oce> (<http://www.odu.edu/oce/>) and review the *Professional Education Handbook*.

Required grade point averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required – all French, German or Spanish major courses must be passed with a grade of C or higher.
- A professional education GPA of 2.75 is required – all professional education courses must be passed with a grade of C- or higher.

Although students may enroll in a limited number of education courses, students must be admitted into the approved foreign language teacher preparation program prior to enrolling in any instructional strategies practicum education course. Students must also meet with an education advisor in the Office of Clinical Experiences in the Darden College of Education and Professional Studies.

Continuance

Students must maintain a cumulative GPA of 2.75, a major/content GPA of 2.75 and a professional education GPA of 2.75. French, German or Spanish courses must be passed with a grade of C or higher. The professional education core must be completed with a grade of C- or higher for continuance. A professional education GPA of 2.75 is required for continuance. Students must take and pass the Praxis Subject Assessment, French, German or Spanish World Language (formerly Praxis II) and receive an official rating of Advanced-low or higher on the ACTFL OPI prior to or while enrolled in the instructional strategies course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <https://www.odu.edu/clinical-experiences/placement/background-checks> (<https://www.odu.edu/clinical-experiences/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Virginia Board of Education Prescribed Assessments for Licensure

- Praxis Subject Assessment, French World Language (test code 5174) – passing score of 163 required
- Praxis Subject Assessment, German World Language (test code 5183) – passing score of 163 required
- Praxis Subject Assessment, Spanish World Language (test code 5195) – passing score of 168 required

To review more information on the Virginia Board of Education prescribed assessments, visit the Office of Clinical Experiences website, www.odu.edu/oce (<http://www.odu.edu/oce/>).

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
FR 101F	Beginning French I	3
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity		3
Interpreting the Past (HIST 104H may not be used to meet the requirement)		3
Credit Hours		15
Spring		
FR 102F	Beginning French II	3
Human Behavior:		
GEOG 100S	Human Geography (required)	3
Information Literacy and Research		3
Literature:		
WCS 100L	Introduction to World Literatures and Cultures (required)	3
Philosophy and Ethics		3
Credit Hours		15
Sophomore		
Fall		
FR 201	Intermediate French I	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Core Requirement course		3
TLED 301	Foundations and Introduction to Assessment of Education	3
Credit Hours		16
Spring		
FR 202	Intermediate French II	3
Nature of Science II		4
Core Requirement course		3
Elective course		3

TLED 430W	PK-12 Instructional Technology (satisfies Impact of Technology)	3
Credit Hours		16
Junior		
Fall		
FR 311	Global Conversations (Satisfies Oral Communication)	3
FR 300/400-level course		3
FR 300/400-level course		3
TLED 360	Classroom Management and Discipline	2
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
Elective course		1
Credit Hours		15
Spring		
FR 312W	Writing Around the World (Grade of C or better required)	3
FR 323	World Cultures and Contexts	3
FR 331 or FR 332 or FR 333	French Literary Forms: Prose or French Literary Forms: Theatre or French Literary Forms: Poetry	3
FR 400-level Literature course		3
TLED 408	Reading and Writing in Content Areas	3
Credit Hours		15
Senior		
Fall		
FR 407	Advanced Grammar and Syntax	3
FR 300/400-level course		3
FR 300/400-level course		3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
WLC 452	Methods for Teaching World Languages in Pre-K through Grade 12	3
WLC 456	Seminar in World Languages Teacher Education	1
Credit Hours		16
Spring		
TLED 485	Teacher Candidate Internship	12
Credit Hours		12
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit

hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts World Languages and Cultures with a Major in German (BA) Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Oral Communication (satisfied in the major for French, German, Japanese, and Spanish by one of the following: FR 311, GER 311, JAPN 311, SPAN 311. Students in the World Cultural Studies major must complete a general education oral communication course.)

Language and Culture: satisfied by the major for French, German, Japanese, and Spanish. Students in the World Cultural Studies major must demonstrate foreign language proficiency at the fourth-semester level.

Interpreting the Past: HIST 104H may not be used to satisfy the requirement.

Literature: WCS 100L is required

Impact of Technology requirement is satisfied by TLED 430W for teacher licensure students.

Human Behavior: GEOG 100S is required

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program, such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

World Languages and Cultures Core

Select one of the following:	6
Option A: Another foreign language at any level or	
Option B: Area Studies. Consult the department for a list of approved courses each semester.	

Total Credit Hours	6

German Major

General Education

Complete lower-division requirements	38-50
Complete upper-division requirements (minimum of 6 credit hours)	6

World Languages and Cultures Core

Complete world languages and cultures core requirements	6

German

GER 311	Global Conversations *	3
GER 312W	Writing Around the World **	3
GER 323	World Cultures and Contexts	3
GER 407	Advanced Grammar and Syntax	3

Elective Credit

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements

Transfer Credits

Students who have received an AA, AS or AA and S from a Virginia community college, Richard Bland College or an equivalent associate degree approved by Transfer Evaluation Services have met all lower-division general education requirements. However, completion of ENGL 211C and either six hours of a second foreign language or six hours of area studies (which may include WCS 100L) are major requirements and are not automatically met by completion of an associate degree. Transfer students who have taken a different general education course in the same perspective area should consult the chief departmental advisor to determine if substitutions are possible.

All majors must complete the Lower-Division General Education requirements and the core requirements and select one of the following majors. A cumulative grade point average of 2.00 is required for the 30 hours of upper-division courses in French, German, Japanese, or Spanish. No more than two FR/GER/JAPN/SPAN courses taught in English can be counted for the major. At least 12 hours in the major must be taken at Old Dominion University.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
GER 101F	Beginning German I	3
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity		3
Interpreting the Past (HIST 104H may not be used to meet the requirement)		3
Credit Hours		15
Spring		
GER 102F	Beginning German II	3
Human Behavior:		
GEOG 100S	Human Geography (required)	3
Information Literacy and Research		3
Literature:		
WCS 100L	Introduction to World Literatures and Cultures (required)	3
Impact of Technology		3
Credit Hours		15
Sophomore		
Fall		
GER 201	Intermediate German I	3

ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Elective course		3
Elective course		3
Credit Hours		16
Spring		
GER 202	Intermediate German II	3
Philosophy and Ethics		3
Nature of Science II		4
Elective course		3
Elective course		3
Credit Hours		16
Junior		
Fall		
GER 311	Global Conversations (Satisfies Oral Communication)	3
GER 323	World Cultures and Contexts	3
GER 300/400-level course		3
Core Requirement course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
GER 312W	Writing Around the World (Grade of C or better required)	3
GER 300/400-level course		3
GER 300/400-level course		3
Core Requirement course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
GER 407	Advanced Grammar and Syntax	3
GER 300/400-level course		3
Elective course		3
Elective course		3
Minor or Elective		3
Credit Hours		15
Spring		
GER 300/400-level course		3
GER 300/400-level course		3
Elective course		3
Elective course		1
Minor or Elective		3
Credit Hours		13
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts World Languages and Cultures with a Major in PreK-12 German Education (BA)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3

Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Oral Communication (satisfied in the major for French, German, Japanese, and Spanish by one of the following: FR 311, GER 311, JAPN 311, SPAN 311. Students in the World Cultural Studies major must complete a general education oral communication course.)

Language and Culture: satisfied by the major for French, German, Japanese, and Spanish. Students in the World Cultural Studies major must demonstrate foreign language proficiency at the fourth-semester level.

Interpreting the Past: HIST 104H may not be used to satisfy the requirement.

Literature: WCS 100L is required

Impact of Technology requirement is satisfied by TLED 430W for teacher licensure students.

Human Behavior: GEOG 100S is required

Upper-Division General Education

Satisfied by the professional education core.

Requirements for Graduation

Requirements for graduation include completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better; completion of the Senior Assessment; a minimum cumulative 2.75 GPA in the major area and in the professional education core with no grade less than a C in the major/content and with no grade less than a C- in the professional education core; successful completion of the Teacher Candidate Internship, and a minimum of 120 credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the teacher education programs in the College of Arts and Letters are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information from their advisors and from the Office of Clinical Experiences website at www.odu.edu/oce (<http://www.odu.edu/oce/>).

Students holding a baccalaureate degree in French, German, or Spanish (or its accepted equivalent) may enroll in the program leading to licensure. Students seeking licensure only must see an advisor before enrolling. A maximum of nine hours in the language, to be selected with the help of the major advisor, may also be required.

Students seeking licensure in pre-K through grade 12 complete the lower-division General Education requirements listed under the Bachelor of Arts-World Languages and Cultures major.

PreK-12 German Education Major

General Education

Complete lower-division requirements 35-47

Complete upper-division requirements (satisfied by professional education coursework)

World Languages and Cultures Core

Complete world languages and cultures core requirements 6

PreK-12 German Education

GER 311 Global Conversations * 3

GER 312W Writing Around the World 3

GER 323 World Cultures and Contexts 3

GER 407 Advanced Grammar and Syntax 3

Six GER 300/400 level electives ** 18

Professional Education Sequence

TLED 301 Foundations and Introduction to Assessment of Education 3

TLED 360 Classroom Management and Discipline 2

TLED 408 Reading and Writing in Content Areas 3

TLED 430W PK-12 Instructional Technology *** 3

TLED 485 Teacher Candidate Internship 12

SPED 313 Fundamentals of Human Growth and Development: Birth through Adolescence 3

SPED 400 Foundations of Special Education: Legal Aspects and Characteristics 3

WLC 452 Methods for Teaching World Languages in Pre-K through Grade 12 3

WLC 456 Seminar in World Languages Teacher Education 1

Total Credit Hours 104-116

- * Satisfies oral communication requirement.
** At least six credits must be on the 400 level and one in literature.
*** Satisfies impact of technology requirement.

Elective Credit

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Information

Admission

All students must apply for and be admitted into the approved foreign language PreK-12 teacher education program for French, German or Spanish. Students must meet the required criteria for admission by earning the minimum required grade point averages (GPA).

Prescribed Virginia Board of Education Assessment for Admission to an Approved Teacher Education Program

Old Dominion University students seeking admission to an approved teacher education program must satisfy the Virginia Board of Education required assessment for admission into an approved teacher education program.

For the most current information on the prescribed Virginia Board of Education admission assessment, visit the Office of Clinical Experiences website, <http://www.odu.edu/oce> (<http://www.odu.edu/oce/>) and review the *Professional Education Handbook*.

Required grade point averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required – all French, German or Spanish major courses must be passed with a grade of C or higher.
- A professional education GPA of 2.75 is required – all professional education courses must be passed with a grade of C- or higher.

Although students may enroll in a limited number of education courses, students must be admitted into the approved foreign language teacher preparation program prior to enrolling in any instructional strategies practicum education course. Students must also meet with an education advisor in the Office of Clinical Experiences in the Darden College of Education and Professional Studies.

Continuance

Students must maintain a cumulative GPA of 2.75, a major/content GPA of 2.75 and a professional education GPA of 2.75. French, German or Spanish courses must be passed with a grade of C or higher. The professional education core must be completed with a grade of C- or higher for continuance. A professional education GPA of 2.75 is required for continuance. Students must take and pass the Praxis Subject Assessment, French, German or Spanish World Language (formerly Praxis II) and receive an official rating of Advanced-low or higher on the ACTFL OPI prior to or while enrolled in the instructional strategies course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <https://www.odu.edu/clinical-experiences/placement/background-checks> (<https://www.odu.edu/clinical-experiences/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Virginia Board of Education Prescribed Assessments for Licensure

- Praxis Subject Assessment, French World Language (test code 5174) – passing score of 163 required
- Praxis Subject Assessment, German World Language (test code 5183) – passing score of 163 required
- Praxis Subject Assessment, Spanish World Language (test code 5195) – passing score of 168 required

To review more information on the Virginia Board of Education prescribed assessments, visit the Office of Clinical Experiences website, www.odu.edu/oce (<http://www.odu.edu/oce/>).

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
GER 101F	Beginning German I	3

ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity		3
Interpreting the Past (HIST 104H may not be used to meet the requirement)		3
Credit Hours		15
Spring		
GER 102F	Beginning German II	3
Human Behavior:		
GEOG 100S	Human Geography (required)	3
Information Literacy and Research		3
Literature:		
WCS 100L	Introduction to World Literatures and Cultures (required)	3
Philosophy and Ethics		3
Credit Hours		15
Sophomore		
Fall		
GER 201	Intermediate German I	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Core Requirement course		3
TLED 301	Foundations and Introduction to Assessment of Education	3
Credit Hours		16
Spring		
GER 202	Intermediate German II	3
Nature of Science II		4
Core Requirement course		3
Elective course		3
TLED 430W	PK-12 Instructional Technology (satisfies Impact of Technology)	3
Credit Hours		16
Junior		
Fall		
GER 311	Global Conversations (Satisfies Oral Communication)	3
GER 323	World Cultures and Contexts	3
GER 300/400-level course		3
TLED 360	Classroom Management and Discipline	2
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
Elective course		1
Credit Hours		15
Spring		
GER 312W	Writing Around the World (Grade of C or better required)	3
GER 300/400-level course		3

GER 400-level course		3
GER 400-level Literature course		3
TLED 408	Reading and Writing in Content Areas	3
Credit Hours		15
Senior		
Fall		
GER 407	Advanced Grammar and Syntax	3
GER 300/400-level course		3
GER 300/400-level course		3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
WLC 452	Methods for Teaching World Languages in Pre-K through Grade 12	3
WLC 456	Seminar in World Languages Teacher Education	1
Credit Hours		16
Spring		
TLED 485	Teacher Candidate Internship	12
Credit Hours		12
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts

World Languages and Cultures with a Major in Japanese (BA)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Oral Communication (satisfied in the major for French, German, Japanese, and Spanish by one of the following: FR 311, GER 311, JAPN 311, SPAN 311. Students in the World Cultural Studies major must complete a general education oral communication course.)

Language and Culture: satisfied by the major for French, German, Japanese, and Spanish. Students in the World Cultural Studies major must demonstrate foreign language proficiency at the fourth-semester level.

Interpreting the Past: HIST 104H may not be used to satisfy the requirement.

Literature: WCS 100L is required

Impact of Technology requirement is satisfied by TLED 430W for teacher licensure students.

Human Behavior: GEOG 100S is required

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program, such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

World Languages and Cultures Core

Select one of the following: 6

Option A: Another foreign language at any level or

Option B: Area Studies. Consult the department for a list of approved courses each semester.

Total Credit Hours 6

Japanese Major

General Education

Complete lower-division requirements 38-44

Complete upper-division requirements (minimum of 6 credit hours) 6

World Languages and Cultures Core

Complete world languages and cultures core requirements 6

Japanese

Japanese Major Prerequisites

JAPN 301 Intermediate to Advanced Japanese I 3

JAPN 302 Intermediate to Advanced Japanese II ** 3

Grade C or above in JAPN 302, or a satisfactory placement test score, is a prerequisite for the Japanese major. JAPN 301 and JAPN 302 do not contribute to a student's GPA for the Japanese major.

Japanese Major Requirements

JAPN 311 Global Conversations * 3

JAPN 312W Writing Around the World ** 3

JAPN 323 World Cultures and Contexts 3

Two JAPN 400-level electives 6

Five JAPN 300- or 400-level electives 15

Total Credit Hours 86-92

* Satisfies oral communication requirement.

** Grade of C or better required.

Elective Credit

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements

Transfer Credits

Students who have received an AA, AS or AA and S from a Virginia community college, Richard Bland College or an equivalent associate degree approved by Transfer Evaluation Services have met all lower-division general education requirements. However, completion of ENGL 211C and either six hours of a second foreign language or six hours of area studies (which may include WCS 100L) are major requirements and are not automatically met by completion of an associate degree. Transfer

students who have taken a different general education course in the same perspective area should consult the chief departmental advisor to determine if substitutions are possible.

All majors must complete the Lower-Division General Education requirements and the core requirements and select one of the following majors. A cumulative grade point average of 2.00 is required for the 30 hours of upper-division courses in French, German, Japanese, or Spanish. No more than two FR/GER/JAPN/SPAN courses taught in English can be counted for the major. At least 12 hours in the major must be taken at Old Dominion University.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
JAPN 111F	Beginning Japanese	6
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematics		3
Human Creativity		3
Credit Hours		15
Spring		
JAPN 212	Intermediate Japanese	6
Interpreting the Past (HIST 104H may not be used to meet the requirement)		3
WCS 100L	Introduction to World Literatures and Cultures (required for Literature)	3
GEOG 100S	Human Geography (required for Human Behavior)	3
Credit Hours		15
Sophomore		
Fall		
JAPN 301	Intermediate to Advanced Japanese I	3
JAPN elective (300/400-level)		3
Information Literacy and Research		3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Credit Hours		16
Spring		
JAPN 302	Intermediate to Advanced Japanese II (Grade of C or better required)	3
JAPN elective (300/400-level)		3
Nature of Science II		4
Philosophy & Ethics		3
Minor, Upper-Division course, or elective		3
Credit Hours		16

Junior		
Fall		
JAPN 311	Global Conversations	3
JAPN 323	World Cultures and Contexts	3
JAPN elective (300/400-level)		3
Minor, Upper-Division course, or elective		3
Core requirement course (second language, 101F, or Area Studies)		3
Credit Hours		15
Spring		
JAPN 312W	Writing Around the World (Grade of C or better required)	3
JAPN elective (300/400-level)		3
Core requirement course (second language, 102F, or Area Studies)		3
Minor or elective		3
Minor or elective		3
Credit Hours		15
Senior		
Fall		
JAPN elective (300/400-level)		3
JAPN elective (400-level)		3
Minor or elective		3
Minor or elective		3
Impact of Technology		3
Credit Hours		15
Spring		
JAPN elective (400-level)		3
Minor or elective		3
Minor or elective		3
Minor or elective		3
Minor or elective		1
Credit Hours		13
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts World Languages and Cultures with a Major in Spanish (BA) Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Oral Communication (satisfied in the major for French, German, Japanese, and Spanish by one of the following: FR 311, GER 311, JAPN 311, SPAN 311. Students in the World Cultural Studies major must complete a general education oral communication course.)

Language and Culture: satisfied by the major for French, German, Japanese, and Spanish. Students in the World Cultural Studies major must demonstrate foreign language proficiency at the fourth-semester level.

Interpreting the Past: HIST 104H may not be used to satisfy the requirement.

Literature: WCS 100L is required

Impact of Technology requirement is satisfied by TLED 430W for teacher licensure students.

Human Behavior: GEOG 100S is required

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study
- Option C. An approved certification program, such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

World Languages and Cultures Core

Select one of the following:	6
Option A: Another foreign language at any level or	
Option B: Area Studies. Consult the department for a list of approved courses each semester.	

Total Credit Hours **6**

Spanish Major

General Education

Complete lower-division requirements	38-50
Complete upper-division requirements (minimum of 6 credit hours)	6

World Languages and Cultures Core

Complete world languages and cultures core requirements	6

Spanish

SPAN 311	Global Conversations *	3
SPAN 312W	Writing Around the World **	3
SPAN 323	World Cultures and Contexts	3
SPAN 330	Introduction to Hispanic Literature	3
SPAN 407	Advanced Grammar and Syntax (Offered in Fall)	3

Three SPAN 300- or 400-level electives 9

One SPAN 400-level elective 3

SPAN 475W	Spanish Senior Research Seminar (Offered in Fall)	3

Total Credit Hours **80-92**

- * Satisfies oral communication
- ** Grade of C or better required

Elective Credit

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements

Transfer Credits

Students who have received an AA, AS or AA and S from a Virginia community college, Richard Bland College or an equivalent associate degree approved by Transfer Evaluation Services have met all lower-division general education requirements. However, completion of ENGL 211C and either six hours of a second foreign language or six hours of area studies (which may include WCS 100L) are major requirements and are not automatically met by completion of an associate degree. Transfer students who have taken a different general education course in the same perspective area should consult the chief departmental advisor to determine if substitutions are possible.

All majors must complete the Lower-Division General Education requirements and the core requirements and select one of the following majors. A cumulative grade point average of 2.00 is required for the 30 hours of upper-division courses in French, German, Japanese, or Spanish. No more than two FR/GER/JAPN/SPAN courses taught in English can be counted for the major. At least 12 hours in the major must be taken at Old Dominion University.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
SPAN 101F	Beginning Spanish I	3
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity		3
Interpreting the Past (HIST 104H may not be used to meet the requirement)		3
Credit Hours		15
Spring		
SPAN 102F	Beginning Spanish II	3
Human Behavior:		
GEOG 100S	Human Geography (required)	3
Information Literacy and Research		3
Literature:		
WCS 100L	Introduction to World Literatures and Cultures (required)	3
Impact of Technology		3
Credit Hours		15
Sophomore		
Fall		
SPAN 201	Intermediate Spanish I	3

ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Elective course		3
Elective course		3
Credit Hours		16
Spring		
SPAN 202	Intermediate Spanish II	3
Philosophy and Ethics		3
Nature of Science II		4
Elective course		3
Elective course		3
Credit Hours		16
Junior		
Fall		
SPAN 311	Global Conversations (Satisfies Oral Communication)	3
SPAN 312W	Writing Around the World (Grade of C or better required)	3
Core requirement course		3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
SPAN 300/400-level course		3
SPAN 323	World Cultures and Contexts	3
SPAN 330	Introduction to Hispanic Literature	3
Core Requirement course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
SPAN 407	Advanced Grammar and Syntax	3
SPAN 475W	Spanish Senior Research Seminar	3
SPAN 300/400-level course		3
Elective course		3
Minor or Elective		3
Credit Hours		15
Spring		
SPAN 300/400 level course		3
SPAN 400-level course		3
Elective course		3
Elective course		1
Minor or Elective		3
Credit Hours		13
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts World Languages and Cultures with a Major in PreK-12 Spanish Education (BA)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3

Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Oral Communication (satisfied in the major for French, German, Japanese, and Spanish by one of the following: FR 311, JAPN 311, GER 311, SPAN 311. Students in the World Cultural Studies major must complete a general education oral communication course.)

Language and Culture: satisfied by the major for French, German, Japanese, and Spanish. Students in the World Cultural Studies major must demonstrate foreign language proficiency at the fourth-semester level.

Interpreting the Past: HIST 104H may not be used to satisfy the requirement.

Literature: WCS 100L is required

Impact of Technology requirement is satisfied by TLED 430W for teacher licensure students.

Human Behavior: GEOG 100S is required

Upper-Division General Education

Satisfied by the professional education core.

Requirements for Graduation

Requirements for graduation include completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better; completion of the Senior Assessment; a minimum cumulative 2.75 GPA in the major area and in the professional education core with no grade less than a C in the major/content and with no grade less than a C- in the professional education core; successful completion of the Teacher Candidate Internship, and a minimum of 120 credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the teacher education programs in the College of Arts and Letters are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information from their advisors and from the Office of Clinical Experiences website at www.odu.edu/oce (<http://www.odu.edu/oce/>).

Students holding a baccalaureate degree in French, German, or Spanish (or its accepted equivalent) may enroll in the program leading to licensure. Students seeking licensure only must see an advisor before enrolling. A maximum of nine hours in the language, to be selected with the help of the major advisor, may also be required.

Students seeking licensure in pre-K through grade 12 complete the lower-division General Education requirements listed under the Bachelor of Arts-World Languages and Cultures major.

PreK-12 Spanish Education

General Education

Complete lower-division requirements	35-47

Complete upper-division requirements (satisfied through professional education coursework)

World Languages and Cultures Core

Complete world languages and cultures core requirements	6

PreK-12 Spanish Education

SPAN 311	Global Conversations **	3
SPAN 312W	Writing Around the World	3
SPAN 323	World Cultures and Contexts	3
SPAN 330	Introduction to Hispanic Literature	3
SPAN 407	Advanced Grammar and Syntax	3
Three SPAN 300 or 400-level electives		9
One SPAN 400-level elective		3
SPAN 475W	Spanish Senior Research Seminar	3

Professional Education Sequence

TLED 301	Foundations and Introduction to Assessment of Education	3
TLED 360	Classroom Management and Discipline	2
TLED 408	Reading and Writing in Content Areas	3
TLED 430W	PK-12 Instructional Technology **	3
TLED 485	Teacher Candidate Internship	12
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
WLC 452	Methods for Teaching World Languages in Pre-K through Grade 12	3
WLC 456	Seminar in World Languages Teacher Education	1

Total Credit Hours	104-116

* Satisfies oral communication requirement.

** Satisfies impact of technology requirement.

Elective Credit

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Information

Admission

All students must apply for and be admitted into the approved foreign language PreK-12 teacher education program for French, German or Spanish. Students must meet the required criteria for admission by earning the minimum required grade point averages (GPA).

Prescribed Virginia Board of Education Assessment for Admission to an Approved Teacher Education Program

Old Dominion University students seeking admission to an approved teacher education program must satisfy the Virginia Board of Education required assessment for admission into an approved teacher education program.

For the most current information on the prescribed Virginia Board of Education admission assessment, visit the Office of Clinical Experiences website, <http://www.odu.edu/oce> (<http://www.odu.edu/oce/>) and review the *Professional Education Handbook*.

Required grade point averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required – all French, German or Spanish major courses must be passed with a grade of C or higher.
- A professional education GPA of 2.75 is required – all professional education courses must be passed with a grade of C- or higher.

Although students may enroll in a limited number of education courses, students must be admitted into the approved foreign language teacher preparation program prior to enrolling in any instructional strategies practicum education course. Students must also meet with an education advisor in the Office of Clinical Experiences in the Darden College of Education and Professional Studies.

Continuance

Students must maintain a cumulative GPA of 2.75, a major/content GPA of 2.75 and a professional education GPA of 2.75. French, German or Spanish courses must be passed with a grade of C or higher. The professional education core must be completed with a grade of C- or higher for continuance. A professional education GPA of 2.75 is required for continuance. Students must take and pass the Praxis Subject Assessment, French, German or Spanish World Language (formerly Praxis II) and receive an official rating of Advanced-low or higher on the ACTFL OPI prior to or while enrolled in the instructional strategies course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <https://www.odu.edu/clinical-experiences/placement/background-checks> (<https://www.odu.edu/clinical-experiences/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Virginia Board of Education Prescribed Assessments for Licensure

- Praxis Subject Assessment, French World Language (test code 5174) – passing score of 163 required
- Praxis Subject Assessment, German World Language (test code 5183) – passing score of 163 required
- Praxis Subject Assessment, Spanish World Language (test code 5195) – passing score of 168 required

To review more information on the Virginia Board of Education prescribed assessments, visit the Office of Clinical Experiences website, www.odu.edu/oce (<http://www.odu.edu/oce/>).

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
SPAN 101F	Beginning Spanish I	3

ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity		3
Interpreting the Past (HIST 104H may not be used to meet the requirement)		3
Credit Hours		15
Spring		
SPAN 102F	Beginning Spanish II	3
Human Behavior:		
GEOG 100S	Human Geography (required)	3
Information Literacy and Research		3
Literature:		
WCS 100L	Introduction to World Literatures and Cultures (required)	3
Philosophy and Ethics		3
Credit Hours		15
Sophomore		
Fall		
SPAN 201	Intermediate Spanish I	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Core Requirement course		3
TLED 301	Foundations and Introduction to Assessment of Education	3
Credit Hours		16
Spring		
SPAN 202	Intermediate Spanish II	3
Nature of Science II		4
Core Requirement course		3
TLED 360	Classroom Management and Discipline	2
TLED 430W	PK-12 Instructional Technology (satisfies Impact of Technology)	3
Credit Hours		15
Junior		
Fall		
SPAN 311	Global Conversations (Satisfies Oral Communication)	3
SPAN 312W	Writing Around the World (Grade of C or better required)	3
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
Elective course		3
Elective course		1
Credit Hours		16
Spring		
SPAN 323	World Cultures and Contexts	3

SPAN 330	Introduction to Hispanic Literature	3
SPAN 300/400-level course		3
SPAN 300/400-level course		3
TLED 408	Reading and Writing in Content Areas	3
Credit Hours		15
Senior		
Fall		
SPAN 407	Advanced Grammar and Syntax	3
SPAN 475W	Spanish Senior Research Seminar	3
SPAN 300/400-level course		3
SPAN 400-level course		3
WLC 452	Methods for Teaching World Languages in Pre-K through Grade 12	3
WLC 456	Seminar in World Languages Teacher Education	1
Credit Hours		16
Spring		
TLED 485	Teacher Candidate Internship	12
Credit Hours		12
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program

must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Arts

World Languages and Cultures with a Major in World Cultural Studies (BA)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses and in ENGL 110C before declaring major.

Oral Communication (satisfied in the major for French, German, Japanese, and Spanish by one of the following: FR 311, GER 311, JAPN 311, SPAN 311. Students in the World Cultural Studies major must complete a general education oral communication course.)

Language and Culture: satisfied by the major for French, German, Japanese, and Spanish. Students in the World Cultural Studies major must demonstrate foreign language proficiency at the fourth-semester level.

Interpreting the Past: HIST 104H may not be used to satisfy the requirement.

Literature: WCS 100L is required

Impact of Technology requirement is satisfied by TLED 430W for teacher licensure students.

Human Behavior: GEOG 100S is required

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study

- Option C. An approved certification program, such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Arts and Letters or from the Social Science Component within the College of Arts and Letters that are not required by the major (6 hours).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

World Languages and Cultures Core

Select one of the following:	6
Option A: Another foreign language at any level or	
Option B: Area Studies. Consult the department for a list of approved courses each semester.	
Total Credit Hours	6

World Cultural Studies Major

The World Cultural Studies major provides students the critical skills necessary to understand, identify, and approach global challenges and to critically evaluate and provide effective solutions for open-ended problems depending on varying cultural perspectives, values, and resources. Courses in this major are taught in English.

General Education		
Complete lower-division requirements		41-47
Complete upper-division requirements (minimum of 6 credit hours)		6
Complete foreign language coursework through the 202 level		0-12
World Languages and Cultures Core		
Complete world languages and cultures core requirements		6
World Cultural Studies		
WCS 311	Global Conversations	3
WCS 312W	Writing Around the World	3
WCS 323	World Cultures and Contexts	3
WCS 400	Global Cultural Studies	3
WCS 407	Global Communication in Practice	3
300/400-level elective *		3
300/400-level elective *		3
300/400-level elective *		3
300/400-level elective *		3
400-level elective *		3
Total Credit Hours		83-101

* Electives may be chosen from WCS 300/400-level courses, 300/400-level courses in Arabic, Chinese, French, German, Japanese and Spanish offered by the World Languages and Cultures Department (if the student is proficient), or approved courses from the Business, Engineering, and Global Citizenship focus areas listed below.

300/400-Level Electives

Business Focus Area

The business focus area provides a critical advantage in understanding the global nexus of cultural influences in international business today.

ECON 450	International Economics	3
FIN 435	International Financial Management	3
INBU 431	Doing Business in Europe	3
INBU 432	Doing Business in Latin America	3
INBU 433	Doing Business in Asia	3
MGMT 462	Comparative International Management	3
MGMT 463	Management Seminar Abroad	3
MKTG 411	Multi-National Marketing	3
PHIL 303E	Business Ethics	3
PHIL 344E	Environmental Ethics	3
WCS 307	Understanding European Culture through Film	3
WCS 310	Japan: A Cultural Odyssey	3
WCS 330	Contemporary Cultures and Media	3
WCS 410	Berlin-Paris: Crucibles of European Ideas	3
WCS 445	German Cinema I	3
WCS 471	Hispanic Women Authors	3
WCS 476	German-Jewish Literature and Culture	3

Engineering Focus Area

The Engineering focus area bridges gaps between science and culture, incorporating skills in transcultural communication and understanding that will serve students interested in working for international corporations or in development sectors.

CEE 402	Professional Practice of Engineering	1
CEE 458	Sustainable Development	3
CEE 459	Biofuels Engineering	3
ECE 407	Introduction to Game Development	3
GEOG 305	World Resources	3
GEOG 306T	Hazards: Natural and Technological	3
IT 425	Information Systems for International Business	3
PHIL 355E	Cybersecurity Ethics	3
PHIL 383T	Philosophy of Technology	3
POLS 324	International Relations Theory	3
WCS 307	Understanding European Culture through Film	3
WCS 310	Japan: A Cultural Odyssey	3
WCS 330	Contemporary Cultures and Media	3
WCS 410	Berlin-Paris: Crucibles of European Ideas	3
WCS 445	German Cinema I	3
WCS 471	Hispanic Women Authors	3
WCS 476	German-Jewish Literature and Culture	3

Global Citizenship Focus Area

In the global citizenship focus area, students learn skills necessary to approach global problems through in-depth analysis, inquiry into global challenges and cultural perspectives, and innovative paths to solutions.

CEE 458	Sustainable Development	3
COMM 400W	Intercultural Communication	3
COMM 471W	International Film History	3
ECE 407	Introduction to Game Development	3
ENGL 371W	Language and Culture	3
GEOG 451	Europe	3
GEOG 452	Africa	3

GEOG 453	Asia	3
GEOG 455	The Middle East	3
HIST 371	Modern Mexico	3
HIST 372	Central America and the Caribbean Since 1800	3
HIST 373	U.S.-Latin American Relations	3
HIST 470	Struggle for Democracy and Development in Latin America	3
PHIL 250E	World Religions: Beliefs and Values	3
PHIL 290G	Philosophy of Digital Culture	3
PHIL 353	Asian Religions	3
PHIL 485	Japanese Religion and Philosophy	3
POLS 324	International Relations Theory	3
POLS 325W	World Politics	3
POLS 436	Japanese Politics	3
POLS 445	Globalization: Dynamics and Implications	3
POLS 462	Ethnic Conflict in the New Global Order	3
PSYC 420	Cross-Cultural Psychology	3
WCS 307	Understanding European Culture through Film	3
WCS 310	Japan: A Cultural Odyssey	3
WCS 330	Contemporary Cultures and Media	3
WCS 410	Berlin-Paris: Crucibles of European Ideas	3
WCS 445	German Cinema I	3
WCS 471	Hispanic Women Authors	3
WCS 476	German-Jewish Literature and Culture	3
WGS 390T	Women, Gender, and Technology Worldwide	3
WGS 401W	Women: A Global Perspective	3

Elective Credit

Elective credit will be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements

Transfer Credits

Students who have received an AA, AS or AA and S from a Virginia community college, Richard Bland College or an equivalent associate degree approved by Transfer Evaluation Services have met all lower-division general education requirements. However, completion of ENGL 211C and either six hours of a second foreign language or six hours of area studies (which may include WCS 100L) are major requirements and are not automatically met by completion of an associate degree. Transfer students who have taken a different general education course in the same perspective area should consult the chief departmental advisor to determine if substitutions are possible.

All majors must complete the Lower-Division General Education requirements and the core requirements and select one of the following majors. A cumulative grade point average of 2.00 is required for the 30 hours of upper-division courses in French, German, Japanese, or Spanish. No more than two FR/GER/JAPN/SPAN courses taught in English can be counted for the major. At least 12 hours in the major must be taken at Old Dominion University.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Mathematical Skills		3
Human Creativity		3
Interpreting the Past (HIST 104H may not be used to meet the requirement)		3
Elective or Language and Culture I (May be waived; See requirement details)		3
Credit Hours		15
Spring		
Literature:		
WCS 100L	Introduction to World Literatures and Cultures (required)	3
Human Behavior:		
GEOG 100S	Human Geography (required)	3
Impact of Technology		3
Information Literacy and Research		3
Elective or Language and Culture II (May be waived; See requirement details)		3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Nature of Science I		4
Language and Culture III		3
Elective course		3
Elective course		3
Credit Hours		16
Spring		
Philosophy and Ethics		3
Nature of Science II		4
Language and Culture IV		3
Oral Communication		3
Elective course		3
Credit Hours		16
Junior		
Fall		
WCS 311	Global Conversations	3
WCS 312W	Writing Around the World (Grade of C or better required)	3
300/400-level approved course		3
300/400-level approved course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
WCS 323	World Cultures and Contexts	3
300/400-level approved course		3

300/400-level approved course		3
Elective course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
WCS 407	Global Communication in Practice	3
400-level approved course		3
Elective course		3
Elective course		3
Minor or Elective		3
Credit Hours		15
Spring		
WCS 400	Global Cultural Studies	3
Elective course		3
Elective course		3
Elective course		1
Minor or Elective		3
Credit Hours		13
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Arabic Minor

Coordinator: Shadi Bayadsy, sbayadsy@odu.edu

The Arabic minor consists of 12 credit hours of 300- and 400-level courses that combine the study of language and culture. For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Requirements

Prerequisite Courses: 12 credit hours

ARAB 111F	Beginning Arabic *	6
ARAB 212	Intermediate Arabic *	6

Required Courses: 12 credit hours

ARAB 311	Advanced Arabic Language and Culture I	3
ARAB 312	Advanced Arabic Language and Culture II	3
ARAB 395	Topics in Arabic	3
ARAB 495	Topics in Arabic	3

* Not included in the calculation of the 2.00 grade point average required for the minor.

Minor Chinese Studies Minor

Coordinator: Zhongtang Ren, zren@odu.edu, 683-5242

The Chinese Studies minor consists of 12 credit hours of 300- and 400- level courses that combine the study of language and culture. For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Requirements

Prerequisite Courses *

CHIN 111F	Beginning Chinese	6
CHIN 212	Intermediate Chinese	6

Total Credit Hours 12

* Prerequisite courses do not count in the 2.00 grade point average required for the minor.

Required Courses

CHIN 311	Advanced Chinese Language and Culture I	3
CHIN 312	Advanced Chinese Language and Culture II	3

Elective Courses

Select 6 credit hours from any two different subject areas listed below

CHIN 395	Topics in Chinese
CHIN 395	Topics in Chinese (Study abroad in China)
CHIN 396	Topics in Chinese

CHIN 495	Topics in Chinese
ASIA 336	The Emergence of New China
ASIA 338W	Politics of East Asia
ASIA 353	Asian Religions
ASIA 395	Topics in Asian Studies (Study abroad in China)
ASIA 435	Chinese Politics
HIST 336	The Emergence of New China
INBU 433	Doing Business in Asia
MGMT 462	Comparative International Management
MGMT 463	Management Seminar Abroad
PHIL 353	Asian Religions
PHIL 381	Buddhist Traditions
PHIL 482	Chinese Religion and Philosophy
POLS 338W	Politics of East Asia
POLS 435	Chinese Politics
POLS 437	International Relations in East Asia

Total Credit Hours 12

Any study abroad course at the 300-400 level that offers three credits can fulfill one course requirement for this minor. In cases where a study abroad course fits the themes of another interdisciplinary minor, students may request approval from the minor coordinator to use that study abroad course.

Minor European Studies Minor

Coordinator: Peter Schulman, 683-3973

The turn of the twenty-first century coincides with the first united European currency, the Euro. The Euro is emblematic of a new Europe, one that has become a major force not only in world politics but in the ever-evolving cultural landscape of the new millennium. The study of European cultures provides students with a unique understanding of the complex mosaic that is today's Europe. In the increasingly competitive job market, a focus on European Studies is a valuable asset in any field.

Requirements

Students who minor in European Studies focus on different aspects of European culture, language, literature, film, politics, geography, philosophy, and history. Students may declare a minor in European Studies upon successful completion of FR 311 and FR 312W or GER 311 and GER 312W or SPAN 311 and SPAN 312W, or the equivalent. The additional 12 credit hours will include electives in the Department of World Languages and Cultures and courses from the following program areas: Art, Geography, History, Music, Philosophy, and Political Science.

Option 1

- Two courses from World Languages and Cultures, above 312W or the equivalent. One course must be outside the language of proficiency, or can be a WCS course with a European emphasis.
- Two courses from related disciplines outside of the Department of World Languages and Cultures.

Option 2

- Three courses from World Languages and Cultures, above 312W. One course must be outside the language of proficiency, or can be a WCS course with a European emphasis.
- One course from related disciplines outside of the World Languages and Cultures Department.

Credits can also be earned by studying abroad in Europe. The student's course of study will be determined in consultation with an advisor from the Department of World Languages and Cultures.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a

requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Minor French Minor

Students must complete 15 hours of 300/400-level courses in French and earn a cumulative grade point average of 2.0 in the upper-level courses specified as a requirement for the minor. Lower-level courses and prerequisite courses do not count toward the grade point average required for the minor. Only one FR course taught in English may be applied toward the minor. At least six hours of upper-level courses must be taken through courses offered by Old Dominion University. To declare a minor the student must have completed ENGL 110C and the 202 course in the language, or have placed out of 202.

Advisor: Elizabeth Black, eblack@odu.edu

Requirements

Fifteen credit hours of 300/400-level courses in the language are required. Requirements are as follows:

FR 311	Global Conversations	3
FR 312W	Writing Around the World	3
Three FR courses at the 300/400 level		9
Total Credit Hours		15

Minor German Minor

Students must complete 15 hours of 300/400-level courses in German and earn a cumulative grade point average of 2.0 in the upper-level courses specified as a requirement for the minor. Lower-level courses and prerequisite courses do not count toward the grade point average required for the minor. Only one GER course taught in English may be applied toward the minor. At least six hours of upper-level courses must be taken through courses offered by Old Dominion University. To declare a minor the student must have completed ENGL 110C and the 202 course in the language, or have placed out of 202.

Advisor: Kerstin Steitz, ksteitz@odu.edu

Requirements

Fifteen credit hours of 300/400-level courses in the language are required. Requirements are as follows:

GER 311	Global Conversations	3
GER 312W	Writing Around the World	3
Three GER courses at the 300/400 level		9
Total Credit Hours		15

Minor Japanese Minor

The Japanese minor consists of 12 credit hours of 300- and 400-level courses that combine the study of language and culture. For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Coordinator: Minori Marken, mmarken@odu.edu

Requirements

Prerequisite Courses: 12 credit hours

JAPN 111F	Beginning Japanese *	6
JAPN 212	Intermediate Japanese *	6

Required Courses: 6 credit hours

JAPN 301	Intermediate to Advanced Japanese I	3
JAPN 302	Intermediate to Advanced Japanese II	3

Electives: 6 credit hours

Two JAPN courses at the 300/400 level	6

* Not included in the calculation of the 2.00 grade point average required for the minor.

** JAPN 212 or equivalent is a prerequisite to JAPN 311.

Minor Latin American Studies Minor

Program Director: Angélica Huízar, ahuizar@odu.edu

The minor in Latin American Studies provides students with an interdisciplinary understanding of the remarkably diverse Latin American region as well as the US bilingual and bicultural community. For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Requirements

The requirements for a minor in Latin American Studies are 15 credit hours comprised of the following:

1. Three credit hours to demonstrate Spanish proficiency (202-level or higher) or the equivalent by examination.
2. Twelve credit hours at the 300- or 400-level taken from at least three of the following program areas: Geography, History, International Business, Latin American Studies, Political Science, Spanish, and World Cultural Studies. Other courses with Latin American area focus may also count; please confirm with the Program Director.

Select four courses from at least three of the following program areas (12 credits)

Geography:	
GEOG 454W	Latin America
History:	
HIST 371	Modern Mexico
HIST 372	Central America and the Caribbean Since 1800
HIST 373	U.S.-Latin American Relations
HIST 409	History of US-Mexico Borderlands
HIST 470	Struggle for Democracy and Development in Latin America
HIST 471	Revolution in Latin America
International Business:	
INBU 432	Doing Business in Latin America
Latin American Studies:	
LAS 320	Latin American Studies: Overview of Field
LAS 321	Comparative Caribbean and Latin American Culture and Civilization
LAS 330	Afro-Latinx Narratives
LAS 331	Brazilian Cultural History
LAS 395	Topics in Latin American Area Studies
LAS 421	Human Rights in Latin America

LAS 430	Latin American Thinkers Changing Culture and Politics
LAS 431	Race and Culture in Brazil
LAS 495	Topics in Latin American Area Studies
Political Science:	
POLS 337	Latin American Politics
Spanish:	
SPAN 449	Contemporary Spanish-American Drama
World Cultural Studies:	
WCS 395	Topics in World Cultural Studies (approval of program director required)
WCS 495	Topics in World Cultural Studies (approval of program director required)
Total Credit Hours	
12	

Minor

Spanish Minor

Students must complete 15 hours of 300/400-level courses in Spanish and earn a cumulative grade point average of 2.0 in the upper-level courses specified as a requirement for the minor. Lower-level courses and prerequisite courses do not count toward the grade point average required for the minor. Only one SPAN course taught in English may be applied toward the minor. At least six hours of upper-level courses must be taken through courses offered by Old Dominion University. To declare a minor the student must have completed ENGL 110C and the 202 course in the language, or have placed out of 202.

Advisor: Luis Guadano, lguadano@odu.edu

Requirements

Fifteen credit hours of 300/400-level courses in the language are required. Requirements are as follows:

SPAN 311	Global Conversations	3
SPAN 312W	Writing Around the World	3
Three SPAN course at the 300/400 level		9
Total Credit Hours		15

Minor

World Cultures: Values and Visions Minor

Coordinator: Lee Slater, lslater@odu.edu

The World Cultures: Values and Vision interdisciplinary minor requires 12 credit hours of 300/400-level courses selected from at least two different disciplines with a maximum of six credits from any one discipline. For completion of the interdisciplinary minor, students must have a minimum overall cumulative grade point average of 2.00 in ALL courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses. At least six hours of upper-level courses must be taken through courses offered by Old Dominion University. Three credit hours may be in the major, if a major course is listed as an option for the interdisciplinary minor. As such, it will be credited toward both the major and the interdisciplinary minor.

This interdisciplinary minor develops an understanding of human behavior in different cultures. In order to interpret information from other countries and ethnic groups, students need to learn that certain common notions such as perceptions of personhood, the organization of time and space, and the appropriate organization and behavior of social groups vary from country to country. This minor will explore different cultural perspectives and value systems. Students should emerge with a more sophisticated understanding of their own and others' cultures.

Requirements

Course options are as follows:

ARAB 311	Advanced Arabic Language and Culture I	3
ARAB 312	Advanced Arabic Language and Culture II	3
ARTH 305	Egyptian Art	3
ARTH 315	Early Renaissance Art in Italy	3
ARTH 318	Baroque Art in Italy and Spain	3
ARTH 360	Asian Art	3
ARTH 495	Topics in Art History *	3
ASIA 395	Topics in Asian Studies *	3
CGE 450	Social Justice & Literacy for Immigrant and Refugee Learners	3
CGE 496	Topics in Language, Culture, and Society *	3
CHIN 395	Topics in Chinese *	3
COMM 300	International Sojourning	3
COMM 400W	Intercultural Communication	3
DANC 361	Hip Hop Dance & Culture 1	2
ECON 450	International Economics	3
ENGL 301	Introduction to British Literature I	3
ENGL 303	Shakespeare's Histories and Comedies	3
ENGL 371W	Language and Culture	3
FR 312W	Writing Around the World	3
FR 323	World Cultures and Contexts	3
FR 331	French Literary Forms: Prose	3
FR 333	French Literary Forms: Poetry	3
FR 366	Business French: Language and Culture	3
FR 407	Advanced Grammar and Syntax	3
FR 495	Topics in French *	3
GEOG 305	World Resources	3
GEOG 320	Political Geography	3
GEOG 401	Global Environmental Policy	3
GEOG 412	Cities of the World	3
GER 311	Global Conversations	3
GER 312W	Writing Around the World	3
GER 323	World Cultures and Contexts	3
GER 495	Topics in German *	3
HIST 313	Bread and Circuses: The Roman Empire	3
HIST 322	Ancient and Medieval England	3
HIST 323	Britain and the World	3
HIST 336	The Emergence of New China	3
HIST 338	Japan's Era of Transformation	3
HIST 345	Native American History	3
HIST 370	Africa and the Atlantic Slave Trade	3
HIST 371	Modern Mexico	3
HIST 481	Museums and Museology	3
INBU 450	Global Business	3
JAPN 301	Intermediate to Advanced Japanese I	3
JAPN 302	Intermediate to Advanced Japanese II	3
JAPN 309	Kanji Skills for Reading Japanese	3
JAPN 310	Japan: A Cultural Odyssey	3
JAPN 312W	Writing Around the World	3
JAPN 323	World Cultures and Contexts	3
JAPN 335	Japanese Society and Language	3
JAPN 422	Analyzing Japanese Conversation	3
JAPN 445	Japanese Language Acquisition and Teaching	3
JAPN 495	Topics in Japanese *	3
PHIL 353	Asian Religions	3

POLS 314	European Politics	3
POLS 316	Politics of Africa	3
POLS 321W	International Organizations	3
POLS 323	International Political Economy	3
POLS 324	International Relations Theory	3
POLS 337	Latin American Politics	3
POLS 338W	Politics of East Asia	3
POLS 401	Global Environmental Policy	3
PSYC 420	Cross-Cultural Psychology	3
REL 312	New Testament	3
REL 350	Judaism	3
REL 352	Islam	3
REL 354	African and African American Religious Traditions	3
REL 451	Native American Philosophies	3
REL 483	Tibet, Happiness, and this Precious Life	3
SPAN 311	Global Conversations	3
SPAN 312W	Writing Around the World	3
SPAN 323	World Cultures and Contexts	3
SPAN 330	Introduction to Hispanic Literature	3
SPAN 366	Business Spanish: Language and Culture	3
SPAN 395	Topics in Spanish *	3
SPAN 407	Advanced Grammar and Syntax	3
SPAN 415	Spanish Phonetics	3
SPAN 475W	Spanish Senior Research Seminar	3
SPAN 495	Topics in Spanish *	3
WCS 310	Japan: A Cultural Odyssey	3
WCS 311	Global Conversations	3
WCS 312W	Writing Around the World	3
WCS 323	World Cultures and Contexts	3
WCS 350	Global Communications for International Business	3
WCS 395	Topics in World Cultural Studies *	3
WCS 400	Global Cultural Studies	3
WCS 421	The Question of Memory in World Cultures	3
WCS 495	Topics in World Cultural Studies *	3
WGS 306	Women, the Environment, and Climate Change	3
WGS 390T	Women, Gender, and Technology Worldwide	3
WGS 395	Topics in Women's, Gender, and Sexuality Studies *	1-3
WGS 401W	Women: A Global Perspective	3
WGS 495	Topics in Women's, Gender, and Sexuality Studies *	3

* With approval of the coordinator

Study Abroad: Any study abroad course at the 300-400 level that offers three credits can fulfill one course requirement for this minor.

Other courses: The coordinator for the minor can approve other courses not listed above to fulfill the minor provided they substantively address some aspect of world cultures.

Strome College of Business

Web Site: <http://www.odu.edu/business> (<http://www.odu.edu/business/>)

Erika Marsillac, Dean

Elko Klijn, Associate Dean for Academic Programs and Student Success

Kiran Karande, Associate Dean for Faculty Affairs and Research

Martin Goossen, Associate Dean for Graduate Programs (Interim)

Department Chairs

Hong (Kim) Duong, Accountancy

Robert McNab, Economics

Bruce Rubin, Financial Management

Weiyong Zhang, Information Technology and Decision Sciences

Shaomin Li, Management

Chuanyi Tang, Marketing

Brandon A. Shah, Military Science and Leadership

Bruce McDonald, Public Service

Center and Institute Directors

Robert McNab, Dragas Center for Economic Analysis and Policy

Rob Pidduck, Hudgins Transitional Entrepreneurship Lab

Michael McShane, Insurance and Financial Services Center

Simon Stevenson, Harvey Lindsay School of Real Estate

Yuping Liu-Thompkins, Loyalty Science Lab

Sharon Scannell, Program Manager, Strome Center for Entrepreneurship and Innovation

Aaron Arndt, Thurmond School of Professional Sales and Negotiations

Simon Stevenson, E.V. Williams Center for Real Estate

Old Dominion University's Strome College of Business has as its principal objective the preparation of liberally educated specialists who will enter the challenging world of business and public administration. All programs in the College are designed to promote the following: professional competence; facility in the communication arts; analytical skills; leadership abilities; an understanding of social, political, and economic forces; and a strong sense of business ethics and public purpose, with a focus on problem solving. This foundation enables graduates of these programs to advance in a broad range of careers in the public and private sectors.

The Strome College of Business is one of approximately 800 schools in the world to have achieved accreditation at the graduate and undergraduate levels by the Association to Advance Collegiate Schools of Business – AACSB International. The undergraduate and graduate accounting programs have received their own accreditation through the same agency. In addition, the Master of Public Administration program is one of approximately 164 graduate programs certified as meeting the standards of the National Association of Schools of Public Affairs and Administration (NASPAA).

Undergraduate students may pursue majors in accounting, business analytics, economics, finance, human resources management, information systems and technology, international business, management, marketing, personal financial planning, real estate, and risk management and insurance. The College offers graduate programs in accounting, business administration, economics, and public administration. Additionally, the College offers a joint master's degree in computer information science with the Computer Science Department. Information about the graduate programs is available in the Graduate Catalog.

Also housed within the College is the Department of Military Science and Leadership. The mission of this department is to provide professional instruction and leadership development for selected students who desire to serve in the active or reserve components of the U.S. Army. Additional information about this program may be obtained through the Military Science and Leadership Department.

Mission and Vision Statements

The mission of the Strome College of Business is The Business of Problem Solving. Our vision is to be the preeminent source for problem solving in business, government, and non-profit organizations.

Distance Education

The college offers several degrees online through ODUGlobal to students throughout the state of Virginia and beyond. Usually students complete their general education program in a community college and transfer to Old Dominion University to complete the degree requirements. Bachelor of Science degrees in accounting, finance, information systems and technology, management, and marketing are available through different delivery technologies. Minors in several disciplines are also available.

Bachelor of Arts - Economics

The Bachelor of Arts in Economics has been discontinued. Continuing students must earn their degree by the end of spring semester 2025. This program is not available for students entering Old Dominion University in fall 2020 and subsequent semesters.

Departments

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- Economics (p. 377)
- Financial Management (p. 383)
- Information Systems and Technology (p. 407)
- Management (p. 437)
- Marketing (p. 462)
- Military Science and Leadership (Army Reserve Officers' Training Corps) (p. 486)

Programs

Bachelor of Science in Business Administration Programs

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- Financial Management with a Major in Finance (BSBA) (p. 383)
- Financial Management with a Major in Personal Financial Planning (BSBA) (p. 389)
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- Marketing Management with a Major in Digital Marketing (BSBA) (p. 468)
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Minor Programs

- Accounting Minor (p. 377)
- Business Administration Minor (p. 369)

- Business Analytics Minor (p. 436)
- Economics Minor (p. 383)
- Entrepreneurship Minor (p. 460)
- Financial Management Minor (p. 406)
- Information Systems and Technology Minor (p. 436)
- International Business Minor (p. 461)
- Management Minor (p. 461)
- Maritime and Supply Chain Management Minor (p. 437)
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- Marketing-Digital Marketing Minor (p. 474)
- Marketing-Marketing Analytics Minor (p. 480)
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- Military Leadership Minor (p. 487)
- Public Service Minor (p. 370)
- Real Estate Minor (p. 406)
- Risk Management and Insurance Minor (p. 406)
- Urban Community Minor (p. 370)

Certificate Program

- Entrepreneurship Certificate (p. 462)

Army ROTC Program

- Military Leadership (p. 486)

Centers and Institutes

The College has several external units that enhance and support the academic programs. These units, listed below, offer opportunities for faculty members and students to interact with representatives of business, industry and government regionally, nationally, and globally.

Dragas Center for Economic Analysis and Policy

The primary objectives of the center are to conduct research and develop a knowledge base relating to regional issues concerning Hampton Roads. In addition, via its annual *State of the Region* report, the center provides a forum for analysis and discussions of vital issues relating to the region and its cities.

Harvey Lindsay School of Real Estate

The Harvey Lindsay School of Real Estate at ODU embraces a comprehensive multi-disciplinary approach to real estate education. The faculty bring real-world experience to the classroom to engage students in a curriculum that will assist in developing the analytical and professional skills necessary for a career in real estate or economic development. Students enjoy access to research programs involving real-time development issues in the Hampton Roads community, as well as internship opportunities throughout the region and beyond.

Hudgins Transitional Entrepreneurship Lab

The Lab has a three-pronged mission. The first goal is to develop entrepreneurship skill-sets among individuals in the following groups in the Hampton Roads community: veterans, individuals in economically-distressed communities, women, immigrants and refugees. In addition, the Lab will develop and disseminate research focused on entrepreneurship among transitional communities. Finally, the Lab will offer students an opportunity to work on projects and activities that are entrepreneurial and community-minded to drive economic development, particularly in disadvantaged communities, with priority given to the Greater Peninsula region.

Insurance and Financial Services Center

The Insurance and Financial Services Center supports undergraduate and graduate curricula in the disciplines of professional financial planning and risk and insurance. In addition, it provides for active involvement with the Eastern Virginia financial services community as a placement, research, consultative, and resource agency. The center further supports educational

programs and seminars for the profession including a professional development program for practitioners that leads to the designation of Professional Financial Planner (PFP).

Loyalty Science Lab

The Loyalty Science Lab houses the Customer Analytics and Strategy Collaboratory (CASC). The goal is to bridge businesses and academia for collaborative inquiry and educational endeavors on turning customer data into actionable marketing strategy through advanced analytics. Faculty and student teams work with business partners to identify critical, long-standing marketing and customer challenges that research can help solve. Combining years of experience in retail, finance, travel and other sectors, we aim to create mutually beneficial relationships that help businesses answer their important questions, help our researchers do more relevant research, and help our students gain important learning experiences.

Strome Center for Entrepreneurship and Innovation

The Strome Center for Entrepreneurship and Innovation aims to spur a vibrant entrepreneurship and innovation ecosystem among ODU's student population. Open to all students across all disciplines, the Center serves as a resource for those students wanting to start a venture as well as those students interested in learning about entrepreneurship and innovation.

Thurmond School of Professional Sales and Negotiations

The core mission of the School is to provide negotiation, sales, and communication skills education. Specifically, the Thurmond School of Professional Sales and Negotiations serves four communities: (1) practitioners, (2) the local community, (3) ODU students and (4) academic scholars. The School is a boundary-spanning organization that engages in customized training sessions, hosts events, and provides research opportunities related to negotiation, sales, and communication skills. A core value of the School is to empower women and minorities through customized negotiation skills education.

E.V. Williams Center for Real Estate

The mission of the E.V. Williams Center for Real Estate is to connect the multi-disciplinary analyses, innovative curriculum and research underway at Old Dominion University with students, industry and the public sector interested and engaged in the real estate and economic development communities. By hosting topical seminars on key development issues and working closely with real estate and economic development professionals, the E.V. Williams Center builds relationships throughout the community, to facilitate research, growth and development. The E.V. Williams Center publishes annual real estate market reviews on the office, industrial, retail, single family and multi-family real estate markets and sponsors the Hampton Roads Real Estate Market Review and Forecast.

Minors

Minor Programs

- Business Administration Minor (p. 369)
- Public Service Minor (p. 370)
- Urban Community Minor (p. 370)

Minor

Business Administration Minor Requirements

A minor in business administration is available to students not receiving the Bachelor of Science in Business Administration degree. ACCT 201, ACCT 202, ECON 202S, and either BNAL 206 or STAT 130M must be completed as prerequisites for the minor and are not included in the calculation of the grade point average for the minor. Requirements for the minor are:

FIN 323	Introductory Financial Management	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3
IT 360T	Principles of Information Technology	3
OPMT 303	Operations Management	3
Total Credit Hours		15

To receive a minor, the student must achieve a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of 200-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Minor Public Service Minor

The minor in public service is offered by the School of Public Service. The purpose of the minor is to provide students with a solid theoretical foundation in the study and practice of public service, preparing students for citizenship, leadership, and careers in governmental and non-profit agencies. Students will achieve this goal by completing a series of courses from different disciplines across the University designed to provide a solid foundation in public administration and non-profit management, including an appreciation of both internal process and external environment of public and non-profit organizations. This minor will help prepare students for careers in public service and for graduate education in public administration, public affairs, and related fields.

Requirements

Program Structure

The minor in public service consists of 12 hours of coursework. Students take six hours of core classes and six hours of elective courses. At least three hours of elective courses must be chosen from PAS 408, PAS 409, PAS 410, PAS 411, PAS 412, PAS 413 or PAS 395. The other three elective hours may be selected from the approved list of elective classes, taken upon the recommendation of the department and/or academic advisor. Students should seek the recommendation of their department and/or academic advisor as to the precise mix of elective courses taken.

Designated courses for the minor in public service are as follows:

Required Core

PAS 300	Foundations of Public Service	3
PAS 301	Ethics, Governance and Accountability in Public Service	3

Electives

Select at least one of the following: 3-6

PAS 395	Selected Topics in Public Administration
PAS 408	Public Service Films
PAS 409	Leadership and Cultural Competence
PAS 410	Public and Non-profit Organization
PAS 411	Multi-Sector Partnerships for Public Service
PAS 412	Public Service Practice
PAS 413	Public Service Entrepreneurship

Select one of the following (if needed) 0-3

CRJS 444	Community Justice
HMSV 494	Entrepreneurship in Human Services and Non-Profit Fundraising
PAS 368	Internship in Public Service
PAS 497	Independent Study in Public Service
PHIL 410	Social and Political Philosophy
POLS 300	Introduction to Public Policy
POLS 309	Race, Culture and Public Policy

SOC 300	Social Problems	
SOC 325	Social Welfare	
Total Credit Hours		12

For completion of the minor, a student must have a minimum grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of 200-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Minor Urban Community Minor

Christopher B. Colburn, Department of Economics, Coordinator

The interdisciplinary minor in the Urban Community encourages an interdisciplinary approach to the problems and crucial issues that emerge from urban environments. Students gain an understanding of the issues associated with the convergence of diverse populations in urban locations and acquire an appreciation of the complexities of the interlocking and contingent nature of urban problems. This will be accomplished through an examination of the topical areas of common space, diversity, urban services, disorder, and work.

Requirements

Course options are as follows:

ARTH 435W	Modern Architecture	3
CRJS 323	Police in American Society	3
CRJS 325	Women and Crime	3
CRJS 355	Crime and the Community	3
CRJS 441	Drugs and Society	3
ECON 402	Transportation Economics	3
ECON 445W	Urban Economics	3
GEOG 310	Geography of the City	3
GEOG 411	Urban and Regional Planning	3
GEOG 412	Cities of the World	3
PRTS 433	Camp Administration	3
CRJS/SOC 444	Community Justice	3

The interdisciplinary minor in the Urban Community requires 12 credit hours of 300/400-level courses selected from at least two different disciplines with a maximum of six credits from any one discipline. For completion of the interdisciplinary minor, students must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses. At least six hours of upper-level courses must be taken through courses offered by Old Dominion University. Three credit hours may be in the major, if a major course is listed as an option for the interdisciplinary minor. As such, it will be credited toward both the major and the interdisciplinary minor.

Accountancy

Programs

Bachelor of Science in Business Administration Program

- Accounting (BSBA) (p. 371)

Minor Program

- Accounting Minor (p. 377)

Linked BSBA/MS in Accounting

Undergraduate students pursuing a BSBA in accounting at Old Dominion University may complete up to nine hours toward a Master

of Science, Accounting (MS) degree by choosing from ACCT 623, ACCT 626, ACCT 627, ACCT 630, and ACCT 662 while enrolled as an undergraduate BSBA student. Students in the linked BSBA/MS program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

A student may apply to the linked BSBA/MS program after completing ACCT 305 and 12 hours from ACCT 306, ACCT 307, ACCT 311, ACCT 425, or ACCT 426 with a C or better. Students must have an overall grade point average of 3.00 in all course work taken at Old Dominion University to be admitted to the linked program. Students must apply for admission to the MS program after completion of the undergraduate degree. Students should note that being in the undergraduate accounting major does not guarantee acceptance to the MS program.

Once admitted to the linked program, a student will take 600-level core graduate accounting courses, and these courses will be applied to the MS course requirements as long as the student already has 120 discrete credit hours for the undergraduate degree. By completing these nine hours, students will only have 21 hours to complete in the MS program during an additional year of study after graduating from the undergraduate program as long as the student earns 120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree for a total of 150 credit hours.

Bachelor of Science in Business Administration Accounting (BSBA)

Hong (Kim) Duong, Ph.D., Chair
To be named, Chief Academic Advisor

Accounting, as the world's oldest information system, provides information for most government, non-profit, and business decisions. Accounting graduates pursue successful careers in the public or private sectors. The undergraduate program in accounting at Old Dominion University is one of a select group in the country with separate accreditation from AACSB-International. The program provides a broad-based education with a variety of career objectives. The Bachelor of Science in Business Administration (BSBA) in accounting provides students with technical accounting knowledge, the ability to analyze problems, communicate solutions, interact with colleagues, and successfully handle ethical issues appropriate for staff-level positions. The program provides, at a minimum, 24 hours of accounting, which is sufficient for a graduate to sit for most accounting professional licensure and certification exams.

A student who seeks a Bachelor of Science in Business Administration degree in accounting from Old Dominion University must, in addition to meeting other requirements of the University, earn a minimum of 25 percent of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) through on- or off-campus instruction.

Strome College of Business (SCB) Center for Undergraduate Advising and Student Success

The mission of this office is to challenge and support students in self-exploration and, through advising, provide resources for them to develop an achievable plan for success. Our vision is for students to be aware of their academic, personal, and professional goals; empowered to pursue them; and confident in their ability to accomplish them.

Our professional advisors work with all Strome College of Business students regarding degree planning, changing majors, admissions, continuance, graduation requirements and required curricula for the majors and minors offered by the College.

Degree Requirements

Students in all of the Bachelor of Science in Business Administration degree programs must fulfill the University General Education requirements (including foreign language) as well as the Strome College of Business's

core, major, and elective requirements. Students must choose at least one major area to meet requirements towards the degree.

To stay in compliance with AACSB accreditation standards, students receiving a Bachelor of Science in Business Administration from Old Dominion University must complete at least half of their business course work in residence with a minimum of four courses in their declared major. This equates to 10 business classes, thus meeting the University's residency requirement as well.

Majors in the college may not take business and public administration courses for pass/fail credit except those courses in which pass/fail is the only grading option (i.e., internships and practica).

Admission to the Undergraduate Program in Business Administration

General Requirements

Applicants for admission to the undergraduate degree program in business administration (the Bachelor of Science in Business Administration) should apply initially to the Office of Admissions of Old Dominion University. Students cannot be accepted into business administration without first being admitted to the University. Admission to the University does not guarantee admission to the Bachelor of Science in Business Administration (BSBA) program. Candidates for admission to the BSBA program should indicate on the application to the University their intention to enter the undergraduate business administration degree program.

Admission to the Bachelor's Degree Program in Business Administration:

Before Admission to the bachelor's degree program in business administration can be granted, a student must have earned a grade of C or higher in each of the business Admission courses:

BUSN 110	Introduction to Contemporary Business	1
ENGL 110C	English Composition	3
MATH 162M	Precalculus I	3
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3

- BUSN 110 is not required for students pursuing majors under the BSBA in Information Systems and Technology (excluding Business Analytics) or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
- Students may utilize the Grade Forgiveness Policy for the business Admission courses.
- Transfer students may complete business Admission courses (BUSN 110, ENGL 110C, MATH 162M, ACCT 201, and ECON 202S) at another accredited college or university, but are responsible for having Transfer Evaluation Services determine that the courses are acceptable to the University.

Eligibility to Enroll in Upper-Level (300/400-level) Business Courses

Only students who have officially completed Admission courses to the BSBA program will be eligible to enroll in upper-level (300/400) business courses (refer to exceptions for non-business majors). However, students who are in progress with the business Admission courses may enroll in upper-level (300/400) business courses. Note: These students will need a Program Restriction Waiver (PRW) to enroll in these courses, with the exception of FIN 323, MGMT 325, MKTG 311, and OPMT 303. These courses require a junior class standing for registration.

Enrollment in 300/400-level Business Courses by Non-Business Majors

Enrollment in 300/400-level business courses will be granted without the Admission courses for the following exceptions:

1. Students pursuing a declared minor in the Strome College of Business may enroll in 300/400-level business courses appropriate to the minor.
2. Students pursuing Upper-Division General Education Requirement Option B: Interdisciplinary Minor or Option D: Six hours of elective upper-division courses outside the student's major discipline or college.
3. Students wishing to satisfy the Impact of Technology requirement may enroll in IT 360T.
4. Students pursuing a degree program other than the Bachelor of Science in Business Administration (BSBA) that requires or accepts specific 300/400-level business courses to complete the degree may enroll in the courses appropriate to the major.
5. Non-degree-seeking students may enroll in 300/400-level business courses if they have satisfied the prerequisites for these courses.

Students in categories 1 - 5 above who do not have a declared major will need a Program Restriction Waiver (PRW) in order to enroll in any 300/400-level Strome College of Business course (including Economics courses). Forms to request a PRW are available at the Strome College of Business website.

Regulations for Continuance in the Bachelor of Science in Business Administration

In addition to the Old Dominion University continuance policies, the following policies are specific to all declared Bachelor of Science in Business Administration (BSBA) students. The Strome College of Business makes a reasonable effort to notify undergraduate students who are not in good academic standing in the BSBA program of their academic status. Each undergraduate student who is placed on BSBA Academic Alarm or BSBA Termination (explained below) will be sent an e-mail message to that effect at the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business. Non-receipt of the e-mail messages by a student will not be considered grounds for granting exceptions or delays in enforcement of the BSBA continuance regulations.

BSBA Continuance Regulations

If a student's Grade Point Average (GPA) in their BSBA Core courses falls below a 2.0, then they will be on Academic Alarm within the Strome College of Business (SCB). This policy is very similar to the University's academic continuance policy, the main difference being that it is based on the core Business courses and impacts acceptance and continuance within the SCB.

Academic Alarm

The first semester in which a student's BSBA Core GPA drops to below a 2.0, they will be on Academic Alarm. Once considered on academic alarm within the college, taking courses within the BSBA Core is the only way to bring that GPA back up.

- If the student raises the BSBA Core GPA to above a 2.0, then they will no longer be on academic alarm.
- If the BSBA Core GPA does not reach a 2.0 but the semester average in the BSBA Core courses is a 2.0 or higher, then the student will remain on academic alarm and be able to continue within the SCB.

SCB Termination

While on academic alarm within the Strome College of Business, if the semester BSBA Core GPA falls below a 2.0, the student will be terminated from the SCB and their major coding will be changed from Business to Undecided. (Terminations will not be processed in summer semesters.)

Appeals

If you have been terminated, you may appeal the decision if you have extenuating circumstances and documentation to support your claim. To appeal, write a letter and include documentation of your circumstances to the Associate Dean of the Strome College of Business (Constant Hall, Suite 2004). There are specific details that need to be included with your appeal -

for more information, please see the appeals process as described in the most recently issued catalog.

Guidelines for Filing a BSBA Termination Appeal

1. All students have the right to appeal their BSBA termination if they believe that extraordinary circumstances were the main reason for their poor academic performance. Notifications of pending BSBA termination are sent to the student's ODU email address and include information on the appeal process and deadlines. All BSBA termination appeals must be submitted electronically using the link provided in the email and will be reviewed by the SCB Termination Appeal Committee. Students are responsible for submitting their appeal by the stated deadline; late appeals will not be reviewed. Decisions of the Termination Appeal Committee may be appealed to the Associate Dean for Academic Programs in the Strome College of Business whose decision is final.

2. Appeals must be based on circumstances pertinent to the semesters in which the academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the terminated student. The appeal letter must provide sufficient detail and explanation regarding the following points because there is no face-to-face meeting with the Associate Dean for Academic Programs in the Strome College of Business. The decision of the Associate Dean is final. Students without documentation will not be allowed to appeal their termination. In order to be reviewed, an appeal letter must:

- a. Document the extraordinary circumstances such as a death in the family, medical complications or chronic conditions, personal or family emergency, overwhelming work schedules, dorm-mate conflict, or a personal relationship conflict that have adversely affected performance: i.e., a statement or letter from a physician, employer, family members, faculty, academic advisor, Counseling Services, or Educational Accessibility.
- b. Explain how the extraordinary circumstances caused each semester of poor academic performance.
- c. State the reasons why an official withdrawal was not requested.
- d. Explain how the extraordinary circumstance(s) has been resolved.
- e. Provide a plan of action to return to good BSBA academic standing.

3. Students who do not file a BSBA termination appeal or whose appeals are denied, are no longer eligible to pursue a bachelor's degree in Business Administration. Upon BSBA termination, the student's major in the Strome College of Business will be removed. (This does not affect a declared second major outside of the BSBA.) These students are advised to work with an advisor in the SCB Center for Undergraduate Advising to explore other major options, and for referrals to other advising departments for a new major declaration.

4. BSBA-terminated students who had pre-registered for a subsequent semester lose eligibility for continued enrollment in upper-level business courses.

Applying for Readmission to the BSBA Program

After a minimum of five years has passed since a student was terminated from the BSBA program, the student may apply for readmission to the program. There must be a high probability the student will successfully complete the degree program, and approval will be at the discretion of the Strome College of Business Associate Dean.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3

Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication: COMM 101R or MKTG 200R required. Additionally, all students majoring in business administration can expect to complete several courses in which individual and/or group oral presentations will be required.

Mathematics: MATH 162M and MATH 200 required.

Information Literacy and Research: IT 150G (recommended) or any "G" course from the approved general education information literacy and research course list.

Human Behavior: Met in the Business Administration core for all majors except Economics.

Philosophy and Ethics must be satisfied by completion of either PHIL 230E or an upper-level "E" course from the approved general education ethics course list. A philosophy course designated with a P will not meet this requirement for business administration students with the exception of a "P" course taken prior to fall 2010.

Impact of Technology requirement is satisfied within each BSBA degree major except Information Systems and Technology by IT 360T. In the Information Systems and Technology majors (excluding Business Analytics), the Impact of Technology requirement is satisfied by the coursework required for the major.

Transfer students with an applicable associate's degree from a Virginia Community College or another community college that has a seamless transfer agreement with ODU, and students with a prior bachelor's degree from another university, must nevertheless have a grade of C or better in the following to be able to transfer them:

COMM 101R	Public Speaking	3
or MKTG 200R	Professional Interactions and Negotiations	
PHIL 230E	Introduction to Ethics (Or an upper-level ethics course)	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3

Upper-Division General Education

- Option A. Any University-approved minor, second degree, or second major.
- Option B. An interdisciplinary minor consisting of 12 credits, three of which can be in the major. Interdisciplinary minors are described in the University Catalog section labeled Requirements for Undergraduate Degrees, Upper-Division Requirements.

- Option C. An approved certification program, such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the Strome College of Business and not required by the major (6 credits).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Business Administration Core

ACCT 201	Principles of Financial Accounting *	3
ACCT 202	Principles of Managerial Accounting *	3
BNAL 206	Business Analytics I *	3
BNAL 306	Business Analytics II	3
ECON 201S	Principles of Macroeconomics *	3
ECON 202S	Principles of Microeconomics *	3
ECON 301	Managerial Economics	3
FIN 323	Introductory Financial Management	3
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology **	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 485W	Business Policy and Strategy (C or better) ***	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
Total Credit Hours		42

* Not automatically waived for transfer students with an applicable associate's degree from a Virginia Community College or another acceptable community college, or for students with a prior bachelor's degree from another university. A grade of C or better must be earned to transfer these courses to Old Dominion University.

** Students completing a major or minor in Information Systems and Technology (excluding the Business Analytics major) do not take this course.

*** Students majoring in Economics must complete MGMT 485W, but meet the writing intensive requirement by earning a grade of C or better either in MGMT 485W or in one of the ECON Writing Intensive courses.

Accounting Major

General Education

Complete lower-division requirements		35-41
Complete upper-division requirements (minimum of 6 credit hours)		6
BUSN 110	Introduction to Contemporary Business ⁺	1
MATH 200	Calculus for Business and Economics	3

Business Administration Core

Complete business administration core requirements	42

Accounting

ACCT 305	Essentials of Financial Accounting I (grade of C or better required)	3
ACCT 306	Essentials of Financial Accounting II *	3
ACCT 307	Essentials of Financial Accounting III *	3
ACCT 311	Managerial Accounting *	3
ACCT 411	Financial Auditing *	3
ACCT 425	Taxation of Individuals *	3
ACCT 426	Taxation of Business Entities *	3
ACCT 460	Accounting Information Systems *	3
International Business Requirement		
Select one of the following:		3
ACCT 450	International and Advanced Accounting *	
ECON 450	International Economics	
FIN 435	International Financial Management	
IT 425	Information Systems for International Business	
MGMT 361	International Business Operations	
MGMT 462	Comparative International Management	
MGMT 463	Management Seminar Abroad	
MKTG 411	Multi-National Marketing	
MSCM 370	International Shipping	
Free Elective		3
300-400 Level Free Elective		3
Total Credit Hours		120-126

+ Not required for students pursuing the IT major or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.

* Grade of C- or higher required.

ECON 200S cannot be used for credit by students pursuing a degree in the Strome College of Business. ECON 200S cannot be used as a free elective.

Courses included in the calculation of the 2.00 overall grade point average for major course work for graduation are: all 300- and/or 400-level ACCT courses. In addition to an overall and major grade point average of 2.0, students must complete ACCT 305, Essentials of Financial Accounting I, with a grade of C or better and all other upper-division accounting courses with a grade of C- or better in order to graduate.

Non-Required Electives

All accounting students may take one of these electives, and use the course as a free elective or 300-400 level free elective, if they have completed ACCT 305, Essentials of Financial Accounting I, with a C or better and ACCT 306, Essentials of Financial Accounting II, with a C- or better:

ACCT 367	Cooperative Education	1-3
ACCT 368	Student Internship	1-3
ACCT 369	Practicum	1-3
ACCT 405	Accounting and Auditing in the Public/Nonprofit Sector	3
ACCT 422	Tax Research	3
ACCT 450	International and Advanced Accounting	3
ACCT 495	Selected Topics in Accounting	1-3

Additional Requirements and Information

Advanced Placement

The college accepts advanced placement credit in accordance with the rules and regulations outlined in the Academic Information section of this catalog. Students may take College-Level Examination Program (CLEP) tests to receive credit for:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
FIN 331	Legal Environment of Business	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3

Students are advised to contact the Office of Prior Learning Assessment for more information regarding CLEP and other prior learning assessment credit options. For advanced placement credit in any other business or public administration course, students are advised to contact the chair of the department offering the course. Additional information about credit awarded for qualifying scores on AP and IB subject examinations can be found on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Practical Work Experience for Business Administration Majors

Students may complement their major studies with a practical work experience, which may take the form of an internship, cooperative education experience or a class containing a real-world, hands-on project. Students must apply for internship or co-op participation through the Strome College of Business Career & Leadership Development Satellite Office. All work experiences must be approved by the faculty sponsor in the appropriate department prior to registering for credit. Students may not earn credit for previous or current work experiences. (However, academic credit for work experience may be approved in accordance with the policies for granting prior learning credit as defined in the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this catalog.) For details see the Center for Career & Leadership Development section of this catalog.

Use of Internship and Similar Hours Toward Business Administration Majors

A student may apply no more than six hours of cooperative education, student internship or practicum courses to satisfy degree requirements. Students may not use more than three hours of cooperative education, student internship or practicum courses to satisfy major elective requirements in each of the students' majors. These courses are numbered 367, 368 or 369. Additional hours of cooperative education, student internship or practicum courses, however, can be used to satisfy other requirements such as free electives or general business electives. Additional internships must each involve substantially different kinds of work experiences. Internships must be approved by the Chief Departmental Advisor of the student's major and the CAP Coordinator of the internship.

Transfer of the Associate of Science in Business Administration Towards Degree Requirements

Students transferring to the college must complete a minimum of 10 business courses offered by the college to earn the degree from Old Dominion University, in accordance with AACSB regulations. Those transfer students holding the Associate of Science in Business Administration degree from a Virginia Community College must earn the grade of "C" or better in the following courses in order to satisfy requirements found in the first two years of the BSBA degree:

COMM 101R	Public Speaking	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
BNAL 206	Business Analytics I	3

Select one of the following:	3
PHIL 230E Introduction to Ethics	
Upper-level ethics course	

With the exception of the courses listed above, the University's lower-division General Education requirements are deemed satisfied by the accepted AS degrees. These typically include all AS degrees from the Virginia Community College System except the applied science degrees. For more information about accepted AS degrees contact the Office of Admissions. Associate degree holders, although meeting lower-level General Education requirements, must ensure that 120 credits are completed to earn the BSBA degree. A minimum of 25% of the required credit hours must be completed through Old Dominion University, at least 12 of which are upper-level courses in the major program.

The Strome College of Business does not accept courses completed at the freshman and sophomore levels at other institutions for required courses at the junior and senior level at Old Dominion University. Please see the section on CLEP credits (Prior Learning Assessment Credit Options at the Undergraduate Level) for additional information.

Grade Average Requirements for Graduation

To graduate with a Bachelor of Science in Business Administration degree, students must present a minimum of 120 hours with a minimum overall grade point average of 2.00 in all courses taken at Old Dominion University. Students must also attain a minimum overall grade point average of 2.00 in courses taken toward the major (courses included in the major grade point average calculation are listed following the description of each major's course work).

Additionally, students must attain a minimum overall grade point average of 2.00 in the BSBA Core listed below. Only courses completed at Old Dominion University will be used to compute the BSBA Core average. Students with an Information Systems and Technology major (excluding Business Analytics) are not required to take IT 360T, so the BSBA Core grade point average is computed using the remaining courses. If the BSBA Core average is below the required 2.00 minimum, students are advised to utilize the Grade Forgiveness Policy or Adjusted Resident Credit option when appropriate to improve the grade point average.

Requirements for Completing a Bachelor of Science in Business Administration

The following sections show the courses that are requirements for all business students, regardless of the chosen major: Lower-Division General Education, BSBA Core Courses, and Upper-Division General Education. Credit hours are listed after the course title. The student must also choose a major and complete the requirements listed for that major on the following pages.

Foundation Courses for Admission to the Strome College of Business

ENGL 110C	English Composition (C or better)	3
MATH 162M	Precalculus I (C or better)	3
ACCT 201	Principles of Financial Accounting (C or better)	3
ECON 202S	Principles of Microeconomics (C or better)	3
BUSN 110	Introduction to Contemporary Business *	1

* Not required for students pursuing an Information Systems and Technology major (excluding Business Analytics) or for students with an associate's degree in business administration or with a prior bachelor's degree in business administration.

See the section on Admission to the Undergraduate Program in Business Administration, General Requirements.

Business Elective

A business elective is a course that is offered by an accredited college of business, including the Strome College of Business at Old Dominion

University. Public Affairs and Service (PAS) courses offered by the Strome College of Business are not considered as business courses. However, because some business courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate business elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Free Elective

In the majority of cases a free elective is any course offered by an accredited community college or university, including Old Dominion University. However, because some courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 162M	Precalculus I (C or better required)	3
Language and Culture I (May be waived; see requirement details)		0-3
Nature of Science I		4
BUSN 110	Introduction to Contemporary Business (C or better required)	1
Free Elective		3
Credit Hours		14-17

Spring		
MATH 200	Calculus for Business and Economics	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Language and Culture II (May be waived; see requirement details)		0-3
Nature of Science II		4
Interpreting the Past		3
Credit Hours		13-16

Sophomore		
Fall		
Literature		3
Oral Communication: COMM 101R required		3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	

PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL/DASC 357E	Ethics and Data	
PHIL 442E	Studies in Applied Ethics	
ACCT 201	Principles of Financial Accounting (C or better required)	3
ECON 202S	Principles of Microeconomics (C or better required)	3
Credit Hours		15
Spring		
Human Creativity		3
Information Literacy and Research		3
ACCT 202	Principles of Managerial Accounting (C or better required)	3
ECON 201S	Principles of Macroeconomics	3
BNAL 206	Business Analytics I	3
Credit Hours		15
Junior		
Fall		
BNAL 306	Business Analytics II	3
FIN 323	Introductory Financial Management	3
IT 360T	Principles of Information Technology (Satisfies Impact of Technology)	3
MGMT 325	Contemporary Organizations and Management	3
ACCT 305	Essentials of Financial Accounting I (C or better required)	3
Credit Hours		15
Spring		
OPMT 303	Operations Management	3
FIN 331	Legal Environment of Business	3
MKTG 311	Marketing Principles and Problems	3
ECON 301	Managerial Economics	3
ACCT 306	Essentials of Financial Accounting II (C- or better required)	3
ACCT 311	Managerial Accounting (C- or better required)	3
Credit Hours		18
Senior		
Fall		
MGMT 485W	Business Policy and Strategy (C or better required)	3
ACCT 307	Essentials of Financial Accounting III (C- or better required)	3
ACCT 411	Financial Auditing (C- or better required)	3
ACCT 425	Taxation of Individuals (C- or better required)	3

Upper-Division General Education		3
Credit Hours		15
Spring		
ACCT 426	Taxation of Business Entities (C- or better required)	3
ACCT 460	Accounting Information Systems (C- or better required)	3
International Business Elective		3
300-400 Level Free Elective		3
Upper-Division General Education		3
Credit Hours		15
Total Credit Hours		120-126

Linked BSBA/MS in Accounting

Undergraduate students pursuing a BSBA in accounting at Old Dominion University may complete up to nine hours toward a Master of Science, Accounting (MS) degree by choosing from ACCT 623, ACCT 626, ACCT 627, ACCT 630, and ACCT 662 while enrolled as an undergraduate BSBA student. Students in the linked BSBA/MS program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

A student may apply to the linked BSBA/MS program after completing ACCT 305 and 12 hours from ACCT 306, ACCT 307, ACCT 311, ACCT 425, or ACCT 426 with a C or better. Students must have an overall grade point average of 3.00 in all course work taken at Old Dominion University to be admitted to the linked program. Students must apply for admission to the MS program after completion of the undergraduate degree. Students should note that being in the undergraduate accounting major does not guarantee acceptance to the MS program.

Once admitted to the linked program, a student will take 600-level core graduate accounting courses, and these courses will be applied to the MS course requirements as long as the student already has 120 discrete credit hours for the undergraduate degree. By completing these nine hours, students will only have 21 hours to complete in the MS program during an additional year of study after graduating from the undergraduate program as long as the student earns 120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree for a total of 150 credit hours.

BSBA to MBA (Master of Business Administration) Linked Program

Students interested in the program should contact the MBA Program Office as early as possible to discuss their plans for early entry. Once admitted to the program, the MBA program manager will act as the student's co-advisor, along with the chief departmental advisor or chief discipline advisor in the student's undergraduate major. The MBA Program Office is located in 1026 Constant Hall. The phone number is 757-683-3585 and email is mbainfo@odu.edu.

BSBA to MPA (Master of Public Administration) Linked Program

The linked BSBA to MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking 12 credits of the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program

must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

A potential candidate will have:

1. Completed all lower level general education requirements
2. Achieved a cumulative GPA of at least 3.0 at the end of the junior year

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog. For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Accounting Minor Requirements

A minor in accounting requires the completion of ACCT 305 with a grade of C or better, ACCT 306 with a C- or better, and 6 hours of 300- and/or 400-level accounting courses. All accounting courses at the 300 and 400 levels must be preceded by listed prerequisites with:

ACCT 201 & ACCT 202	Principles of Financial Accounting and Principles of Managerial Accounting	6
or		
ACCT 226 & ACCT 227	Honors: Principles of Financial Accounting and Honors: Principles of Managerial Accounting	6
As prerequisites to:		
ACCT 305	Essentials of Financial Accounting I	3

Students cannot use ACCT 367, ACCT 368 or ACCT 369 to satisfy the minor elective. To receive a minor, the student must achieve a minimum overall cumulative grade point average of 2.00 in all 300- and/or 400-level accounting courses specified as a requirement for the minor exclusive of 200-level courses and prerequisite courses. In addition, a grade of C or better is required in ACCT 305, and a grade of C- or better is required in all other 300-and/or 400-level accounting courses counted toward the minor. A minimum of 6 hours in upper-level courses in the minor must be taken through courses offered by Old Dominion University.

Economics

Web Site: <https://www.odu.edu/business/departments/economics> (<https://www.odu.edu/business/departments/economics/>)

Programs

Bachelor of Science in Business Administration Program

- Economics (BSBA) (p. 377)

Minor Program

- Economics Minor (p. 383)

Bachelor of Science in Business Administration Economics (BSBA)

Robert McNab, Chair
Mohamed Rahoui, Chief Departmental Advisor

Economics is the study of how societies use their limited resources to produce wealth and how the distribution of the wealth among their members is determined. Knowledge of economics helps businesses and households understand how economic events will affect them, how they can best react to those events, and how to assess government economic policies.

Majoring in economics is a springboard to a wide variety of careers in business, government agencies, and not-for-profit organizations. A major in economics is also excellent preparation for law school and graduate study towards master's and doctoral programs in economics, business administration, public administration, urban studies, international studies, marine affairs, and other fields. A student who seeks a Bachelor of Science in Business Administration degree with a major in Economics from Old Dominion University must, in addition to meeting other requirements of the University, earn a minimum of 25 percent of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) through on- or off-campus instruction. This must include a minimum of 12 credit hours of upper-level ECON courses.

Strome College of Business (SCB) Center for Undergraduate Advising and Student Success

The mission of this office is to challenge and support students in self-exploration and, through advising, provide resources for them to develop an achievable plan for success. Our vision is for students to be aware of their academic, personal, and professional goals; empowered to pursue them; and confident in their ability to accomplish them.

Our professional advisors work with all Strome College of Business students regarding degree planning, changing majors, admissions, continuance, graduation requirements and required curricula for the majors and minors offered by the College.

Degree Requirements

Students in all of the Bachelor of Science in Business Administration degree programs must fulfill the University General Education requirements (including foreign language) as well as the Strome College of Business's core, major, and elective requirements. Students must choose at least one major area to meet requirements towards the degree.

To stay in compliance with AACSB accreditation standards, students receiving a Bachelor of Science in Business Administration from Old Dominion University must complete at least half of their business course work in residence with a minimum of four courses in their declared major. This equates to 10 business classes, thus meeting the University's residency requirement as well.

Majors in the college may not take business and public administration courses for pass/fail credit except those courses in which pass/fail is the only grading option (i.e., internships and practica).

Admission to the Undergraduate Program in Business Administration

General Requirements

Applicants for admission to the undergraduate degree program in business administration (the Bachelor of Science in Business Administration) should apply initially to the Office of Admissions of Old Dominion University. Students cannot be accepted into business administration without first being admitted to the University. Admission to the University does not guarantee admission to the Bachelor of Science in Business Administration (BSBA) program. Candidates for admission to the BSBA program should indicate on the application to the University their intention to enter the undergraduate business administration degree program.

Admission to the Bachelor's Degree Program in Business Administration:

Before Admission to the bachelor's degree program in business administration can be granted, a student must have earned a grade of C or higher in each of the business Admission courses:

BUSN 110	Introduction to Contemporary Business	1
ENGL 110C	English Composition	3
MATH 162M	Precalculus I	3
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3

- BUSN 110 is not required for students pursuing majors under the BSBA in Information Systems and Technology (excluding Business Analytics) or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
- Students may utilize the Grade Forgiveness Policy for the business Admission courses.
- Transfer students may complete business Admission courses (BUSN 110, ENGL 110C, MATH 162M, ACCT 201, and ECON 202S) at another accredited college or university, but are responsible for having Transfer Evaluation Services determine that the courses are acceptable to the University.

Eligibility to Enroll in Upper-Level (300/400-level) Business Courses

Only students who have officially completed Admission courses to the BSBA program will be eligible to enroll in upper-level (300/400) business courses (refer to exceptions for non-business majors). However, students who are in progress with the business Admission courses may enroll in upper-level (300/400) business courses. Note: These students will need a Program Restriction Waiver (PRW) to enroll in these courses, with the exception of FIN 323, MGMT 325, MKTG 311, and OPMT 303. These courses require a junior class standing for registration.

Enrollment in 300/400-level Business Courses by Non-Business Majors

Enrollment in 300/400-level business courses will be granted without the Admission courses for the following exceptions:

1. Students pursuing a declared minor in the Strome College of Business may enroll in 300/400-level business courses appropriate to the minor.
2. Students pursuing Upper-Division General Education Requirement Option B: Interdisciplinary Minor or Option D: Six hours of elective upper-division courses outside the student's major discipline or college.
3. Students wishing to satisfy the Impact of Technology requirement may enroll in IT 360T.
4. Students pursuing a degree program other than the Bachelor of Science in Business Administration (BSBA) that requires or accepts specific 300/400-level business courses to complete the degree may enroll in the courses appropriate to the major.
5. Non-degree-seeking students may enroll in 300/400-level business courses if they have satisfied the prerequisites for these courses.

Students in categories 1 - 5 above who do not have a declared major will need a Program Restriction Waiver (PRW) in order to enroll in any 300/400-level Strome College of Business course (including Economics courses). Forms to request a PRW are available at the Strome College of Business website.

Regulations for Continuance in the Bachelor of Science in Business Administration

In addition to the Old Dominion University continuance policies, the following policies are specific to all declared Bachelor of Science in Business Administration (BSBA) students. The Strome College of Business makes a reasonable effort to notify undergraduate students who are not in good academic standing in the BSBA program of their academic status. Each undergraduate student who is placed on BSBA Academic Alarm or BSBA Termination (explained below) will be sent an e-mail message to that effect at the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business. Non-receipt of the e-mail messages by a student will not be considered grounds for granting exceptions or delays in enforcement of the BSBA continuance regulations.

BSBA Continuance Regulations

If a student's Grade Point Average (GPA) in their BSBA Core courses falls below a 2.0, then they will be on Academic Alarm within the Strome

College of Business (SCB). This policy is very similar to the University's academic continuance policy, the main difference being that it is based on the core Business courses and impacts acceptance and continuance within the SCB.

Academic Alarm

The first semester in which a student's BSBA Core GPA drops to below a 2.0, they will be on Academic Alarm. Once considered on academic alarm within the college, taking courses within the BSBA Core is the only way to bring that GPA back up.

- If the student raises the BSBA Core GPA to above a 2.0, then they will no longer be on academic alarm.
- If the BSBA Core GPA does not reach a 2.0 but the semester average in the BSBA Core courses is a 2.0 or higher, then the student will remain on academic alarm and be able to continue within the SCB.

SCB Termination

While on academic alarm within the Strome College of Business, if the semester BSBA Core GPA falls below a 2.0, the student will be terminated from the SCB and their major coding will be changed from Business to Undecided. (Terminations will not be processed in summer semesters.)

Appeals

If you have been terminated, you may appeal the decision if you have extenuating circumstances and documentation to support your claim. To appeal, write a letter and include documentation of your circumstances to the Associate Dean of the Strome College of Business (Constant Hall, Suite 2004). There are specific details that need to be included with your appeal - for more information, please see the appeals process as described in the most recently issued catalog.

Guidelines for Filing a BSBA Termination Appeal

1. All students have the right to appeal their BSBA termination if they believe that extraordinary circumstances were the main reason for their poor academic performance. Notifications of pending BSBA termination are sent to the student's ODU email address and include information on the appeal process and deadlines. All BSBA termination appeals must be submitted electronically using the link provided in the email and will be reviewed by the SCB Termination Appeal Committee. Students are responsible for submitting their appeal by the stated deadline; late appeals will not be reviewed. Decisions of the Termination Appeal Committee may be appealed to the Associate Dean for Academic Programs in the Strome College of Business whose decision is final.
2. Appeals must be based on circumstances pertinent to the semesters in which the academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the terminated student. The appeal letter must provide sufficient detail and explanation regarding the following points because there is no face-to-face meeting with the Associate Dean for Academic Programs in the Strome College of Business. The decision of the Associate Dean is final. Students without documentation will not be allowed to appeal their termination. In order to be reviewed, an appeal letter must:
 - a. Document the extraordinary circumstances such as a death in the family, medical complications or chronic conditions, personal or family emergency, overwhelming work schedules, dorm-mate conflict, or a personal relationship conflict that have adversely affected performance: i.e., a statement or letter from a physician, employer, family members, faculty, academic advisor, Counseling Services, or Educational Accessibility.
 - b. Explain how the extraordinary circumstances caused each semester of poor academic performance.
 - c. State the reasons why an official withdrawal was not requested.
 - d. Explain how the extraordinary circumstance(s) has been resolved.
 - e. Provide a plan of action to return to good BSBA academic standing.

3. Students who do not file a BSBA termination appeal or whose appeals are denied, are no longer eligible to pursue a bachelor's degree in Business Administration. Upon BSBA termination, the student's major in the Strome College of Business will be removed. (This does not affect a declared second major outside of the BSBA.) These students are advised to work with an advisor in the SCB Center for Undergraduate Advising to explore other major options, and for referrals to other advising departments for a new major declaration.

4. BSBA-terminated students who had pre-registered for a subsequent semester lose eligibility for continued enrollment in upper-level business courses.

Applying for Readmission to the BSBA Program

After a minimum of five years has passed since a student was terminated from the BSBA program, the student may apply for readmission to the program. There must be a high probability the student will successfully complete the degree program, and approval will be at the discretion of the Strome College of Business Associate Dean.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication: COMM 101R or MKTG 200R required. Additionally, all students majoring in business administration can expect to complete several courses in which individual and/or group oral presentations will be required.

Mathematics: MATH 162M and MATH 200 required.

Information Literacy and Research: IT 150G (recommended) or any "G" course from the approved general education information literacy and research course list.

Human Behavior: Met in the Business Administration core for all majors except Economics.

Philosophy and Ethics must be satisfied by completion of either PHIL 230E or an upper-level "E" course from the approved general education ethics course list. A philosophy course designated with a P will not meet this requirement for business administration students with the exception of a "P" course taken prior to fall 2010.

Impact of Technology requirement is satisfied within each BSBA degree major except Information Systems and Technology by IT 360T. In the Information Systems and Technology majors (excluding Business Analytics), the Impact of Technology requirement is satisfied by the coursework required for the major.

Transfer students with an applicable associate's degree from a Virginia Community College or another community college that has a seamless transfer agreement with ODU, and students with a prior bachelor's degree from another university, must nevertheless have a grade of C or better in the following to be able to transfer them:

COMM 101R	Public Speaking	3
or MKTG 200R	Professional Interactions and Negotiations	
PHIL 230E	Introduction to Ethics (Or an upper-level ethics course)	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3

Upper-Division General Education

- Option A. Any University-approved minor, second degree, or second major.
- Option B. An interdisciplinary minor consisting of 12 credits, three of which can be in the major. Interdisciplinary minors are described in the University Catalog section labeled Requirements for Undergraduate Degrees, Upper-Division Requirements.
- Option C. An approved certification program, such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the Strome College of Business and not required by the major (6 credits).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Business Administration Core

ACCT 201	Principles of Financial Accounting *	3
ACCT 202	Principles of Managerial Accounting *	3
BNAL 206	Business Analytics I *	3
BNAL 306	Business Analytics II	3
ECON 201S	Principles of Macroeconomics *	3
ECON 202S	Principles of Microeconomics *	3
ECON 301	Managerial Economics	3
FIN 323	Introductory Financial Management	3
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology **	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 485W	Business Policy and Strategy (C or better) ***	3
MKTG 311	Marketing Principles and Problems	3

OPMT 303	Operations Management	3
Total Credit Hours		42

*	Not automatically waived for transfer students with an applicable associate's degree from a Virginia Community College or another acceptable community college, or for students with a prior bachelor's degree from another university. A grade of C or better must be earned to transfer these courses to Old Dominion University.
**	Students completing a major or minor in Information Systems and Technology (excluding the Business Analytics major) do not take this course.
***	Students majoring in Economics must complete MGMT 485W, but meet the writing intensive requirement by earning a grade of C or better either in MGMT 485W or in one of the ECON Writing Intensive courses.

Economics Major

General Education

Complete lower-division requirements		38-44
Complete upper-division requirements (minimum of 6 credit hours)		6
BUSN 110	Introduction to Contemporary Business ⁺	1
MATH 200	Calculus for Business and Economics	3

Business Administration Core

Complete business administration core requirements	42

Economics

ECON 304	Intermediate Microeconomic Theory *	3
ECON 305	Intermediate Macroeconomic Theory *	3
ECON 311	Analytical Tools for Economists *	3
ECON 400	From Correlation to Causation: Applied Causal Inference *	3

Select two of the following ECON Electives: *	6

ECON 368	Internship **	
ECON 369	Practicum in Economics **	
ECON 395/396	Topics in Economics	
ECON 402	Transportation Economics	
ECON 407W	Labor Market Economics	
ECON 421	Public Economics	
ECON 425	Introduction to Mathematical Economics	
ECON 427	Industrial Organization and Public Policy	
ECON 431	Money and Banking	
ECON 435	Health Economics: A Global Perspective	
ECON 445W	Urban Economics	
ECON 447W	Natural Resource and Environmental Economics	
ECON 450	International Economics	
ECON 451	History of Economic Thought	
ECON 454W	Economic Development	
ECON 455	Comparative Economic Systems	
ECON 495	Selected Topics in Economics	
ECON 499	Readings in Economics	

Free Elective ***	3
200-400 Level Free Elective ***	3
300-400 Level Business Elective ****	6

Total Credit Hours	120-126

*	Grade of C- or higher required.
**	No more than three credits of ECON 368 and/or ECON 369.
***	Excluding ECON 200S.

****	Can be any 300-400 level course offered by the Strome College of Business or transfer courses of a business or economics nature.
+	Not required for students pursuing the IT major or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.

All upper-level economics courses taken are included in the grade point average in the major except ECON 301 and ECON 436 (ECON 436 does not count toward the major in economics).

Minimum Grade Requirements for Completion of the Major

For completion of a major in economics, a student must have a minimum overall cumulative grade point average of 2.00 in all 300-400 level economics courses taken except ECON 301 and ECON 436. Students must also earn a grade of C or better in ECON 201S, ECON 202S and one of the ECON writing intensive (W) courses and must earn a grade of C- or better in ECON 304, ECON 305, ECON 311, ECON 400, and two 300-400 level ECON electives, not including ECON 436, which does not count toward the major in economics.

Additional Requirements and Information

Advanced Placement

The college accepts advanced placement credit in accordance with the rules and regulations outlined in the Academic Information section of this catalog. Students may take College-Level Examination Program (CLEP) tests to receive credit for:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
FIN 331	Legal Environment of Business	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3

Students are advised to contact the Office of Prior Learning Assessment for more information regarding CLEP and other prior learning assessment credit options. For advanced placement credit in any other business or public administration course, students are advised to contact the chair of the department offering the course. Additional information about credit awarded for qualifying scores on AP and IB subject examinations can be found on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Practical Work Experience for Business Administration Majors

Students may complement their major studies with a practical work experience, which may take the form of an internship, cooperative education experience or a class containing a real-world, hands-on project. Students must apply for internship or co-op participation through the Strome College of Business Career & Leadership Development Satellite Office. All work experiences must be approved by the faculty sponsor in the appropriate department prior to registering for credit. Students may not earn credit for previous or current work experiences. (However, academic credit for work experience may be approved in accordance with the policies for granting prior learning credit as defined in the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this catalog.) For details see the Center for Career & Leadership Development section of this catalog.

Use of Internship and Similar Hours Toward Business Administration Majors

A student may apply no more than six hours of cooperative education, student internship or practicum courses to satisfy degree requirements. Students may not use more than three hours of cooperative education,

student internship or practicum courses to satisfy major elective requirements in each of the students' majors. These courses are numbered 367, 368 or 369. Additional hours of cooperative education, student internship or practicum courses, however, can be used to satisfy other requirements such as free electives or general business electives. Additional internships must each involve substantially different kinds of work experiences. Internships must be approved by the Chief Departmental Advisor of the student's major and the CAP Coordinator of the internship.

Transfer of the Associate of Science in Business Administration Towards Degree Requirements

Students transferring to the college must complete a minimum of 10 business courses offered by the college to earn the degree from Old Dominion University, in accordance with AACSB regulations. Those transfer students holding the Associate of Science in Business Administration degree from a Virginia Community College must earn the grade of "C" or better in the following courses in order to satisfy requirements found in the first two years of the BSBA degree:

COMM 101R	Public Speaking	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
BNAL 206	Business Analytics I	3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
Upper-level ethics course		

With the exception of the courses listed above, the University's lower-division General Education requirements are deemed satisfied by the accepted AS degrees. These typically include all AS degrees from the Virginia Community College System except the applied science degrees. For more information about accepted AS degrees contact the Office of Admissions. Associate degree holders, although meeting lower-level General Education requirements, must ensure that 120 credits are completed to earn the BSBA degree. A minimum of 25% of the required credit hours must be completed through Old Dominion University, at least 12 of which are upper-level courses in the major program.

The Strome College of Business does not accept courses completed at the freshman and sophomore levels at other institutions for required courses at the junior and senior level at Old Dominion University. Please see the section on CLEP credits (Prior Learning Assessment Credit Options at the Undergraduate Level) for additional information.

Grade Average Requirements for Graduation

To graduate with a Bachelor of Science in Business Administration degree, students must present a minimum of 120 hours with a minimum overall grade point average of 2.00 in all courses taken at Old Dominion University. Students must also attain a minimum overall grade point average of 2.00 in courses taken toward the major (courses included in the major grade point average calculation are listed following the description of each major's course work).

Additionally, students must attain a minimum overall grade point average of 2.00 in the BSBA Core listed below. Only courses completed at Old Dominion University will be used to compute the BSBA Core average. Students with an Information Systems and Technology major (excluding Business Analytics) are not required to take IT 360T, so the BSBA Core grade point average is computed using the remaining courses. If the BSBA Core average is below the required 2.00 minimum, students are advised to utilize the Grade Forgiveness Policy or Adjusted Resident Credit option when appropriate to improve the grade point average.

Requirements for Completing a Bachelor of Science in Business Administration

The following sections show the courses that are requirements for all business students, regardless of the chosen major: Lower-Division General Education, BSBA Core Courses, and Upper-Division General Education. Credit hours are listed after the course title. The student must also choose a major and complete the requirements listed for that major on the following pages.

Foundation Courses for Admission to the Strome College of Business

ENGL 110C	English Composition (C or better)	3
MATH 162M	Precalculus I (C or better)	3
ACCT 201	Principles of Financial Accounting (C or better)	3
ECON 202S	Principles of Microeconomics (C or better)	3
BUSN 110	Introduction to Contemporary Business *	1

* Not required for students pursuing an Information Systems and Technology major (excluding Business Analytics) or for students with an associate's degree in business administration or with a prior bachelor's degree in business administration.

See the section on Admission to the Undergraduate Program in Business Administration, General Requirements.

Business Elective

A business elective is a course that is offered by an accredited college of business, including the Strome College of Business at Old Dominion University. Public Affairs and Service (PAS) courses offered by the Strome College of Business are not considered as business courses. However, because some business courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate business elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Free Elective

In the majority of cases a free elective is any course offered by an accredited community college or university, including Old Dominion University. However, because some courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 162M	Precalculus I (C or better required)	3

Language and Culture I (May be waived; see requirement details)	0-3
Nature of Science I	4
BUSN 110	Introduction to Contemporary Business (C or better required) 1
Free Elective	3
Credit Hours	14-17
Spring	
MATH 200	Calculus for Business and Economics 3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics 3
Language and Culture II (May be waived; see requirement details)	0-3
Nature of Science II	4
Interpreting the Past	3
Credit Hours	13-16
Sophomore	
Fall	
Literature	3
Oral Communication: COMM 101R required	3
Select one of the following:	3
PHIL 230E	Introduction to Ethics
PHIL 303E	Business Ethics
PHIL 344E	Environmental Ethics
PHIL 345E	Bioethics
PHIL 355E	Cybersecurity Ethics
PHIL/DASC 357E	Ethics and Data
PHIL 442E	Studies in Applied Ethics
ACCT 201	Principles of Financial Accounting (C or better required) 3
ECON 202S	Principles of Microeconomics (C or better required) 3
Credit Hours	15
Spring	
Human Creativity	3
Information Literacy and Research	3
ACCT 202	Principles of Managerial Accounting 3
ECON 201S	Principles of Macroeconomics 3
BNAL 206	Business Analytics I 3
Credit Hours	15
Junior	
Fall	
BNAL 306	Business Analytics II 3
FIN 323	Introductory Financial Management 3
MGMT 325	Contemporary Organizations and Management 3
ECON 301	Managerial Economics 3
ECON 304	Intermediate Microeconomic Theory 3

Human Behavior	3
Credit Hours	18
Spring	
OPMT 303	Operations Management 3
FIN 331	Legal Environment of Business 3
IT 360T	Principles of Information Technology (Satisfies Impact of Technology) 3
MKTG 311	Marketing Principles and Problems 3
ECON 305	Intermediate Macroeconomic Theory 3
ECON Major Elective	3
Credit Hours	18
Senior	
Fall	
MGMT 485W	Business Policy and Strategy (C or better required) 3
ECON 311	Analytical Tools for Economists 3
ECON Major Elective	3
Upper-Division General Education	3
Credit Hours	12
Spring	
ECON 400	From Correlation to Causation: Applied Causal Inference 3
300-400 Level Business Elective	3
300-400 Level Business Elective	3
200-400 Level Free Elective	3
Upper-Division General Education	3
Credit Hours	15
Total Credit Hours	120-126

BSBA to MBA (Master of Business Administration) Linked Program

Students interested in the program should contact the MBA Program Office as early as possible to discuss their plans for early entry. Once admitted to the program, the MBA program manager will act as the student's co-advisor, along with the chief departmental advisor or chief discipline advisor in the student's undergraduate major. The MBA Program Office is located in 1026 Constant Hall. The phone number is 757-683-3585 and email is mbainfo@odu.edu.

BSBA to MPA (Master of Public Administration) Linked Program

The linked BSBA to MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking 12 credits of the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

- A potential candidate will have:
- 1. Completed all lower level general education requirements
 - 2. Achieved a cumulative GPA of at least 3.0 at the end of the junior year

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog. For additional information, please contact the School of Public Service in the Strome College of Business.

Minor
Economics Minor
Requirements

A minor in economics requires the completion of 12 hours of 300- and/or 400-level economics courses. The 12 hours must include either ECON 304 or ECON 305, and may include both. The 12 hours may not include ECON 368, ECON 369 or ECON 436. All courses at the 300 and 400 levels must be preceded by listed prerequisites.

For completion of the minor, a student must have a minimum overall cumulative grade point average of 2.00 in all economics courses exclusive of 100/200-level courses. A minimum of 6 hours in upper-level courses in the minor must be taken through courses offered by Old Dominion University. In addition, students must earn a grade of C or better in ECON 202S and a grade of C- or better in either ECON 304 or ECON 305, and in three other 300-400 level ECON courses. Students must also earn a grade of C or better in ECON 201S if they wish to take ECON 305.

A minor in economics will fulfill the Upper-Division General Education requirements for all BSBA majors.

Financial Management
Programs

Bachelor of Science in Business Administration
Programs

- Financial Management with a Major in Finance (BSBA) (p. 383)
- Financial Management with a Major in Personal Financial Planning (BSBA) (p. 389)
- Financial Management with a Major in Real Estate (BSBA) (p. 394)
- Financial Management with a Major in Risk Management and Insurance (BSBA) (p. 400)

Minor Programs

- Financial Management Minor (p. 406)
- Real Estate Minor (p. 406)
- Risk Management and Insurance Minor (p. 406)

Bachelor of Science in Business
Administration
Financial Management with a
Major in Finance (BSBA)

Bruce Rubin, Chair
Sara Russell-Riggs, Chief Departmental Advisor

Financial management comprises four majors: finance, personal financial planning, real estate, and risk management and insurance. Finance graduates are qualified for corporate financial management positions such as financial analysts, capital budgeting managers, credit managers, or cash control and risk managers; portfolio management positions like securities analysts, account executives, or portfolio manager/analysts; bank management

positions include lending officers, marketing officers, or loan analysts; or entrepreneurs running their own businesses.

A student who seeks a Bachelor of Science in Business Administration degree in financial management with a major in finance from Old Dominion University must, in addition to meeting other requirements of the University, earn a minimum of 25 percent of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) through on- or off-campus instruction. This must include a minimum of 12 credit hours of upper-level FIN courses or other upper-level courses specifically listed as requirements or electives on the course lists below.

Strome College of Business (SCB) Center for Undergraduate Advising
and Student Success

The mission of this office is to challenge and support students in self-exploration and, through advising, provide resources for them to develop an achievable plan for success. Our vision is for students to be aware of their academic, personal, and professional goals; empowered to pursue them; and confident in their ability to accomplish them.

Our professional advisors work with all Strome College of Business students regarding degree planning, changing majors, admissions, continuance, graduation requirements and required curricula for the majors and minors offered by the College.

Degree Requirements

Students in all of the Bachelor of Science in Business Administration degree programs must fulfill the University General Education requirements (including foreign language) as well as the Strome College of Business's core, major, and elective requirements. Students must choose at least one major area to meet requirements towards the degree.

To stay in compliance with AACSB accreditation standards, students receiving a Bachelor of Science in Business Administration from Old Dominion University must complete at least half of their business course work in residence with a minimum of four courses in their declared major. This equates to 10 business classes, thus meeting the University's residency requirement as well.

Majors in the college may not take business and public administration courses for pass/fail credit except those courses in which pass/fail is the only grading option (i.e., internships and practica).

Admission to the Undergraduate Program
in Business Administration

General Requirements

Applicants for admission to the undergraduate degree program in business administration (the Bachelor of Science in Business Administration) should apply initially to the Office of Admissions of Old Dominion University. Students cannot be accepted into business administration without first being admitted to the University. Admission to the University does not guarantee admission to the Bachelor of Science in Business Administration (BSBA) program. Candidates for admission to the BSBA program should indicate on the application to the University their intention to enter the undergraduate business administration degree program.

Admission to the Bachelor's Degree Program in
Business Administration:

Before Admission to the bachelor's degree program in business administration can be granted, a student must have earned a grade of C or higher in each of the business Admission courses:

BUSN 110	Introduction to Contemporary Business	1
ENGL 110C	English Composition	3
MATH 162M	Precalculus I	3
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3

- BUSN 110 is not required for students pursuing majors under the BSBA in Information Systems and Technology (excluding Business Analytics) or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
- Students may utilize the Grade Forgiveness Policy for the business Admission courses.
- Transfer students may complete business Admission courses (BUSN 110, ENGL 110C, MATH 162M, ACCT 201, and ECON 202S) at another accredited college or university, but are responsible for having Transfer Evaluation Services determine that the courses are acceptable to the University.

Eligibility to Enroll in Upper-Level (300/400-level) Business Courses

Only students who have officially completed Admission courses to the BSBA program will be eligible to enroll in upper-level (300/400) business courses (refer to exceptions for non-business majors). However, students who are in progress with the business Admission courses may enroll in upper-level (300/400) business courses. Note: These students will need a Program Restriction Waiver (PRW) to enroll in these courses, with the exception of FIN 323, MGMT 325, MKTG 311, and OPMT 303. These courses require a junior class standing for registration.

Enrollment in 300/400-level Business Courses by Non-Business Majors

Enrollment in 300/400-level business courses will be granted without the Admission courses for the following exceptions:

1. Students pursuing a declared minor in the Strome College of Business may enroll in 300/400-level business courses appropriate to the minor.
2. Students pursuing Upper-Division General Education Requirement Option B: Interdisciplinary Minor or Option D: Six hours of elective upper-division courses outside the student's major discipline or college.
3. Students wishing to satisfy the Impact of Technology requirement may enroll in IT 360T.
4. Students pursuing a degree program other than the Bachelor of Science in Business Administration (BSBA) that requires or accepts specific 300/400-level business courses to complete the degree may enroll in the courses appropriate to the major.
5. Non-degree-seeking students may enroll in 300/400-level business courses if they have satisfied the prerequisites for these courses.

Students in categories 1 - 5 above who do not have a declared major will need a Program Restriction Waiver (PRW) in order to enroll in any 300/400-level Strome College of Business course (including Economics courses). Forms to request a PRW are available at the Strome College of Business website.

Regulations for Continuance in the Bachelor of Science in Business Administration

In addition to the Old Dominion University continuance policies, the following policies are specific to all declared Bachelor of Science in Business Administration (BSBA) students. The Strome College of Business makes a reasonable effort to notify undergraduate students who are not in good academic standing in the BSBA program of their academic status. Each undergraduate student who is placed on BSBA Academic Alarm or BSBA Termination (explained below) will be sent an e-mail message to that effect at the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business. Non-receipt of the e-mail messages by a student will not be considered grounds for granting exceptions or delays in enforcement of the BSBA continuance regulations.

BSBA Continuance Regulations

If a student's Grade Point Average (GPA) in their BSBA Core courses falls below a 2.0, then they will be on Academic Alarm within the Strome

College of Business (SCB). This policy is very similar to the University's academic continuance policy, the main difference being that it is based on the core Business courses and impacts acceptance and continuance within the SCB.

Academic Alarm

The first semester in which a student's BSBA Core GPA drops to below a 2.0, they will be on Academic Alarm. Once considered on academic alarm within the college, taking courses within the BSBA Core is the only way to bring that GPA back up.

- If the student raises the BSBA Core GPA to above a 2.0, then they will no longer be on academic alarm.
- If the BSBA Core GPA does not reach a 2.0 but the semester average in the BSBA Core courses is a 2.0 or higher, then the student will remain on academic alarm and be able to continue within the SCB.

SCB Termination

While on academic alarm within the Strome College of Business, if the semester BSBA Core GPA falls below a 2.0, the student will be terminated from the SCB and their major coding will be changed from Business to Undecided. (Terminations will not be processed in summer semesters.)

Appeals

If you have been terminated, you may appeal the decision if you have extenuating circumstances and documentation to support your claim. To appeal, write a letter and include documentation of your circumstances to the Associate Dean of the Strome College of Business (Constant Hall, Suite 2004). There are specific details that need to be included with your appeal - for more information, please see the appeals process as described in the most recently issued catalog.

Guidelines for Filing a BSBA Termination Appeal

1. All students have the right to appeal their BSBA termination if they believe that extraordinary circumstances were the main reason for their poor academic performance. Notifications of pending BSBA termination are sent to the student's ODU email address and include information on the appeal process and deadlines. All BSBA termination appeals must be submitted electronically using the link provided in the email and will be reviewed by the SCB Termination Appeal Committee. Students are responsible for submitting their appeal by the stated deadline; late appeals will not be reviewed. Decisions of the Termination Appeal Committee may be appealed to the Associate Dean for Academic Programs in the Strome College of Business whose decision is final.
2. Appeals must be based on circumstances pertinent to the semesters in which the academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the terminated student. The appeal letter must provide sufficient detail and explanation regarding the following points because there is no face-to-face meeting with the Associate Dean for Academic Programs in the Strome College of Business. The decision of the Associate Dean is final. Students without documentation will not be allowed to appeal their termination. In order to be reviewed, an appeal letter must:
 - a. Document the extraordinary circumstances such as a death in the family, medical complications or chronic conditions, personal or family emergency, overwhelming work schedules, dorm-mate conflict, or a personal relationship conflict that have adversely affected performance: i.e., a statement or letter from a physician, employer, family members, faculty, academic advisor, Counseling Services, or Educational Accessibility.
 - b. Explain how the extraordinary circumstances caused each semester of poor academic performance.
 - c. State the reasons why an official withdrawal was not requested.
 - d. Explain how the extraordinary circumstance(s) has been resolved.
 - e. Provide a plan of action to return to good BSBA academic standing.

3. Students who do not file a BSBA termination appeal or whose appeals are denied, are no longer eligible to pursue a bachelor's degree in Business Administration. Upon BSBA termination, the student's major in the Strome College of Business will be removed. (This does not affect a declared second major outside of the BSBA.) These students are advised to work with an advisor in the SCB Center for Undergraduate Advising to explore other major options, and for referrals to other advising departments for a new major declaration.

4. BSBA-terminated students who had pre-registered for a subsequent semester lose eligibility for continued enrollment in upper-level business courses.

Applying for Readmission to the BSBA Program

After a minimum of five years has passed since a student was terminated from the BSBA program, the student may apply for readmission to the program. There must be a high probability the student will successfully complete the degree program, and approval will be at the discretion of the Strome College of Business Associate Dean.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication: COMM 101R or MKTG 200R required. Additionally, all students majoring in business administration can expect to complete several courses in which individual and/or group oral presentations will be required.

Mathematics: MATH 162M and MATH 200 required.

Information Literacy and Research: IT 150G (recommended) or any "G" course from the approved general education information literacy and research course list.

Human Behavior: Met in the Business Administration core for all majors except Economics.

Philosophy and Ethics must be satisfied by completion of either PHIL 230E or an upper-level "E" course from the approved general education ethics course list. A philosophy course designated with a P will not meet this requirement for business administration students with the exception of a "P" course taken prior to fall 2010.

Impact of Technology requirement is satisfied within each BSBA degree major except Information Systems and Technology by IT 360T. In the Information Systems and Technology majors (excluding Business Analytics), the Impact of Technology requirement is satisfied by the coursework required for the major.

Transfer students with an applicable associate's degree from a Virginia Community College or another community college that has a seamless transfer agreement with ODU, and students with a prior bachelor's degree from another university, must nevertheless have a grade of C or better in the following to be able to transfer them:

COMM 101R	Public Speaking	3
or MKTG 200R	Professional Interactions and Negotiations	
PHIL 230E	Introduction to Ethics (Or an upper-level ethics course)	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3

Upper-Division General Education

- Option A. Any University-approved minor, second degree, or second major.
- Option B. An interdisciplinary minor consisting of 12 credits, three of which can be in the major. Interdisciplinary minors are described in the University Catalog section labeled Requirements for Undergraduate Degrees, Upper-Division Requirements.
- Option C. An approved certification program, such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the Strome College of Business and not required by the major (6 credits).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Business Administration Core

ACCT 201	Principles of Financial Accounting *	3
ACCT 202	Principles of Managerial Accounting *	3
BNAL 206	Business Analytics I *	3
BNAL 306	Business Analytics II	3
ECON 201S	Principles of Macroeconomics *	3
ECON 202S	Principles of Microeconomics *	3
ECON 301	Managerial Economics	3
FIN 323	Introductory Financial Management	3
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology **	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 485W	Business Policy and Strategy (C or better) ***	3
MKTG 311	Marketing Principles and Problems	3

OPMT 303	Operations Management	3
Total Credit Hours		42

*	Not automatically waived for transfer students with an applicable associate's degree from a Virginia Community College or another acceptable community college, or for students with a prior bachelor's degree from another university. A grade of C or better must be earned to transfer these courses to Old Dominion University.	
**	Students completing a major or minor in Information Systems and Technology (excluding the Business Analytics major) do not take this course.	
***	Students majoring in Economics must complete MGMT 485W, but meet the writing intensive requirement by earning a grade of C or better either in MGMT 485W or in one of the ECON Writing Intensive courses.	

Finance Major

General Education

Complete lower-division requirements		35-41
Complete upper-division requirements (minimum of 6 credit hours)		6
BUSN 110	Introduction to Contemporary Business ⁺	1
MATH 200	Calculus for Business and Economics	3

Business Administration Core

Complete business administration core requirements		42

Finance

RMI 317	Principles of Risk Management and Insurance	3
or REST 319	Principles of Real Estate	
FIN 431	Investments	3
FIN 432	Intermediate Financial Management *	3
FIN 435	International Financial Management	3
FIN 439	Financial Decision Making	3

Major Electives:

Select one of the following:		3

FIN 433	Introduction to Futures and Options	
FIN 434	Management of Financial Institutions	
FIN 441	Student Managed Investment Fund	
FIN 497	Selected Topics in Finance	
ACCT 301	Intermediate Accounting I	
or ACCT 311	Managerial Accounting	
ECON 431	Money and Banking	

Select two of the following:		6

FIN 367	Cooperative Education	
FIN 368	Finance Internship	
FIN 433	Introduction to Futures and Options	
FIN 434	Management of Financial Institutions	
FIN 441	Student Managed Investment Fund	
FIN 497	Selected Topics in Finance	
RMI 317	Principles of Risk Management and Insurance	
or REST 319	Principles of Real Estate	
RMI 410	Life and Health Insurance	
RMI 411	Employee Benefit Planning	
RMI 412	Property & Liability Insurance Company Operations	
RMI 413	Risk Analysis and Control	
RMI 443	Enterprise Risk Management	
REST 450	Real Estate Finance	
REST 454	Real Estate Investment Analysis	

REST 495	Selected Topics in Real Estate	
ECON 421	Public Economics	
ECON 445W	Urban Economics	
ECON 450	International Economics	
ACCT 301	Intermediate Accounting I	
ACCT 311	Managerial Accounting	
Free Elective		3
200-400 Level Business Elective **		3
300-400 Level Business Elective ***		3
Total Credit Hours		120-126

*	C or better required
**	Can be any 200-400 level course offered by the Strome College of Business except ECON 200S, providing that the student has the appropriate prerequisites.
***	Can be any 300-400 level course offered by the Strome College of Business, providing that the student has the appropriate prerequisites.
+	Not required for students pursuing the IT major or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.

Courses included in the calculation of the 2.00 overall grade point average for major course work for graduation are:

RMI 317	Principles of Risk Management and Insurance	3
or REST 319	Principles of Real Estate	
FIN 431	Investments	3
FIN 432	Intermediate Financial Management	3
FIN 435	International Financial Management	3
FIN 439	Financial Decision Making	3
Major Electives		9

Additional Requirements and Information

Advanced Placement

The college accepts advanced placement credit in accordance with the rules and regulations outlined in the Academic Information section of this catalog. Students may take College-Level Examination Program (CLEP) tests to receive credit for:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
FIN 331	Legal Environment of Business	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3

Students are advised to contact the Office of Prior Learning Assessment for more information regarding CLEP and other prior learning assessment credit options. For advanced placement credit in any other business or public administration course, students are advised to contact the chair of the department offering the course. Additional information about credit awarded for qualifying scores on AP and IB subject examinations can be found on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Practical Work Experience for Business Administration Majors

Students may complement their major studies with a practical work experience, which may take the form of an internship, cooperative education experience or a class containing a real-world, hands-on project. Students

must apply for internship or co-op participation through the Strome College of Business Career & Leadership Development Satellite Office. All work experiences must be approved by the faculty sponsor in the appropriate department prior to registering for credit. Students may not earn credit for previous or current work experiences. (However, academic credit for work experience may be approved in accordance with the policies for granting prior learning credit as defined in the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this catalog.) For details see the Center for Career & Leadership Development section of this catalog.

Use of Internship and Similar Hours Toward Business Administration Majors

A student may apply no more than six hours of cooperative education, student internship or practicum courses to satisfy degree requirements. Students may not use more than three hours of cooperative education, student internship or practicum courses to satisfy major elective requirements in each of the students' majors. These courses are numbered 367, 368 or 369. Additional hours of cooperative education, student internship or practicum courses, however, can be used to satisfy other requirements such as free electives or general business electives. Additional internships must each involve substantially different kinds of work experiences. Internships must be approved by the Chief Departmental Advisor of the student's major and the CAP Coordinator of the internship.

Transfer of the Associate of Science in Business Administration Towards Degree Requirements

Students transferring to the college must complete a minimum of 10 business courses offered by the college to earn the degree from Old Dominion University, in accordance with AACSB regulations. Those transfer students holding the Associate of Science in Business Administration degree from a Virginia Community College must earn the grade of "C" or better in the following courses in order to satisfy requirements found in the first two years of the BSBA degree:

COMM 101R	Public Speaking	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
BNAL 206	Business Analytics I	3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
Upper-level ethics course		

With the exception of the courses listed above, the University's lower-division General Education requirements are deemed satisfied by the accepted AS degrees. These typically include all AS degrees from the Virginia Community College System except the applied science degrees. For more information about accepted AS degrees contact the Office of Admissions. Associate degree holders, although meeting lower-level General Education requirements, must ensure that 120 credits are completed to earn the BSBA degree. A minimum of 25% of the required credit hours must be completed through Old Dominion University, at least 12 of which are upper-level courses in the major program.

The Strome College of Business does not accept courses completed at the freshman and sophomore levels at other institutions for required courses at the junior and senior level at Old Dominion University. Please see the section on CLEP credits (Prior Learning Assessment Credit Options at the Undergraduate Level) for additional information.

Grade Average Requirements for Graduation

To graduate with a Bachelor of Science in Business Administration degree, students must present a minimum of 120 hours with a minimum overall grade point average of 2.00 in all courses taken at Old Dominion University.

Students must also attain a minimum overall grade point average of 2.00 in courses taken toward the major (courses included in the major grade point average calculation are listed following the description of each major's course work).

Additionally, students must attain a minimum overall grade point average of 2.00 in the BSBA Core listed below. Only courses completed at Old Dominion University will be used to compute the BSBA Core average. Students with an Information Systems and Technology major (excluding Business Analytics) are not required to take IT 360T, so the BSBA Core grade point average is computed using the remaining courses. If the BSBA Core average is below the required 2.00 minimum, students are advised to utilize the Grade Forgiveness Policy or Adjusted Resident Credit option when appropriate to improve the grade point average.

Requirements for Completing a Bachelor of Science in Business Administration

The following sections show the courses that are requirements for all business students, regardless of the chosen major: Lower-Division General Education, BSBA Core Courses, and Upper-Division General Education. Credit hours are listed after the course title. The student must also choose a major and complete the requirements listed for that major on the following pages.

Foundation Courses for Admission to the Strome College of Business		
ENGL 110C	English Composition (C or better)	3
MATH 162M	Precalculus I (C or better)	3
ACCT 201	Principles of Financial Accounting (C or better)	3
ECON 202S	Principles of Microeconomics (C or better)	3
BUSN 110	Introduction to Contemporary Business *	1

* Not required for students pursuing an Information Systems and Technology major (excluding Business Analytics) or for students with an associate's degree in business administration or with a prior bachelor's degree in business administration.

See the section on Admission to the Undergraduate Program in Business Administration, General Requirements.

Business Elective

A business elective is a course that is offered by an accredited college of business, including the Strome College of Business at Old Dominion University. Public Affairs and Service (PAS) courses offered by the Strome College of Business are not considered as business courses. However, because some business courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate business elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Free Elective

In the majority of cases a free elective is any course offered by an accredited community college or university, including Old Dominion University. However, because some courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 162M	Precalculus I (C or better required)	3
Language and Culture I (May be waived; see requirement details)		0-3
BUSN 110	Introduction to Contemporary Business (C or better required)	1
Nature of Science I		4
Free Elective		3
Credit Hours		14-17
Spring		
Select one of the following: (Grade of C or better required)		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 200	Calculus for Business and Economics	3
Language and Culture II (May be waived; see requirement details)		0-3
Nature of Science II		4
Interpreting the Past		3
Credit Hours		13-16
Sophomore		
Fall		
Literature		3
Oral Communication: COMM 101R or MKTG 200R required		3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL/DASC 357E	Ethics and Data	
PHIL 442E	Studies in Applied Ethics	
ACCT 201	Principles of Financial Accounting (C or better required)	3
ECON 202S	Principles of Microeconomics (C or better required)	3
Credit Hours		15
Spring		
Human Creativity		3
Information Literacy and Research (IT 150G recommended)		3
ACCT 202	Principles of Managerial Accounting	3

ECON 201S	Principles of Macroeconomics	3
BNAL 206	Business Analytics I	3
Credit Hours		15
Junior		
Fall		
BNAL 306	Business Analytics II	3
FIN 323	Introductory Financial Management (C or better required to progress)	3
MGMT 325	Contemporary Organizations and Management	3
RMI 317 or REST 319	Principles of Risk Management and Insurance or Principles of Real Estate	3
ECON 301	Managerial Economics	3
Credit Hours		15
Spring		
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology (Satisfies Impact of Technology)	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
FIN 435	International Financial Management	3
FIN 431	Investments	3
Credit Hours		18
Senior		
Fall		
MGMT 485W	Business Policy and Strategy (C or better required)	3
FIN 432	Intermediate Financial Management (C or better required)	3
FIN Major Elective		3
200-400 Level Business Elective		3
Upper-Division General Education		3
Credit Hours		15
Spring		
FIN 439	Financial Decision Making	3
FIN Major Elective		3
FIN Major Elective		3
300-400 Level Business Elective		3
Upper-Division General Education		3
Credit Hours		15
Total Credit Hours		120-126

BSBA to MBA (Master of Business Administration) Linked Program

Students interested in the program should contact the MBA Program Office as early as possible to discuss their plans for early entry. Once admitted to the program, the MBA program manager will act as the student’s co-advisor, along with the chief departmental advisor or chief discipline advisor in the student's undergraduate major. The MBA Program Office is located in 1026 Constant Hall. The phone number is 757-683-3585 and email is mbainfo@odu.edu.

BSBA to MPA (Master of Public Administration) Linked Program

The linked BSBA to MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking 12 credits of the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

A potential candidate will have:

1. Completed all lower level general education requirements
2. Achieved a cumulative GPA of at least 3.0 at the end of the junior year

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog. For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science in Business Administration Financial Management with a Major in Personal Financial Planning (BSBA)

Bruce Rubin, Chair
Sara Russell-Riggs, Chief Departmental Advisor

Financial management comprises four majors: finance, personal financial planning, real estate, and risk management and insurance. There are many opportunities for financial planning graduates due to the shift in business and government away from company provided pension plans to plans individuals have to fund and manage. Opportunities exist as independent planners, in human resource departments, as well as in the investments and insurance brokerage industries.

A student who seeks a Bachelor of Science in Business Administration degree in financial management with a major in personal financial planning from Old Dominion University must, in addition to meeting other requirements of the University, earn a minimum of 25 percent of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) through on- or off-campus instruction. This must include a minimum of 12 credit hours of upper-level FIN or RMI courses or other upper-level courses specifically listed as a requirement or elective on the course lists below.

Strome College of Business (SCB) Center for Undergraduate Advising and Student Success

The mission of this office is to challenge and support students in self-exploration and, through advising, provide resources for them to develop an achievable plan for success. Our vision is for students to be aware of their academic, personal, and professional goals; empowered to pursue them; and confident in their ability to accomplish them.

Our professional advisors work with all Strome College of Business students regarding degree planning, changing majors, admissions, continuance, graduation requirements and required curricula for the majors and minors offered by the College.

Degree Requirements

Students in all of the Bachelor of Science in Business Administration degree programs must fulfill the University General Education requirements (including foreign language) as well as the Strome College of Business's core, major, and elective requirements. Students must choose at least one major area to meet requirements towards the degree.

To stay in compliance with AACSB accreditation standards, students receiving a Bachelor of Science in Business Administration from Old Dominion University must complete at least half of their business course work in residence with a minimum of four courses in their declared major. This equates to 10 business classes, thus meeting the University's residency requirement as well.

Majors in the college may not take business and public administration courses for pass/fail credit except those courses in which pass/fail is the only grading option (i.e., internships and practica).

Admission to the Undergraduate Program in Business Administration

General Requirements

Applicants for admission to the undergraduate degree program in business administration (the Bachelor of Science in Business Administration) should apply initially to the Office of Admissions of Old Dominion University. Students cannot be accepted into business administration without first being admitted to the University. Admission to the University does not guarantee admission to the Bachelor of Science in Business Administration (BSBA) program. Candidates for admission to the BSBA program should indicate on the application to the University their intention to enter the undergraduate business administration degree program.

Admission to the Bachelor's Degree Program in Business Administration:

Before Admission to the bachelor's degree program in business administration can be granted, a student must have earned a grade of C or higher in each of the business Admission courses:

BUSN 110	Introduction to Contemporary Business	1
ENGL 110C	English Composition	3
MATH 162M	Precalculus I	3
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3

- BUSN 110 is not required for students pursuing majors under the BSBA in Information Systems and Technology (excluding Business Analytics) or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
- Students may utilize the Grade Forgiveness Policy for the business Admission courses.
- Transfer students may complete business Admission courses (BUSN 110, ENGL 110C, MATH 162M, ACCT 201, and ECON 202S) at another accredited college or university, but are responsible for having Transfer Evaluation Services determine that the courses are acceptable to the University.

Eligibility to Enroll in Upper-Level (300/400-level) Business Courses

Only students who have officially completed Admission courses to the BSBA program will be eligible to enroll in upper-level (300/400) business courses (refer to exceptions for non-business majors). However, students who are in progress with the business Admission courses may enroll in upper-level (300/400) business courses. Note: These students will need a Program Restriction Waiver (PRW) to enroll in these courses, with the exception of FIN 323, MGMT 325, MKTG 311, and OPMT 303. These courses require a junior class standing for registration.

Enrollment in 300/400-level Business Courses by Non-Business Majors

Enrollment in 300/400-level business courses will be granted without the Admission courses for the following exceptions:

1. Students pursuing a declared minor in the Strome College of Business may enroll in 300/400-level business courses appropriate to the minor.
2. Students pursuing Upper-Division General Education Requirement Option B: Interdisciplinary Minor or Option D: Six hours of elective upper-division courses outside the student's major discipline or college.
3. Students wishing to satisfy the Impact of Technology requirement may enroll in IT 360T.
4. Students pursuing a degree program other than the Bachelor of Science in Business Administration (BSBA) that requires or accepts specific 300/400-level business courses to complete the degree may enroll in the courses appropriate to the major.
5. Non-degree-seeking students may enroll in 300/400-level business courses if they have satisfied the prerequisites for these courses.

Students in categories 1 - 5 above who do not have a declared major will need a Program Restriction Waiver (PRW) in order to enroll in any 300/400-level Strome College of Business course (including Economics courses). Forms to request a PRW are available at the Strome College of Business website.

Regulations for Continuance in the Bachelor of Science in Business Administration

In addition to the Old Dominion University continuance policies, the following policies are specific to all declared Bachelor of Science in Business Administration (BSBA) students. The Strome College of Business makes a reasonable effort to notify undergraduate students who are not in good academic standing in the BSBA program of their academic status. Each undergraduate student who is placed on BSBA Academic Alarm or BSBA Termination (explained below) will be sent an e-mail message to that effect at the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business. Non-receipt of the e-mail messages by a student will not be considered grounds for granting exceptions or delays in enforcement of the BSBA continuance regulations.

BSBA Continuance Regulations

If a student's Grade Point Average (GPA) in their BSBA Core courses falls below a 2.0, then they will be on Academic Alarm within the Strome College of Business (SCB). This policy is very similar to the University's academic continuance policy, the main difference being that it is based on the core Business courses and impacts acceptance and continuance within the SCB.

Academic Alarm

The first semester in which a student's BSBA Core GPA drops to below a 2.0, they will be on Academic Alarm. Once considered on academic alarm within the college, taking courses within the BSBA Core is the only way to bring that GPA back up.

- If the student raises the BSBA Core GPA to above a 2.0, then they will no longer be on academic alarm.
- If the BSBA Core GPA does not reach a 2.0 but the semester average in the BSBA Core courses is a 2.0 or higher, then the student will remain on academic alarm and be able to continue within the SCB.

SCB Termination

While on academic alarm within the Strome College of Business, if the semester BSBA Core GPA falls below a 2.0, the student will be terminated from the SCB and their major coding will be changed from Business to Undecided. (Terminations will not be processed in summer semesters.)

Appeals

If you have been terminated, you may appeal the decision if you have extenuating circumstances and documentation to support your claim. To appeal, write a letter and include documentation of your circumstances to the Associate Dean of the Strome College of Business (Constant Hall, Suite 2004). There are specific details that need to be included with your appeal - for more information, please see the appeals process as described in the most recently issued catalog.

Guidelines for Filing a BSBA Termination Appeal

1. All students have the right to appeal their BSBA termination if they believe that extraordinary circumstances were the main reason for their poor academic performance. Notifications of pending BSBA termination are sent to the student's ODU email address and include information on the appeal process and deadlines. All BSBA termination appeals must be submitted electronically using the link provided in the email and will be reviewed by the SCB Termination Appeal Committee. Students are responsible for submitting their appeal by the stated deadline; late appeals will not be reviewed. Decisions of the Termination Appeal Committee may be appealed to the Associate Dean for Academic Programs in the Strome College of Business whose decision is final.

2. Appeals must be based on circumstances pertinent to the semesters in which the academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the terminated student. The appeal letter must provide sufficient detail and explanation regarding the following points because there is no face-to-face meeting with the Associate Dean for Academic Programs in the Strome College of Business. The decision of the Associate Dean is final. Students without documentation will not be allowed to appeal their termination. In order to be reviewed, an appeal letter must:

- a. Document the extraordinary circumstances such as a death in the family, medical complications or chronic conditions, personal or family emergency, overwhelming work schedules, dorm-mate conflict, or a personal relationship conflict that have adversely affected performance: i.e., a statement or letter from a physician, employer, family members, faculty, academic advisor, Counseling Services, or Educational Accessibility.
 - b. Explain how the extraordinary circumstances caused each semester of poor academic performance.
 - c. State the reasons why an official withdrawal was not requested.
 - d. Explain how the extraordinary circumstance(s) has been resolved.
 - e. Provide a plan of action to return to good BSBA academic standing.
3. Students who do not file a BSBA termination appeal or whose appeals are denied, are no longer eligible to pursue a bachelor's degree in Business Administration. Upon BSBA termination, the student's major in the Strome College of Business will be removed. (This does not affect a declared second major outside of the BSBA.) These students are advised to work with an advisor in the SCB Center for Undergraduate Advising to explore other major options, and for referrals to other advising departments for a new major declaration.
4. BSBA-terminated students who had pre-registered for a subsequent semester lose eligibility for continued enrollment in upper-level business courses.

Applying for Readmission to the BSBA Program

After a minimum of five years has passed since a student was terminated from the BSBA program, the student may apply for readmission to the program. There must be a high probability the student will successfully complete the degree program, and approval will be at the discretion of the Strome College of Business Associate Dean.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication: COMM 101R or MKTG 200R required. Additionally, all students majoring in business administration can expect to complete several courses in which individual and/or group oral presentations will be required.

Mathematics: MATH 162M and MATH 200 required.

Information Literacy and Research: IT 150G (recommended) or any "G" course from the approved general education information literacy and research course list.

Human Behavior: Met in the Business Administration core for all majors except Economics.

Philosophy and Ethics must be satisfied by completion of either PHIL 230E or an upper-level "E" course from the approved general education ethics course list. A philosophy course designated with a P will not meet this requirement for business administration students with the exception of a "P" course taken prior to fall 2010.

Impact of Technology requirement is satisfied within each BSBA degree major except Information Systems and Technology by IT 360T. In the Information Systems and Technology majors (excluding Business Analytics), the Impact of Technology requirement is satisfied by the coursework required for the major.

Transfer students with an applicable associate's degree from a Virginia Community College or another community college that has a seamless transfer agreement with ODU, and students with a prior bachelor's degree from another university, must nevertheless have a grade of C or better in the following to be able to transfer them:

COMM 101R	Public Speaking	3
or MKTG 200R	Professional Interactions and Negotiations	
PHIL 230E	Introduction to Ethics (Or an upper-level ethics course)	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3

Upper-Division General Education

- Option A. Any University-approved minor, second degree, or second major.
- Option B. An interdisciplinary minor consisting of 12 credits, three of which can be in the major. Interdisciplinary minors are described in the University Catalog section labeled Requirements for Undergraduate Degrees, Upper-Division Requirements.
- Option C. An approved certification program, such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the Strome College of Business and not required by the major (6 credits).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Business Administration Core

ACCT 201	Principles of Financial Accounting *	3
ACCT 202	Principles of Managerial Accounting *	3
BNAL 206	Business Analytics I *	3
BNAL 306	Business Analytics II	3
ECON 201S	Principles of Macroeconomics *	3
ECON 202S	Principles of Microeconomics *	3
ECON 301	Managerial Economics	3
FIN 323	Introductory Financial Management	3
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology **	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 485W	Business Policy and Strategy (C or better) ***	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
Total Credit Hours		42

- * Not automatically waived for transfer students with an applicable associate's degree from a Virginia Community College or another acceptable community college, or for students with a prior bachelor's degree from another university. A grade of C or better must be earned to transfer these courses to Old Dominion University.
- ** Students completing a major or minor in Information Systems and Technology (excluding the Business Analytics major) do not take this course.
- *** Students majoring in Economics must complete MGMT 485W, but meet the writing intensive requirement by earning a grade of C or better either in MGMT 485W or in one of the ECON Writing Intensive courses.

Personal Financial Planning Major

General Education

Complete lower-division requirements	35-41
Complete upper-division requirements (minimum of 6 credit hours)	6
BUSN 110 Introduction to Contemporary Business *	1
MATH 200 Calculus for Business and Economics	3

Business Administration Core

Complete business administration core requirements	42

Personal Financial Planning

FIN 210S Personal Financial Literacy	3
FIN 414 Estate Planning	3
FIN 415 Capstone in Financial Plan Development	3
FIN 431 Investments	3
FIN 435 International Financial Management	3
RMI 317 Principles of Risk Management and Insurance	3
RMI 411 Employee Benefit Planning	3
ACCT 425 Taxation of Individuals	3
Select two of the following:	6
FIN 367 Cooperative Education	
FIN 368 Finance Internship	
FIN 433 Introduction to Futures and Options	
FIN 441 Student Managed Investment Fund	
RMI 410 Life and Health Insurance	
RMI 412 Property & Liability Insurance Company Operations	
REST 319 Principles of Real Estate	
REST 454 Real Estate Investment Analysis	
ACCT 422 Tax Research	
Free Elective	3

Total Credit Hours	120-126

* Not required for students pursuing the IT major or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.

Courses included in the calculation of the 2.00 overall grade point average for major course work for graduation are:

FIN 210S Personal Financial Literacy	3
FIN 414 Estate Planning	3
FIN 415 Capstone in Financial Plan Development	3
FIN 431 Investments	3
FIN 435 International Financial Management	3
RMI 317 Principles of Risk Management and Insurance	3
RMI 411 Employee Benefit Planning	3
ACCT 425 Taxation of Individuals	3
Major Electives	6

Additional Requirements and Information

Advanced Placement

The college accepts advanced placement credit in accordance with the rules and regulations outlined in the Academic Information section of this catalog. Students may take College-Level Examination Program (CLEP) tests to receive credit for:

ACCT 201 Principles of Financial Accounting	3
ACCT 202 Principles of Managerial Accounting	3
ECON 201S Principles of Macroeconomics	3

ECON 202S Principles of Microeconomics	3
FIN 331 Legal Environment of Business	3
MGMT 325 Contemporary Organizations and Management	3
MKTG 311 Marketing Principles and Problems	3

Students are advised to contact the Office of Prior Learning Assessment for more information regarding CLEP and other prior learning assessment credit options. For advanced placement credit in any other business or public administration course, students are advised to contact the chair of the department offering the course. Additional information about credit awarded for qualifying scores on AP and IB subject examinations can be found on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Practical Work Experience for Business Administration Majors

Students may complement their major studies with a practical work experience, which may take the form of an internship, cooperative education experience or a class containing a real-world, hands-on project. Students must apply for internship or co-op participation through the Strome College of Business Career & Leadership Development Satellite Office. All work experiences must be approved by the faculty sponsor in the appropriate department prior to registering for credit. Students may not earn credit for previous or current work experiences. (However, academic credit for work experience may be approved in accordance with the policies for granting prior learning credit as defined in the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this catalog.) For details see the Center for Career & Leadership Development section of this catalog.

Use of Internship and Similar Hours Toward Business Administration Majors

A student may apply no more than six hours of cooperative education, student internship or practicum courses to satisfy degree requirements. Students may not use more than three hours of cooperative education, student internship or practicum courses to satisfy major elective requirements in each of the students' majors. These courses are numbered 367, 368 or 369. Additional hours of cooperative education, student internship or practicum courses, however, can be used to satisfy other requirements such as free electives or general business electives. Additional internships must each involve substantially different kinds of work experiences. Internships must be approved by the Chief Departmental Advisor of the student's major and the CAP Coordinator of the internship.

Transfer of the Associate of Science in Business Administration Towards Degree Requirements

Students transferring to the college must complete a minimum of 10 business courses offered by the college to earn the degree from Old Dominion University, in accordance with AACSB regulations. Those transfer students holding the Associate of Science in Business Administration degree from a Virginia Community College must earn the grade of "C" or better in the following courses in order to satisfy requirements found in the first two years of the BSBA degree:

COMM 101R Public Speaking	3
ENGL 211C Writing, Rhetoric, and Research	3
or ENGL 231C Writing, Rhetoric, and Research: Special Topics	
MATH 162M Precalculus I	3
MATH 200 Calculus for Business and Economics	3
ACCT 201 Principles of Financial Accounting	3
ACCT 202 Principles of Managerial Accounting	3
ECON 201S Principles of Macroeconomics	3
ECON 202S Principles of Microeconomics	3
BNAL 206 Business Analytics I	3
Select one of the following:	3
PHIL 230E Introduction to Ethics	
Upper-level ethics course	

With the exception of the courses listed above, the University's lower-division General Education requirements are deemed satisfied by the accepted AS degrees. These typically include all AS degrees from the Virginia Community College System except the applied science degrees. For more information about accepted AS degrees contact the Office of Admissions. Associate degree holders, although meeting lower-level General Education requirements, must ensure that 120 credits are completed to earn the BSBA degree. A minimum of 25% of the required credit hours must be completed through Old Dominion University, at least 12 of which are upper-level courses in the major program.

The Strome College of Business does not accept courses completed at the freshman and sophomore levels at other institutions for required courses at the junior and senior level at Old Dominion University. Please see the section on CLEP credits (Prior Learning Assessment Credit Options at the Undergraduate Level) for additional information.

Grade Average Requirements for Graduation

To graduate with a Bachelor of Science in Business Administration degree, students must present a minimum of 120 hours with a minimum overall grade point average of 2.00 in all courses taken at Old Dominion University. Students must also attain a minimum overall grade point average of 2.00 in courses taken toward the major (courses included in the major grade point average calculation are listed following the description of each major's course work).

Additionally, students must attain a minimum overall grade point average of 2.00 in the BSBA Core listed below. Only courses completed at Old Dominion University will be used to compute the BSBA Core average. Students with an Information Systems and Technology major (excluding Business Analytics) are not required to take IT 360T, so the BSBA Core grade point average is computed using the remaining courses. If the BSBA Core average is below the required 2.00 minimum, students are advised to utilize the Grade Forgiveness Policy or Adjusted Resident Credit option when appropriate to improve the grade point average.

Requirements for Completing a Bachelor of Science in Business Administration

The following sections show the courses that are requirements for all business students, regardless of the chosen major: Lower-Division General Education, BSBA Core Courses, and Upper-Division General Education. Credit hours are listed after the course title. The student must also choose a major and complete the requirements listed for that major on the following pages.

Foundation Courses for Admission to the Strome College of Business

ENGL 110C	English Composition (C or better)	3
MATH 162M	Precalculus I (C or better)	3
ACCT 201	Principles of Financial Accounting (C or better)	3
ECON 202S	Principles of Microeconomics (C or better)	3
BUSN 110	Introduction to Contemporary Business *	1

* Not required for students pursuing an Information Systems and Technology major (excluding Business Analytics) or for students with an associate's degree in business administration or with a prior bachelor's degree in business administration.

See the section on Admission to the Undergraduate Program in Business Administration, General Requirements.

Business Elective

A business elective is a course that is offered by an accredited college of business, including the Strome College of Business at Old Dominion University. Public Affairs and Service (PAS) courses offered by the Strome College of Business are not considered as business courses. However, because some business courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate business elective

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courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Free Elective

In the majority of cases a free elective is any course offered by an accredited community college or university, including Old Dominion University. However, because some courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 162M	Precalculus I (C or better required)	3
Language and Culture I (May be waived; see requirement details)		0-3
BUSN 110	Introduction to Contemporary Business (C or better required)	1
Nature of Science I		4
Free Elective		3
Credit Hours		14-17
Spring		
MATH 200	Calculus for Business and Economics	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Language and Culture II (May be waived; see requirement details)		0-3
Nature of Science II		4
Interpreting the Past		3
Credit Hours		13-16
Sophomore		
Fall		
Literature		3
Oral Communication: COMM 101R or MKTG 200R required		3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL/DASC 357E	Ethics and Data	

PHIL 442E	Studies in Applied Ethics	
ACCT 201	Principles of Financial Accounting (C or better required)	3
ECON 202S	Principles of Microeconomics (C or better required)	3
FIN 210S	Personal Financial Literacy	3
Credit Hours		18
Spring		
Human Creativity		3
Information Literacy and Research (IT 150G recommended)		3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
BNAL 206	Business Analytics I	3
Credit Hours		15
Junior		
Fall		
BNAL 306	Business Analytics II	3
FIN 323	Introductory Financial Management (C or better required to progress)	3
MGMT 325	Contemporary Organizations and Management	3
RMI 317	Principles of Risk Management and Insurance	3
ECON 301	Managerial Economics	3
Credit Hours		15
Spring		
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology (Satisfies Impact of Technology)	3
MKTG 311	Marketing Principles and Problems	3
FIN 435	International Financial Management	3
FIN 431	Investments	3
Credit Hours		15
Senior		
Fall		
FIN 414	Estate Planning	3
MGMT 485W	Business Policy and Strategy (C or better required)	3
OPMT 303	Operations Management	3
RMI 411	Employee Benefit Planning	3
Upper-Division General Education		3
Credit Hours		15
Spring		
ACCT 425	Taxation of Individuals	3
FIN 415	Capstone in Financial Plan Development	3
Major Elective		3
Major Elective		3

Upper-Division General Education	3
Credit Hours	15
Total Credit Hours	120-126

BSBA to MBA (Master of Business Administration) Linked Program

Students interested in the program should contact the MBA Program Office as early as possible to discuss their plans for early entry. Once admitted to the program, the MBA program manager will act as the student's co-advisor, along with the chief departmental advisor or chief discipline advisor in the student's undergraduate major. The MBA Program Office is located in 1026 Constant Hall. The phone number is 757-683-3585 and email is mbainfo@odu.edu.

BSBA to MPA (Master of Public Administration) Linked Program

The linked BSBA to MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking 12 credits of the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

A potential candidate will have:

1. Completed all lower level general education requirements
2. Achieved a cumulative GPA of at least 3.0 at the end of the junior year

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog. For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science in Business Administration Financial Management with a Major in Real Estate (BSBA)

Bruce Rubin, Chair
Sara Russell-Riggs, Chief Departmental Advisor

Financial management comprises four majors: finance, personal financial planning, real estate, and risk management and insurance. Real estate graduates are employed as appraisers, sales and leasing agents, property managers, developers, and lending officers.

A student who seeks a Bachelor of Science in Business Administration degree in financial management with a major in real estate from Old Dominion University must, in addition to meeting other requirements of the University, earn a minimum of 25 percent of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) through on- or off-campus instruction. This must include a minimum of 12 credit hours of upper-level FIN or REST courses or other upper-level courses specifically listed as electives on the course lists below.

Strome College of Business (SCB) Center for Undergraduate Advising and Student Success

The mission of this office is to challenge and support students in self-exploration and, through advising, provide resources for them to develop an achievable plan for success. Our vision is for students to be aware of their academic, personal, and professional goals; empowered to pursue them; and confident in their ability to accomplish them.

Our professional advisors work with all Strome College of Business students regarding degree planning, changing majors, admissions, continuance, graduation requirements and required curricula for the majors and minors offered by the College.

Degree Requirements

Students in all of the Bachelor of Science in Business Administration degree programs must fulfill the University General Education requirements (including foreign language) as well as the Strome College of Business's core, major, and elective requirements. Students must choose at least one major area to meet requirements towards the degree.

To stay in compliance with AACSB accreditation standards, students receiving a Bachelor of Science in Business Administration from Old Dominion University must complete at least half of their business course work in residence with a minimum of four courses in their declared major. This equates to 10 business classes, thus meeting the University's residency requirement as well.

Majors in the college may not take business and public administration courses for pass/fail credit except those courses in which pass/fail is the only grading option (i.e., internships and practica).

Admission to the Undergraduate Program in Business Administration

General Requirements

Applicants for admission to the undergraduate degree program in business administration (the Bachelor of Science in Business Administration) should apply initially to the Office of Admissions of Old Dominion University. Students cannot be accepted into business administration without first being admitted to the University. Admission to the University does not guarantee admission to the Bachelor of Science in Business Administration (BSBA) program. Candidates for admission to the BSBA program should indicate on the application to the University their intention to enter the undergraduate business administration degree program.

Admission to the Bachelor's Degree Program in Business Administration:

Before Admission to the bachelor's degree program in business administration can be granted, a student must have earned a grade of C or higher in each of the business Admission courses:

BUSN 110	Introduction to Contemporary Business	1
ENGL 110C	English Composition	3
MATH 162M	Precalculus I	3
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3

- BUSN 110 is not required for students pursuing majors under the BSBA in Information Systems and Technology (excluding Business Analytics) or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
- Students may utilize the Grade Forgiveness Policy for the business Admission courses.
- Transfer students may complete business Admission courses (BUSN 110, ENGL 110C, MATH 162M, ACCT 201, and ECON 202S) at another accredited college or university, but are responsible for having Transfer Evaluation Services determine that the courses are acceptable to the University.

Eligibility to Enroll in Upper-Level (300/400-level) Business Courses

Only students who have officially completed Admission courses to the BSBA program will be eligible to enroll in upper-level (300/400) business courses (refer to exceptions for non-business majors). However, students who are in progress with the business Admission courses may enroll in upper-level (300/400) business courses. Note: These students will need a Program Restriction Waiver (PRW) to enroll in these courses, with the exception of FIN 323, MGMT 325, MKTG 311, and OPMT 303. These courses require a junior class standing for registration.

Enrollment in 300/400-level Business Courses by Non-Business Majors

Enrollment in 300/400-level business courses will be granted without the Admission courses for the following exceptions:

1. Students pursuing a declared minor in the Strome College of Business may enroll in 300/400-level business courses appropriate to the minor.
2. Students pursuing Upper-Division General Education Requirement Option B: Interdisciplinary Minor or Option D: Six hours of elective upper-division courses outside the student's major discipline or college.
3. Students wishing to satisfy the Impact of Technology requirement may enroll in IT 360T.
4. Students pursuing a degree program other than the Bachelor of Science in Business Administration (BSBA) that requires or accepts specific 300/400-level business courses to complete the degree may enroll in the courses appropriate to the major.
5. Non-degree-seeking students may enroll in 300/400-level business courses if they have satisfied the prerequisites for these courses.

Students in categories 1 - 5 above who do not have a declared major will need a Program Restriction Waiver (PRW) in order to enroll in any 300/400-level Strome College of Business course (including Economics courses). Forms to request a PRW are available at the Strome College of Business website.

Regulations for Continuance in the Bachelor of Science in Business Administration

In addition to the Old Dominion University continuance policies, the following policies are specific to all declared Bachelor of Science in Business Administration (BSBA) students. The Strome College of Business makes a reasonable effort to notify undergraduate students who are not in good academic standing in the BSBA program of their academic status. Each undergraduate student who is placed on BSBA Academic Alarm or BSBA Termination (explained below) will be sent an e-mail message to that effect at the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business. Non-receipt of the e-mail messages by a student will not be considered grounds for granting exceptions or delays in enforcement of the BSBA continuance regulations.

BSBA Continuance Regulations

If a student's Grade Point Average (GPA) in their BSBA Core courses falls below a 2.0, then they will be on Academic Alarm within the Strome College of Business (SCB). This policy is very similar to the University's academic continuance policy, the main difference being that it is based on the core Business courses and impacts acceptance and continuance within the SCB.

Academic Alarm

The first semester in which a student's BSBA Core GPA drops to below a 2.0, they will be on Academic Alarm. Once considered on academic alarm within the college, taking courses within the BSBA Core is the only way to bring that GPA back up.

- If the student raises the BSBA Core GPA to above a 2.0, then they will no longer be on academic alarm.
- If the BSBA Core GPA does not reach a 2.0 but the semester average in the BSBA Core courses is a 2.0 or higher, then the student will remain on academic alarm and be able to continue within the SCB.

SCB Termination

While on academic alarm within the Strome College of Business, if the semester BSBA Core GPA falls below a 2.0, the student will be terminated from the SCB and their major coding will be changed from Business to Undecided. (Terminations will not be processed in summer semesters.)

Appeals

If you have been terminated, you may appeal the decision if you have extenuating circumstances and documentation to support your claim. To appeal, write a letter and include documentation of your circumstances to the Associate Dean of the Strome College of Business (Constant Hall, Suite 2004). There are specific details that need to be included with your appeal - for more information, please see the appeals process as described in the most recently issued catalog.

Guidelines for Filing a BSBA Termination Appeal

1. All students have the right to appeal their BSBA termination if they believe that extraordinary circumstances were the main reason for their poor academic performance. Notifications of pending BSBA termination are sent to the student's ODU email address and include information on the appeal process and deadlines. All BSBA termination appeals must be submitted electronically using the link provided in the email and will be reviewed by the SCB Termination Appeal Committee. Students are responsible for submitting their appeal by the stated deadline; late appeals will not be reviewed. Decisions of the Termination Appeal Committee may be appealed to the Associate Dean for Academic Programs in the Strome College of Business whose decision is final.

2. Appeals must be based on circumstances pertinent to the semesters in which the academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the terminated student. The appeal letter must provide sufficient detail and explanation regarding the following points because there is no face-to-face meeting with the Associate Dean for Academic Programs in the Strome College of Business. The decision of the Associate Dean is final. Students without documentation will not be allowed to appeal their termination. In order to be reviewed, an appeal letter must:

- Document the extraordinary circumstances such as a death in the family, medical complications or chronic conditions, personal or family emergency, overwhelming work schedules, dorm-mate conflict, or a personal relationship conflict that have adversely affected performance: i.e., a statement or letter from a physician, employer, family members, faculty, academic advisor, Counseling Services, or Educational Accessibility.
- Explain how the extraordinary circumstances caused each semester of poor academic performance.
- State the reasons why an official withdrawal was not requested.
- Explain how the extraordinary circumstance(s) has been resolved.
- Provide a plan of action to return to good BSBA academic standing.

3. Students who do not file a BSBA termination appeal or whose appeals are denied, are no longer eligible to pursue a bachelor's degree in Business Administration. Upon BSBA termination, the student's major in the Strome College of Business will be removed. (This does not affect a declared second major outside of the BSBA.) These students are advised to work with an advisor in the SCB Center for Undergraduate Advising to explore other major options, and for referrals to other advising departments for a new major declaration.

4. BSBA-terminated students who had pre-registered for a subsequent semester lose eligibility for continued enrollment in upper-level business courses.

Applying for Readmission to the BSBA Program

After a minimum of five years has passed since a student was terminated from the BSBA program, the student may apply for readmission to the program. There must be a high probability the student will successfully complete the degree program, and approval will be at the discretion of the Strome College of Business Associate Dean.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication: COMM 101R or MKTG 200R required. Additionally, all students majoring in business administration can expect to complete several courses in which individual and/or group oral presentations will be required.

Mathematics: MATH 162M and MATH 200 required.

Information Literacy and Research: IT 150G (recommended) or any "G" course from the approved general education information literacy and research course list.

Human Behavior: Met in the Business Administration core for all majors except Economics.

Philosophy and Ethics must be satisfied by completion of either PHIL 230E or an upper-level "E" course from the approved general education ethics course list. A philosophy course designated with a P will not meet this requirement for business administration students with the exception of a "P" course taken prior to fall 2010.

Impact of Technology requirement is satisfied within each BSBA degree major except Information Systems and Technology by IT 360T. In the Information Systems and Technology majors (excluding Business Analytics), the Impact of Technology requirement is satisfied by the coursework required for the major.

Transfer students with an applicable associate's degree from a Virginia Community College or another community college that has a seamless transfer agreement with ODU, and students with a prior bachelor's degree

from another university, must nevertheless have a grade of C or better in the following to be able to transfer them:

COMM 101R	Public Speaking	3
or MKTG 200R	Professional Interactions and Negotiations	
PHIL 230E	Introduction to Ethics (Or an upper-level ethics course)	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3

Upper-Division General Education

- Option A. Any University-approved minor, second degree, or second major.
- Option B. An interdisciplinary minor consisting of 12 credits, three of which can be in the major. Interdisciplinary minors are described in the University Catalog section labeled Requirements for Undergraduate Degrees, Upper-Division Requirements.
- Option C. An approved certification program, such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the Strome College of Business and not required by the major (6 credits).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Business Administration Core

ACCT 201	Principles of Financial Accounting *	3
ACCT 202	Principles of Managerial Accounting *	3
BNAL 206	Business Analytics I *	3
BNAL 306	Business Analytics II	3
ECON 201S	Principles of Macroeconomics *	3
ECON 202S	Principles of Microeconomics *	3
ECON 301	Managerial Economics	3
FIN 323	Introductory Financial Management	3
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology **	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 485W	Business Policy and Strategy (C or better) ***	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
Total Credit Hours		42

* Not automatically waived for transfer students with an applicable associate's degree from a Virginia Community College or another acceptable community college, or for students with a prior bachelor's degree from another

university. A grade of C or better must be earned to transfer these courses to Old Dominion University. Students completing a major or minor in Information Systems and Technology (excluding the Business Analytics major) do not take this course. Students majoring in Economics must complete MGMT 485W, but meet the writing intensive requirement by earning a grade of C or better either in MGMT 485W or in one of the ECON Writing Intensive courses.

Real Estate Major

General Education

Complete lower-division requirements		35-41
Complete upper-division requirements		6
BUSN 110	Introduction to Contemporary Business *	1
MATH 200	Calculus for Business and Economics	3

Business Administration Core

Complete business adminiistration core requirements		42
Real Estate		
REST 319	Principles of Real Estate	3
REST 450	Real Estate Finance	3
REST 451	Real Estate Appraisal	3
REST 452	Real Estate Property Management	3
REST 454	Real Estate Investment Analysis	3
Select three of the following:		9

CET 325	Introduction to Land Development
CET 460	Construction Cost Estimating
ECON 445W	Urban Economics
ENTR 301	Fundamentals of Entrepreneurship
ENTR 410	Small Business Management
FIN 431	Investments
FIN 432	Intermediate Financial Management
FIN 433	Introduction to Futures and Options
FIN 434	Management of Financial Institutions
FIN 435	International Financial Management
FIN 441	Student Managed Investment Fund
MKTG 316	Professional Selling
MKTG 404	Sales Management
MKTG 405	The Art of Influence and Persuasion
MKTG 407	Marketing Research
MKTG 417	Advanced Professional Selling
MKTG 428	Marketing of Services
REST 368	Real Estate Internship
REST 495	Selected Topics in Real Estate
RMI 317	Principles of Risk Management and Insurance
RMI 412	Property & Liability Insurance Company Operations
Free Elective	3
200-400 Level Business Elective **	3
300-400 Level Business Elective ***	3

Total Credit Hours **120-126**

* Not required for students pursuing the IT major or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.

** Can be any 200-400 level course offered by the Strome College of Business except ECON 200S, providing that the student has the appropriate prerequisites.

*** Can be any 300-400 level course offered by the Strome College of Business, providing that the student has the appropriate prerequisites.

Courses included in the calculation of the 2.00 overall grade point average for major course work for graduation are:

REST 319	Principles of Real Estate	3
REST 450	Real Estate Finance	3
REST 451	Real Estate Appraisal	3
REST 452	Real Estate Property Management	3
REST 454	Real Estate Investment Analysis	3
Major Electives		9

Additional Requirements and Information

Advanced Placement

The college accepts advanced placement credit in accordance with the rules and regulations outlined in the Academic Information section of this catalog. Students may take College-Level Examination Program (CLEP) tests to receive credit for:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
FIN 331	Legal Environment of Business	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3

Students are advised to contact the Office of Prior Learning Assessment for more information regarding CLEP and other prior learning assessment credit options. For advanced placement credit in any other business or public administration course, students are advised to contact the chair of the department offering the course. Additional information about credit awarded for qualifying scores on AP and IB subject examinations can be found on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Practical Work Experience for Business Administration Majors

Students may complement their major studies with a practical work experience, which may take the form of an internship, cooperative education experience or a class containing a real-world, hands-on project. Students must apply for internship or co-op participation through the Strome College of Business Career & Leadership Development Satellite Office. All work experiences must be approved by the faculty sponsor in the appropriate department prior to registering for credit. Students may not earn credit for previous or current work experiences. (However, academic credit for work experience may be approved in accordance with the policies for granting prior learning credit as defined in the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this catalog.) For details see the Center for Career & Leadership Development section of this catalog.

Use of Internship and Similar Hours Toward Business Administration Majors

A student may apply no more than six hours of cooperative education, student internship or practicum courses to satisfy degree requirements. Students may not use more than three hours of cooperative education, student internship or practicum courses to satisfy major elective requirements in each of the students' majors. These courses are numbered 367, 368 or 369. Additional hours of cooperative education, student internship or practicum courses, however, can be used to satisfy other requirements such as free electives or general business electives. Additional internships must each involve substantially different kinds of work experiences. Internships must be approved by the Chief Departmental Advisor of the student's major and the CAP Coordinator of the internship.

Transfer of the Associate of Science in Business Administration Towards Degree Requirements

Students transferring to the college must complete a minimum of 10 business courses offered by the college to earn the degree from Old Dominion University, in accordance with AACSB regulations. Those transfer students holding the Associate of Science in Business Administration degree from a Virginia Community College must earn the grade of "C" or better in the following courses in order to satisfy requirements found in the first two years of the BSBA degree:

COMM 101R	Public Speaking	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
BNAL 206	Business Analytics I	3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
Upper-level ethics course		

With the exception of the courses listed above, the University's lower-division General Education requirements are deemed satisfied by the accepted AS degrees. These typically include all AS degrees from the Virginia Community College System except the applied science degrees. For more information about accepted AS degrees contact the Office of Admissions. Associate degree holders, although meeting lower-level General Education requirements, must ensure that 120 credits are completed to earn the BSBA degree. A minimum of 25% of the required credit hours must be completed through Old Dominion University, at least 12 of which are upper-level courses in the major program.

The Strome College of Business does not accept courses completed at the freshman and sophomore levels at other institutions for required courses at the junior and senior level at Old Dominion University. Please see the section on CLEP credits (Prior Learning Assessment Credit Options at the Undergraduate Level) for additional information.

Grade Average Requirements for Graduation

To graduate with a Bachelor of Science in Business Administration degree, students must present a minimum of 120 hours with a minimum overall grade point average of 2.00 in all courses taken at Old Dominion University. Students must also attain a minimum overall grade point average of 2.00 in courses taken toward the major (courses included in the major grade point average calculation are listed following the description of each major's course work).

Additionally, students must attain a minimum overall grade point average of 2.00 in the BSBA Core listed below. Only courses completed at Old Dominion University will be used to compute the BSBA Core average. Students with an Information Systems and Technology major (excluding Business Analytics) are not required to take IT 360T, so the BSBA Core grade point average is computed using the remaining courses. If the BSBA Core average is below the required 2.00 minimum, students are advised to utilize the Grade Forgiveness Policy or Adjusted Resident Credit option when appropriate to improve the grade point average.

Requirements for Completing a Bachelor of Science in Business Administration

The following sections show the courses that are requirements for all business students, regardless of the chosen major: Lower-Division General Education, BSBA Core Courses, and Upper-Division General Education. Credit hours are listed after the course title. The student must also choose a major and complete the requirements listed for that major on the following pages.

Foundation Courses for Admission to the Strome College of Business

ENGL 110C	English Composition (C or better)	3
MATH 162M	Precalculus I (C or better)	3
ACCT 201	Principles of Financial Accounting (C or better)	3
ECON 202S	Principles of Microeconomics (C or better)	3
BUSN 110	Introduction to Contemporary Business *	1

* Not required for students pursuing an Information Systems and Technology major (excluding Business Analytics) or for students with an associate's degree in business administration or with a prior bachelor's degree in business administration.

See the section on Admission to the Undergraduate Program in Business Administration, General Requirements.

Business Elective

A business elective is a course that is offered by an accredited college of business, including the Strome College of Business at Old Dominion University. Public Affairs and Service (PAS) courses offered by the Strome College of Business are not considered as business courses. However, because some business courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate business elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Free Elective

In the majority of cases a free elective is any course offered by an accredited community college or university, including Old Dominion University. However, because some courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 162M	Precalculus I (C or better required)	3
Language and Culture I (May be waived; see requirement details)		0-3
Nature of Science I		4
BUSN 110	Introduction to Contemporary Business (C or better required)	1
ACCT 201	Principles of Financial Accounting (C or better required)	3
Credit Hours		14-17

Spring

MATH 200	Calculus for Business and Economics	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Language and Culture II (May be waived; see requirement details)		0-3
Nature of Science II		4
ACCT 202	Principles of Managerial Accounting	3
Credit Hours		13-16

Sophomore

Fall

Literature		3
Oral Communication: COMM 101R or MKTG 200R required		3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL/DASC 357E	Ethics and Data	
PHIL 442E	Studies in Applied Ethics	
ECON 202S	Principles of Microeconomics (C or better required)	3
Interpreting the Past		3
Free Elective		3
Credit Hours		18

Spring

Information Literacy and Research (IT 150G recommended)		3
BNAL 206	Business Analytics I	3
ECON 201S	Principles of Macroeconomics	3
FIN 323	Introductory Financial Management (C or better required to progress)	3
Major Elective		3
Credit Hours		15

Junior

Fall

Human Creativity		3
BNAL 306	Business Analytics II	3
MGMT 325	Contemporary Organizations and Management	3
REST 319	Principles of Real Estate	3
Major Elective		3
Credit Hours		15

Spring

FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology (Satisfies Impact of Technology)	3
MKTG 311	Marketing Principles and Problems	3

REST 450	Real Estate Finance	3
200-400 Level Business Elective		3
Credit Hours		15
Senior		
Fall		
OPMT 303	Operations Management	3
ECON 301	Managerial Economics	3
REST 451	Real Estate Appraisal	3
REST 454	Real Estate Investment Analysis	3
Upper-Division General Education		3
Credit Hours		15
Spring		
MGMT 485W	Business Policy and Strategy (C or better required)	3
REST 452	Real Estate Property Management	3
Major Elective		3
300-400 Level Business Elective		3
Upper-Division General Education		3
Credit Hours		15
Total Credit Hours		120-126

BSBA to MBA (Master of Business Administration) Linked Program

Students interested in the program should contact the MBA Program Office as early as possible to discuss their plans for early entry. Once admitted to the program, the MBA program manager will act as the student's co-advisor, along with the chief departmental advisor or chief discipline advisor in the student's undergraduate major. The MBA Program Office is located in 1026 Constant Hall. The phone number is 757-683-3585 and email is mbainfo@odu.edu.

BSBA to MPA (Master of Public Administration) Linked Program

The linked BSBA to MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking 12 credits of the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

A potential candidate will have:

1. Completed all lower level general education requirements
2. Achieved a cumulative GPA of at least 3.0 at the end of the junior year

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog. For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science in Business Administration Financial Management with a Major in Risk Management and Insurance (BSBA)

Bruce Rubin, Chair

Sara Russell-Riggs, Chief Departmental Advisor

Financial management comprises four majors: finance, personal financial planning, real estate, and risk management and insurance. Risk management and insurance graduates become corporate risk managers; employee benefits specialists; business continuity professionals; loss control specialists; and underwriters, claims adjusters, actuaries, field reps, and producers (both agents and brokers) for personal and commercial lines property-casualty and life-health insurers.

A student who seeks a Bachelor of Science in Business Administration degree in financial management with a major in risk management and insurance from Old Dominion University must, in addition to meeting other requirements of the University, earn a minimum of 25 percent of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) through on- or off-campus instruction. This must include a minimum of 12 credit hours of upper-level RMI or FIN courses or other upper-level courses specifically listed as electives on the course lists below.

Strome College of Business (SCB) Center for Undergraduate Advising and Student Success

The mission of this office is to challenge and support students in self-exploration and, through advising, provide resources for them to develop an achievable plan for success. Our vision is for students to be aware of their academic, personal, and professional goals; empowered to pursue them; and confident in their ability to accomplish them.

Our professional advisors work with all Strome College of Business students regarding degree planning, changing majors, admissions, continuance, graduation requirements and required curricula for the majors and minors offered by the College.

Degree Requirements

Students in all of the Bachelor of Science in Business Administration degree programs must fulfill the University General Education requirements (including foreign language) as well as the Strome College of Business's core, major, and elective requirements. Students must choose at least one major area to meet requirements towards the degree.

To stay in compliance with AACSB accreditation standards, students receiving a Bachelor of Science in Business Administration from Old Dominion University must complete at least half of their business course work in residence with a minimum of four courses in their declared major. This equates to 10 business classes, thus meeting the University's residency requirement as well.

Majors in the college may not take business and public administration courses for pass/fail credit except those courses in which pass/fail is the only grading option (i.e., internships and practica).

Admission to the Undergraduate Program in Business Administration

General Requirements

Applicants for admission to the undergraduate degree program in business administration (the Bachelor of Science in Business Administration) should apply initially to the Office of Admissions of Old Dominion University. Students cannot be accepted into business administration without first being admitted to the University. Admission to the University does not guarantee admission to the Bachelor of Science in Business Administration (BSBA)

program. Candidates for admission to the BSBA program should indicate on the application to the University their intention to enter the undergraduate business administration degree program.

Admission to the Bachelor's Degree Program in Business Administration:

Before Admission to the bachelor's degree program in business administration can be granted, a student must have earned a grade of C or higher in each of the business Admission courses:

BUSN 110	Introduction to Contemporary Business	1
ENGL 110C	English Composition	3
MATH 162M	Precalculus I	3
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3

- BUSN 110 is not required for students pursuing majors under the BSBA in Information Systems and Technology (excluding Business Analytics) or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
- Students may utilize the Grade Forgiveness Policy for the business Admission courses.
- Transfer students may complete business Admission courses (BUSN 110, ENGL 110C, MATH 162M, ACCT 201, and ECON 202S) at another accredited college or university, but are responsible for having Transfer Evaluation Services determine that the courses are acceptable to the University.

Eligibility to Enroll in Upper-Level (300/400-level) Business Courses

Only students who have officially completed Admission courses to the BSBA program will be eligible to enroll in upper-level (300/400) business courses (refer to exceptions for non-business majors). However, students who are in progress with the business Admission courses may enroll in upper-level (300/400) business courses. Note: These students will need a Program Restriction Waiver (PRW) to enroll in these courses, with the exception of FIN 323, MGMT 325, MKTG 311, and OPMT 303. These courses require a junior class standing for registration.

Enrollment in 300/400-level Business Courses by Non-Business Majors

Enrollment in 300/400-level business courses will be granted without the Admission courses for the following exceptions:

1. Students pursuing a declared minor in the Strome College of Business may enroll in 300/400-level business courses appropriate to the minor.
2. Students pursuing Upper-Division General Education Requirement Option B: Interdisciplinary Minor or Option D: Six hours of elective upper-division courses outside the student's major discipline or college.
3. Students wishing to satisfy the Impact of Technology requirement may enroll in IT 360T.
4. Students pursuing a degree program other than the Bachelor of Science in Business Administration (BSBA) that requires or accepts specific 300/400-level business courses to complete the degree may enroll in the courses appropriate to the major.
5. Non-degree-seeking students may enroll in 300/400-level business courses if they have satisfied the prerequisites for these courses.

Students in categories 1 - 5 above who do not have a declared major will need a Program Restriction Waiver (PRW) in order to enroll in any 300/400-level Strome College of Business course (including Economics courses). Forms to request a PRW are available at the Strome College of Business website.

Regulations for Continuance in the Bachelor of Science in Business Administration

In addition to the Old Dominion University continuance policies, the following policies are specific to all declared Bachelor of Science in Business Administration (BSBA) students. The Strome College of Business makes a reasonable effort to notify undergraduate students who are not in good academic standing in the BSBA program of their academic status. Each undergraduate student who is placed on BSBA Academic Alarm or BSBA Termination (explained below) will be sent an e-mail message to that effect at the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business. Non-receipt of the e-mail messages by a student will not be considered grounds for granting exceptions or delays in enforcement of the BSBA continuance regulations.

BSBA Continuance Regulations

If a student's Grade Point Average (GPA) in their BSBA Core courses falls below a 2.0, then they will be on Academic Alarm within the Strome College of Business (SCB). This policy is very similar to the University's academic continuance policy, the main difference being that it is based on the core Business courses and impacts acceptance and continuance within the SCB.

Academic Alarm

The first semester in which a student's BSBA Core GPA drops to below a 2.0, they will be on Academic Alarm. Once considered on academic alarm within the college, taking courses within the BSBA Core is the only way to bring that GPA back up.

- If the student raises the BSBA Core GPA to above a 2.0, then they will no longer be on academic alarm.
- If the BSBA Core GPA does not reach a 2.0 but the semester average in the BSBA Core courses is a 2.0 or higher, then the student will remain on academic alarm and be able to continue within the SCB.

SCB Termination

While on academic alarm within the Strome College of Business, if the semester BSBA Core GPA falls below a 2.0, the student will be terminated from the SCB and their major coding will be changed from Business to Undecided. (Terminations will not be processed in summer semesters.)

Appeals

If you have been terminated, you may appeal the decision if you have extenuating circumstances and documentation to support your claim. To appeal, write a letter and include documentation of your circumstances to the Associate Dean of the Strome College of Business (Constant Hall, Suite 2004). There are specific details that need to be included with your appeal - for more information, please see the appeals process as described in the most recently issued catalog.

Guidelines for Filing a BSBA Termination Appeal

1. All students have the right to appeal their BSBA termination if they believe that extraordinary circumstances were the main reason for their poor academic performance. Notifications of pending BSBA termination are sent to the student's ODU email address and include information on the appeal process and deadlines. All BSBA termination appeals must be submitted electronically using the link provided in the email and will be reviewed by the SCB Termination Appeal Committee. Students are responsible for submitting their appeal by the stated deadline; late appeals will not be reviewed. Decisions of the Termination Appeal Committee may be appealed to the Associate Dean for Academic Programs in the Strome College of Business whose decision is final.
2. Appeals must be based on circumstances pertinent to the semesters in which the academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the terminated student. The appeal letter must provide sufficient detail and explanation regarding the following points because there is no face-to-face meeting

with the Associate Dean for Academic Programs in the Strome College of Business. The decision of the Associate Dean is final. Students without documentation will not be allowed to appeal their termination. In order to be reviewed, an appeal letter must:

- Document the extraordinary circumstances such as a death in the family, medical complications or chronic conditions, personal or family emergency, overwhelming work schedules, dorm-mate conflict, or a personal relationship conflict that have adversely affected performance: i.e., a statement or letter from a physician, employer, family members, faculty, academic advisor, Counseling Services, or Educational Accessibility.
 - Explain how the extraordinary circumstances caused each semester of poor academic performance.
 - State the reasons why an official withdrawal was not requested.
 - Explain how the extraordinary circumstance(s) has been resolved.
 - Provide a plan of action to return to good BSBA academic standing.
3. Students who do not file a BSBA termination appeal or whose appeals are denied, are no longer eligible to pursue a bachelor's degree in Business Administration. Upon BSBA termination, the student's major in the Strome College of Business will be removed. (This does not affect a declared second major outside of the BSBA.) These students are advised to work with an advisor in the SCB Center for Undergraduate Advising to explore other major options, and for referrals to other advising departments for a new major declaration.
4. BSBA-terminated students who had pre-registered for a subsequent semester lose eligibility for continued enrollment in upper-level business courses.

Applying for Readmission to the BSBA Program

After a minimum of five years has passed since a student was terminated from the BSBA program, the student may apply for readmission to the program. There must be a high probability the student will successfully complete the degree program, and approval will be at the discretion of the Strome College of Business Associate Dean.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication: COMM 101R or MKTG 200R required. Additionally, all students majoring in business administration can expect to complete several courses in which individual and/or group oral presentations will be required.

Mathematics: MATH 162M and MATH 200 required.

Information Literacy and Research: IT 150G (recommended) or any "G" course from the approved general education information literacy and research course list.

Human Behavior: Met in the Business Administration core for all majors except Economics.

Philosophy and Ethics must be satisfied by completion of either PHIL 230E or an upper-level "E" course from the approved general education ethics course list. A philosophy course designated with a P will not meet this requirement for business administration students with the exception of a "P" course taken prior to fall 2010.

Impact of Technology requirement is satisfied within each BSBA degree major except Information Systems and Technology by IT 360T. In the Information Systems and Technology majors (excluding Business Analytics), the Impact of Technology requirement is satisfied by the coursework required for the major.

Transfer students with an applicable associate's degree from a Virginia Community College or another community college that has a seamless transfer agreement with ODU, and students with a prior bachelor's degree from another university, must nevertheless have a grade of C or better in the following to be able to transfer them:

COMM 101R	Public Speaking	3
or MKTG 200R	Professional Interactions and Negotiations	
PHIL 230E	Introduction to Ethics (Or an upper-level ethics course)	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3

Upper-Division General Education

- Option A. Any University-approved minor, second degree, or second major.
- Option B. An interdisciplinary minor consisting of 12 credits, three of which can be in the major. Interdisciplinary minors are described in the University Catalog section labeled Requirements for Undergraduate Degrees, Upper-Division Requirements.
- Option C. An approved certification program, such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the Strome College of Business and not required by the major (6 credits).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Business Administration Core

ACCT 201	Principles of Financial Accounting *	3
ACCT 202	Principles of Managerial Accounting *	3
BNAL 206	Business Analytics I *	3
BNAL 306	Business Analytics II	3
ECON 201S	Principles of Macroeconomics *	3
ECON 202S	Principles of Microeconomics *	3
ECON 301	Managerial Economics	3
FIN 323	Introductory Financial Management	3
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology **	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 485W	Business Policy and Strategy (C or better) ***	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
Total Credit Hours		42

*	Not automatically waived for transfer students with an applicable associate's degree from a Virginia Community College or another acceptable community college, or for students with a prior bachelor's degree from another university. A grade of C or better must be earned to transfer these courses to Old Dominion University.
**	Students completing a major or minor in Information Systems and Technology (excluding the Business Analytics major) do not take this course.
***	Students majoring in Economics must complete MGMT 485W, but meet the writing intensive requirement by earning a grade of C or better either in MGMT 485W or in one of the ECON Writing Intensive courses.

Risk Management and Insurance Major

General Education

Complete lower-division requirements		35-41
Complete upper-division requirements (minimum of 6 credit hours)		6
BUSN 110	Introduction to Contemporary Business *	1
MATH 200	Calculus for Business and Economics	3

Business Administration Core

Complete business administration core requirements	42

Risk Management and Insurance

RMI 317	Principles of Risk Management and Insurance	3
RMI 410	Life and Health Insurance	3
RMI 412	Property & Liability Insurance Company Operations	3
or RMI 413	Risk Analysis and Control	
RMI 443	Enterprise Risk Management	3
Select two of the following:		6
RMI 411	Employee Benefit Planning	
RMI 413	Risk Analysis and Control	
or RMI 412	Property & Liability Insurance Company Operations	
Select two of the following:		6
FIN 431	Investments	
FIN 433	Introduction to Futures and Options	
FIN 434	Management of Financial Institutions	
FIN 435	International Financial Management	
FIN 439	Financial Decision Making	
FIN 441	Student Managed Investment Fund	
RMI 367	Cooperative Education	

RMI 368	Insurance Internship	
RMI 495	Selected Topics in Risk Management and Insurance	
REST 454	Real Estate Investment Analysis	
REST 450	Real Estate Finance	
ACCT 411	Financial Auditing	
ACCT 460	Accounting Information Systems	
BNAL 405	Spreadsheet-Based Data Analysis for Decision Making	
BNAL 407	Prescriptive Analytics of Management Science	
CS 462	Cybersecurity Fundamentals	
CYSE/CRJS 406	Cyber Law	
CYSE 425W	Cybersecurity Strategy and Policy	
ECON 304	Intermediate Microeconomic Theory	
ECON 400	From Correlation to Causation: Applied Causal Inference	
ENMA 401	Project Management	
ENMA 424	Risk Analysis in Engineering Management	
IT 410	Business Intelligence	
IT 418	Enterprise Information Assurance	
IT 419	Enterprise Cyber Defense	
MGMT 426	Entrepreneurship: New Ventures Creation	
MGMT 452	Negotiations and Change Management	
MKTG 407	Marketing Research	
MKTG 490	Marketing Policy and Strategy	
MSCM 415	Maritime Security and Risk Analysis	
MSCM 441	Supply Chain Management and Logistics	
MSIM/ECE 416	Cyber Defense Fundamentals	
SMGT 421	Legal Aspects in Recreation and Sport Management	
STAT 405	Introduction to Data Handling	
STAT 437	Applied Regression and Time Series Analysis	

Free Elective	3
200-400 Level Business Elective **	3
300-400 Level Business Elective ***	3
Total Credit Hours	120-126

*	Not required for students pursuing the IT major or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
**	Can be any 200-400 level course except ECON 200S, offered by the Strome College of Business, providing that the student has the appropriate prerequisites.
***	Can be any 300-400 level course offered by the Strome College of Business, providing that the student has the appropriate prerequisites.

Courses included in the calculation of the 2.00 overall grade point average for major course work for graduation are:

RMI 317	Principles of Risk Management and Insurance	3
RMI 410	Life and Health Insurance	3
RMI 412	Property & Liability Insurance Company Operations	3
or RMI 413	Risk Analysis and Control	
RMI 443	Enterprise Risk Management	3
Major Electives		12

Additional Requirements and Information

Advanced Placement

The college accepts advanced placement credit in accordance with the rules and regulations outlined in the Academic Information section of this catalog. Students may take College-Level Examination Program (CLEP) tests to receive credit for:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
FIN 331	Legal Environment of Business	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3

Students are advised to contact the Office of Prior Learning Assessment for more information regarding CLEP and other prior learning assessment credit options. For advanced placement credit in any other business or public administration course, students are advised to contact the chair of the department offering the course. Additional information about credit awarded for qualifying scores on AP and IB subject examinations can be found on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Practical Work Experience for Business Administration Majors

Students may complement their major studies with a practical work experience, which may take the form of an internship, cooperative education experience or a class containing a real-world, hands-on project. Students must apply for internship or co-op participation through the Strome College of Business Career & Leadership Development Satellite Office. All work experiences must be approved by the faculty sponsor in the appropriate department prior to registering for credit. Students may not earn credit for previous or current work experiences. (However, academic credit for work experience may be approved in accordance with the policies for granting prior learning credit as defined in the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this catalog.) For details see the Center for Career & Leadership Development section of this catalog.

Use of Internship and Similar Hours Toward Business Administration Majors

A student may apply no more than six hours of cooperative education, student internship or practicum courses to satisfy degree requirements. Students may not use more than three hours of cooperative education, student internship or practicum courses to satisfy major elective requirements in each of the students' majors. These courses are numbered 367, 368 or 369. Additional hours of cooperative education, student internship or practicum courses, however, can be used to satisfy other requirements such as free electives or general business electives. Additional internships must each involve substantially different kinds of work experiences. Internships must be approved by the Chief Departmental Advisor of the student's major and the CAP Coordinator of the internship.

Transfer of the Associate of Science in Business Administration Towards Degree Requirements

Students transferring to the college must complete a minimum of 10 business courses offered by the college to earn the degree from Old Dominion University, in accordance with AACSB regulations. Those transfer students holding the Associate of Science in Business Administration degree from a Virginia Community College must earn the grade of "C" or better in the following courses in order to satisfy requirements found in the first two years of the BSBA degree:

COMM 101R	Public Speaking	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research: Writing, Rhetoric, and Research: Special Topics	3
MATH 162M	Precalculus I	3

MATH 200	Calculus for Business and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
BNAL 206	Business Analytics I	3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
Upper-level ethics course		

With the exception of the courses listed above, the University's lower-division General Education requirements are deemed satisfied by the accepted AS degrees. These typically include all AS degrees from the Virginia Community College System except the applied science degrees. For more information about accepted AS degrees contact the Office of Admissions. Associate degree holders, although meeting lower-level General Education requirements, must ensure that 120 credits are completed to earn the BSBA degree. A minimum of 25% of the required credit hours must be completed through Old Dominion University, at least 12 of which are upper-level courses in the major program.

The Strome College of Business does not accept courses completed at the freshman and sophomore levels at other institutions for required courses at the junior and senior level at Old Dominion University. Please see the section on CLEP credits (Prior Learning Assessment Credit Options at the Undergraduate Level) for additional information.

Grade Average Requirements for Graduation

To graduate with a Bachelor of Science in Business Administration degree, students must present a minimum of 120 hours with a minimum overall grade point average of 2.00 in all courses taken at Old Dominion University. Students must also attain a minimum overall grade point average of 2.00 in courses taken toward the major (courses included in the major grade point average calculation are listed following the description of each major's course work).

Additionally, students must attain a minimum overall grade point average of 2.00 in the BSBA Core listed below. Only courses completed at Old Dominion University will be used to compute the BSBA Core average. Students with an Information Systems and Technology major (excluding Business Analytics) are not required to take IT 360T, so the BSBA Core grade point average is computed using the remaining courses. If the BSBA Core average is below the required 2.00 minimum, students are advised to utilize the Grade Forgiveness Policy or Adjusted Resident Credit option when appropriate to improve the grade point average.

Requirements for Completing a Bachelor of Science in Business Administration

The following sections show the courses that are requirements for all business students, regardless of the chosen major: Lower-Division General Education, BSBA Core Courses, and Upper-Division General Education. Credit hours are listed after the course title. The student must also choose a major and complete the requirements listed for that major on the following pages.

Foundation Courses for Admission to the Strome College of Business

ENGL 110C	English Composition (C or better)	3
MATH 162M	Precalculus I (C or better)	3
ACCT 201	Principles of Financial Accounting (C or better)	3
ECON 202S	Principles of Microeconomics (C or better)	3
BUSN 110	Introduction to Contemporary Business *	1

* Not required for students pursuing an Information Systems and Technology major (excluding Business Analytics) or for students with an associate's degree in business

administration or with a prior bachelor's degree in business administration.

See the section on Admission to the Undergraduate Program in Business Administration, General Requirements.

Business Elective

A business elective is a course that is offered by an accredited college of business, including the Strome College of Business at Old Dominion University. Public Affairs and Service (PAS) courses offered by the Strome College of Business are not considered as business courses. However, because some business courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate business elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Free Elective

In the majority of cases a free elective is any course offered by an accredited community college or university, including Old Dominion University. However, because some courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 162M	Precalculus I (C or better required)	3
Language and Culture I (May be waived; see requirement details)		0-3
Nature of Science I		4
BUSN 110	Introduction to Contemporary Business (C or better required)	1
Free Elective		3
Credit Hours		14-17
Spring		
MATH 200	Calculus for Business and Economics	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Language and Culture II (May be waived; see requirement details)		0-3
Nature of Science II		4
Interpreting the Past		3
Credit Hours		13-16

Sophomore

Fall

Literature		3
Oral Communication: COMM 101R or MKTG 200R required		3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL/DASC 357E	Ethics and Data	
PHIL 442E	Studies in Applied Ethics	
ACCT 201	Principles of Financial Accounting (C or better required)	3
ECON 202S	Principles of Microeconomics (C or better required)	3
Credit Hours		15

Spring

Information Literacy and Research (IT 150G recommended)		3
Human Creativity		3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
BNAL 206	Business Analytics I	3
Credit Hours		15

Junior

Fall

BNAL 306	Business Analytics II	3
MGMT 325	Contemporary Organizations and Management	3
IT 360T	Principles of Information Technology	3
FIN 323	Introductory Financial Management (C or better required to progress)	3
RMI 317	Principles of Risk Management and Insurance	3
Credit Hours		15

Spring

FIN 331	Legal Environment of Business	3
ECON 301	Managerial Economics	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
RMI 412 or RMI 413	Property & Liability Insurance Company Operations or Risk Analysis and Control	3
200-400 Level Business Elective		3
Credit Hours		18

Senior

Fall

MGMT 485W	Business Policy and Strategy (C or better required)	3
Major Elective		3

Major Elective	3
300-400 Level Business Elective	3
Upper-Division General Education	3
Credit Hours	15
Spring	
RMI 410 Life and Health Insurance	3
RMI 443 Enterprise Risk Management	3
Major Elective	3
Major Elective	3
Upper-Division General Education	3
Credit Hours	15
Total Credit Hours	120-126

BSBA to MBA (Master of Business Administration) Linked Program

Students interested in the program should contact the MBA Program Office as early as possible to discuss their plans for early entry. Once admitted to the program, the MBA program manager will act as the student's co-advisor, along with the chief departmental advisor or chief discipline advisor in the student's undergraduate major. The MBA Program Office is located in 1026 Constant Hall. The phone number is 757-683-3585 and email is mbainfo@odu.edu.

BSBA to MPA (Master of Public Administration) Linked Program

The linked BSBA to MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking 12 credits of the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

A potential candidate will have:

1. Completed all lower level general education requirements
2. Achieved a cumulative GPA of at least 3.0 at the end of the junior year

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog. For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Financial Management Minor Requirements

A minor in financial management requires the completion of:

FIN 323	Introductory Financial Management	3
FIN 431	Investments	3
FIN 432	Intermediate Financial Management	3
Select two of the following:		6
FIN 433	Introduction to Futures and Options	

FIN 434	Management of Financial Institutions	
FIN 435	International Financial Management	
FIN 439	Financial Decision Making	
FIN 441	Student Managed Investment Fund	
Total Credit Hours		15

For completion of a minor, the student must achieve a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor or allowed toward the minor exclusive of prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

The financial management minor is not available to finance majors or personal financial planning majors. Real estate majors and risk management and insurance majors may complete the minor. No more than six credits from the minor may "share" with other areas of the student's curriculum.

Minor Real Estate Minor Requirements

A minor in real estate requires the completion of:

REST 319	Principles of Real Estate	3
REST 450	Real Estate Finance	3
REST 454	Real Estate Investment Analysis	3
Select two of the following:		6
CET 325	Introduction to Land Development	
CET 460	Construction Cost Estimating	
FIN 431	Investments	
FIN 441	Student Managed Investment Fund	
FIN 497	Selected Topics in Finance	
REST 451	Real Estate Appraisal	
REST 452	Real Estate Property Management	
REST 495	Selected Topics in Real Estate	
Total Credit Hours		15

For completion of a minor, the student must achieve a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor or allowed toward the minor exclusive of prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

The real estate minor is not available to real estate majors. Finance majors, personal financial planning majors, and risk management and Insurance majors may complete the minor, provided they complete a minimum of nine credits in REST coursework toward the minor. No more than six credits from the minor may "share" with other areas of the student's curriculum.

Minor Risk Management and Insurance Minor Requirements

A minor in risk management and insurance requires the completion of:

RMI 317	Principles of Risk Management and Insurance	3
RMI 412	Property & Liability Insurance Company Operations	3
or RMI 413	Risk Analysis and Control	
RMI 443	Enterprise Risk Management	3

Select two of the following:		6
RMI 410	Life and Health Insurance	
RMI 411	Employee Benefit Planning	
RMI 413	Risk Analysis and Control	
or RMI 412	Property & Liability Insurance Company Operations	
FIN 431	Investments	
FIN 433	Introduction to Futures and Options	
FIN 434	Management of Financial Institutions	
FIN 435	International Financial Management	
FIN 441	Student Managed Investment Fund	
REST 450	Real Estate Finance	
REST 454	Real Estate Investment Analysis	
ACCT 411	Financial Auditing	
ACCT 460	Accounting Information Systems	
BNAL 405	Spreadsheet-Based Data Analysis for Decision Making	
BNAL 407	Prescriptive Analytics of Management Science	
CS 462	Cybersecurity Fundamentals	
CYSE/CRJS 406	Cyber Law	
CYSE 425W	Cybersecurity Strategy and Policy	
ECON 304	Intermediate Microeconomic Theory	
ECON 400	From Correlation to Causation: Applied Causal Inference	
ENMA 401	Project Management	
ENMA 424	Risk Analysis in Engineering Management	
IT 410	Business Intelligence	
IT 418	Enterprise Information Assurance	
IT 419	Enterprise Cyber Defense	
MGMT 426	Entrepreneurship: New Ventures Creation	
MGMT 452	Negotiations and Change Management	
MKTG 407	Marketing Research	
MKTG 490	Marketing Policy and Strategy	
MSCM 415	Maritime Security and Risk Analysis	
MSCM 441	Supply Chain Management and Logistics	
MSIM/ECE 416	Cyber Defense Fundamentals	
SMGT 421	Legal Aspects in Recreation and Sport Management	
STAT 405	Introduction to Data Handling	
STAT 437	Applied Regression and Time Series Analysis	
Total Credit Hours		15

For completion of a minor, the student must achieve a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor or allowed toward the minor exclusive of prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

The risk management and insurance minor is not available to risk management and insurance majors. Finance majors, personal financial planning majors, and real estate majors may complete the minor, provided they complete a minimum of nine credits in RMI coursework toward the minor. No more than six credits from the minor may “share” with other areas of the student’s curriculum.

Information Systems and Technology

Programs

Bachelor of Science in Business Administration Programs

- Information Systems and Technology (BSBA) (p. 407)
- Information Systems and Technology with a Major in Business Analytics (BSBA) (p. 413)
- Information Systems and Technology with a Major in Business Analytics and Intelligence (BSBA) (p. 419)
- Information Systems and Technology-Database Major (BSBA) (p. 425)
- Information Systems and Technology-Network Engineering Major (BSBA) (p. 431)

Minor Program

- Business Analytics Minor (p. 436)
- Information Systems and Technology Minor (p. 436)
- Maritime and Supply Chain Management Minor (p. 437)

Bachelor of Science in Business Administration Information Systems and Technology (BSBA)

Weiyong Zhang, Chair
Roya Ardalan, Chief Discipline Advisor

The information systems and technology program is designed to provide students with a technical background in information technology as well as a broad perspective of the business environment in which information technology plays a strategic role. The program emphasizes the development of business analysis and system implementation skills; these skills can provide a basis for job entry, career development and flexibility amid the rapid changes in information technology.

A student who seeks a Bachelor of Science in Business Administration degree in Information Systems and Technology from Old Dominion University must, in addition to meeting other requirements of the University, earn a minimum of 25 percent of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) through on- or off-campus instruction. This must include a minimum of 12 credit hours of upper-level IT courses or upper-level BNAL courses specifically listed as electives on the course lists below.

Strome College of Business (SCB) Center for Undergraduate Advising and Student Success

The mission of this office is to challenge and support students in self-exploration and, through advising, provide resources for them to develop an achievable plan for success. Our vision is for students to be aware of their academic, personal, and professional goals; empowered to pursue them; and confident in their ability to accomplish them.

Our professional advisors work with all Strome College of Business students regarding degree planning, changing majors, admissions, continuance, graduation requirements and required curricula for the majors and minors offered by the College.

Degree Requirements

Students in all of the Bachelor of Science in Business Administration degree programs must fulfill the University General Education requirements (including foreign language) as well as the Strome College of Business’s

core, major, and elective requirements. Students must choose at least one major area to meet requirements towards the degree.

To stay in compliance with AACSB accreditation standards, students receiving a Bachelor of Science in Business Administration from Old Dominion University must complete at least half of their business course work in residence with a minimum of four courses in their declared major. This equates to 10 business classes, thus meeting the University's residency requirement as well.

Majors in the college may not take business and public administration courses for pass/fail credit except those courses in which pass/fail is the only grading option (i.e., internships and practica).

Admission to the Undergraduate Program in Business Administration

General Requirements

Applicants for admission to the undergraduate degree program in business administration (the Bachelor of Science in Business Administration) should apply initially to the Office of Admissions of Old Dominion University. Students cannot be accepted into business administration without first being admitted to the University. Admission to the University does not guarantee admission to the Bachelor of Science in Business Administration (BSBA) program. Candidates for admission to the BSBA program should indicate on the application to the University their intention to enter the undergraduate business administration degree program.

Admission to the Bachelor's Degree Program in Business Administration:

Before Admission to the bachelor's degree program in business administration can be granted, a student must have earned a grade of C or higher in each of the business Admission courses:

BUSN 110	Introduction to Contemporary Business	1
ENGL 110C	English Composition	3
MATH 162M	Precalculus I	3
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3

- BUSN 110 is not required for students pursuing majors under the BSBA in Information Systems and Technology (excluding Business Analytics) or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
- Students may utilize the Grade Forgiveness Policy for the business Admission courses.
- Transfer students may complete business Admission courses (BUSN 110, ENGL 110C, MATH 162M, ACCT 201, and ECON 202S) at another accredited college or university, but are responsible for having Transfer Evaluation Services determine that the courses are acceptable to the University.

Eligibility to Enroll in Upper-Level (300/400-level) Business Courses

Only students who have officially completed Admission courses to the BSBA program will be eligible to enroll in upper-level (300/400) business courses (refer to exceptions for non-business majors).

However, students who are in progress with the business Admission courses may enroll in upper-level (300/400) business courses. Note: These students will need a Program Restriction Waiver (PRW) to enroll in these courses, with the exception of FIN 323, MGMT 325, MKTG 311, and OPMT 303. These courses require a junior class standing for registration.

Enrollment in 300/400-level Business Courses by Non-Business Majors

Enrollment in 300/400-level business courses will be granted without the Admission courses for the following exceptions:

1. Students pursuing a declared minor in the Strome College of Business may enroll in 300/400-level business courses appropriate to the minor.
2. Students pursuing Upper-Division General Education Requirement Option B: Interdisciplinary Minor or Option D: Six hours of elective upper-division courses outside the student's major discipline or college.
3. Students wishing to satisfy the Impact of Technology requirement may enroll in IT 360T.
4. Students pursuing a degree program other than the Bachelor of Science in Business Administration (BSBA) that requires or accepts specific 300/400-level business courses to complete the degree may enroll in the courses appropriate to the major.
5. Non-degree-seeking students may enroll in 300/400-level business courses if they have satisfied the prerequisites for these courses.

Students in categories 1 - 5 above who do not have a declared major will need a Program Restriction Waiver (PRW) in order to enroll in any 300/400-level Strome College of Business course (including Economics courses). Forms to request a PRW are available at the Strome College of Business website.

Regulations for Continuance in the Bachelor of Science in Business Administration

In addition to the Old Dominion University continuance policies, the following policies are specific to all declared Bachelor of Science in Business Administration (BSBA) students. The Strome College of Business makes a reasonable effort to notify undergraduate students who are not in good academic standing in the BSBA program of their academic status. Each undergraduate student who is placed on BSBA Academic Alarm or BSBA Termination (explained below) will be sent an e-mail message to that effect at the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business. Non-receipt of the e-mail messages by a student will not be considered grounds for granting exceptions or delays in enforcement of the BSBA continuance regulations.

BSBA Continuance Regulations

If a student's Grade Point Average (GPA) in their BSBA Core courses falls below a 2.0, then they will be on Academic Alarm within the Strome College of Business (SCB). This policy is very similar to the University's academic continuance policy, the main difference being that it is based on the core Business courses and impacts acceptance and continuance within the SCB.

Academic Alarm

The first semester in which a student's BSBA Core GPA drops to below a 2.0, they will be on Academic Alarm. Once considered on academic alarm within the college, taking courses within the BSBA Core is the only way to bring that GPA back up.

- If the student raises the BSBA Core GPA to above a 2.0, then they will no longer be on academic alarm.
- If the BSBA Core GPA does not reach a 2.0 but the semester average in the BSBA Core courses is a 2.0 or higher, then the student will remain on academic alarm and be able to continue within the SCB.

SCB Termination

While on academic alarm within the Strome College of Business, if the semester BSBA Core GPA falls below a 2.0, the student will be terminated from the SCB and their major coding will be changed from Business to Undecided. (Terminations will not be processed in summer semesters.)

Appeals

If you have been terminated, you may appeal the decision if you have extenuating circumstances and documentation to support your claim. To appeal, write a letter and include documentation of your circumstances to the Associate Dean of the Strome College of Business (Constant Hall, Suite 2004). There are specific details that need to be included with your appeal -

for more information, please see the appeals process as described in the most recently issued catalog.

Guidelines for Filing a BSBA Termination Appeal

1. All students have the right to appeal their BSBA termination if they believe that extraordinary circumstances were the main reason for their poor academic performance. Notifications of pending BSBA termination are sent to the student's ODU email address and include information on the appeal process and deadlines. All BSBA termination appeals must be submitted electronically using the link provided in the email and will be reviewed by the SCB Termination Appeal Committee. Students are responsible for submitting their appeal by the stated deadline; late appeals will not be reviewed. Decisions of the Termination Appeal Committee may be appealed to the Associate Dean for Academic Programs in the Strome College of Business whose decision is final.

2. Appeals must be based on circumstances pertinent to the semesters in which the academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the terminated student. The appeal letter must provide sufficient detail and explanation regarding the following points because there is no face-to-face meeting with the Associate Dean for Academic Programs in the Strome College of Business. The decision of the Associate Dean is final. Students without documentation will not be allowed to appeal their termination. In order to be reviewed, an appeal letter must:

- Document the extraordinary circumstances such as a death in the family, medical complications or chronic conditions, personal or family emergency, overwhelming work schedules, dorm-mate conflict, or a personal relationship conflict that have adversely affected performance: i.e., a statement or letter from a physician, employer, family members, faculty, academic advisor, Counseling Services, or Educational Accessibility.
- Explain how the extraordinary circumstances caused each semester of poor academic performance.
- State the reasons why an official withdrawal was not requested.
- Explain how the extraordinary circumstance(s) has been resolved.
- Provide a plan of action to return to good BSBA academic standing.

3. Students who do not file a BSBA termination appeal or whose appeals are denied, are no longer eligible to pursue a bachelor's degree in Business Administration. Upon BSBA termination, the student's major in the Strome College of Business will be removed. (This does not affect a declared second major outside of the BSBA.) These students are advised to work with an advisor in the SCB Center for Undergraduate Advising to explore other major options, and for referrals to other advising departments for a new major declaration.

4. BSBA-terminated students who had pre-registered for a subsequent semester lose eligibility for continued enrollment in upper-level business courses.

Applying for Readmission to the BSBA Program

After a minimum of five years has passed since a student was terminated from the BSBA program, the student may apply for readmission to the program. There must be a high probability the student will successfully complete the degree program, and approval will be at the discretion of the Strome College of Business Associate Dean.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3

Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication: COMM 101R or MKTG 200R required. Additionally, all students majoring in business administration can expect to complete several courses in which individual and/or group oral presentations will be required.

Mathematics: MATH 162M and MATH 200 required.

Information Literacy and Research: IT 150G (recommended) or any "G" course from the approved general education information literacy and research course list.

Human Behavior: Met in the Business Administration core for all majors except Economics.

Philosophy and Ethics must be satisfied by completion of either PHIL 230E or an upper-level "E" course from the approved general education ethics course list. A philosophy course designated with a P will not meet this requirement for business administration students with the exception of a "P" course taken prior to fall 2010.

Impact of Technology requirement is satisfied within each BSBA degree major except Information Systems and Technology by IT 360T. In the Information Systems and Technology majors (excluding Business Analytics), the Impact of Technology requirement is satisfied by the coursework required for the major.

Transfer students with an applicable associate's degree from a Virginia Community College or another community college that has a seamless transfer agreement with ODU, and students with a prior bachelor's degree from another university, must nevertheless have a grade of C or better in the following to be able to transfer them:

COMM 101R or MKTG 200R	Public Speaking Professional Interactions and Negotiations	3
PHIL 230E	Introduction to Ethics (Or an upper-level ethics course)	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research Writing, Rhetoric, and Research: Special Topics	3
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3

Upper-Division General Education

- Option A. Any University-approved minor, second degree, or second major.
- Option B. An interdisciplinary minor consisting of 12 credits, three of which can be in the major. Interdisciplinary minors are described in the University Catalog section labeled Requirements for Undergraduate Degrees, Upper-Division Requirements.

- Option C. An approved certification program, such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the Strome College of Business and not required by the major (6 credits).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Business Administration Core

ACCT 201	Principles of Financial Accounting *	3
ACCT 202	Principles of Managerial Accounting *	3
BNAL 206	Business Analytics I *	3
BNAL 306	Business Analytics II	3
ECON 201S	Principles of Macroeconomics *	3
ECON 202S	Principles of Microeconomics *	3
ECON 301	Managerial Economics	3
FIN 323	Introductory Financial Management	3
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology **	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 485W	Business Policy and Strategy (C or better) ***	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
Total Credit Hours		42

- * Not automatically waived for transfer students with an applicable associate's degree from a Virginia Community College or another acceptable community college, or for students with a prior bachelor's degree from another university. A grade of C or better must be earned to transfer these courses to Old Dominion University.
- ** Students completing a major or minor in Information Systems and Technology (excluding the Business Analytics major) do not take this course.
- *** Students majoring in Economics must complete MGMT 485W, but meet the writing intensive requirement by earning a grade of C or better either in MGMT 485W or in one of the ECON Writing Intensive courses.

Information Systems and Technology Core

Required Core Courses

IT 201	Introduction to Information Systems (grade of C or better required as a prerequisite for upper-level IT courses)	3
IT 205	Introduction to Object-Oriented Programming	3
IT 315	Introduction to Networking and Security	3

IT 317	Enterprise Information Architecture (grade of C or better required as prerequisite for IT 464)	3
IT 363	Systems Analysis and Design	3
IT 450	Database Concepts	3
IT 464	Essentials of Project Management	3
IT 474	Strategic IT Administration	3
Total Credit Hours		24

All courses listed above except the International Business Elective and Business Elective are included in the calculation of the 2.00 overall grade point average required for major course work.

Information Systems and Technology Major

General Education

Complete lower-division requirements	35-41	
Complete upper-division requirements (minimum of 6 credit hours)	6	
MATH 200	Calculus for Business and Economics	3

Business Administration Core

Complete business administration core requirements	39

Information Systems and Technology Core

Complete information systems and technology core requirements	24

Information Systems and Technology Major

Select two of the following IT Electives:	6
IT 310	Object-Oriented Programming with C++
IT 325	Web Site and Web Page Design
IT 367	Cooperative Education
IT 368	Student Internship
IT 369	Practicum
IT 374	C# and Applications
IT 376	PHP and Applications
IT 401	Mobile and Cloud Computing
IT 408	E-Business Portal Programming
IT 410	Business Intelligence
IT 416	Network Server Configuration and Administration
IT 417	Management of Information Security
IT 418	Enterprise Information Assurance
IT 419	Enterprise Cyber Defense
IT 420	Object-Oriented Application Development Using Visual Basic
IT 425	Information Systems for International Business *
IT 430	Object-Oriented Application Development with JAVA
IT 451	Database Administration
IT 452	Cloud Database
IT 453	Advanced Database Concepts
IT 454	Web-based Database Administration
IT 461	Implementing Internet Applications
IT 494	Entrepreneurship in Information Technology
IT 495	Selected Topics in Information Systems
IT 497	Independent Study in Information Systems
Select one of the following International Business Electives:	3
IT 425	Information Systems for International Business *
ACCT 450	International and Advanced Accounting
ECON 450	International Economics
FIN 435	International Financial Management
MGMT 361	International Business Operations

MGMT 462	Comparative International Management	
MGMT 463	Management Seminar Abroad	
MKTG 411	Multi-National Marketing	
MSCM 370	International Shipping	
One Business Elective at 300-400 Level **		3
Total Credit Hours		119-125

* IT 425 cannot be used as both the IT major elective and as the International Business elective.

** Can be any 300-400 level course offered by the Strome College of Business, providing that the student has the appropriate prerequisites, except IT 360T.

All courses listed above except the International Business Elective and Business Elective are included in the calculation of the 2.00 overall grade point average required for major course work.

Additional Requirements and Information

Advanced Placement

The college accepts advanced placement credit in accordance with the rules and regulations outlined in the Academic Information section of this catalog. Students may take College-Level Examination Program (CLEP) tests to receive credit for:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
FIN 331	Legal Environment of Business	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3

Students are advised to contact the Office of Prior Learning Assessment for more information regarding CLEP and other prior learning assessment credit options. For advanced placement credit in any other business or public administration course, students are advised to contact the chair of the department offering the course. Additional information about credit awarded for qualifying scores on AP and IB subject examinations can be found on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib>).

Practical Work Experience for Business Administration Majors

Students may complement their major studies with a practical work experience, which may take the form of an internship, cooperative education experience or a class containing a real-world, hands-on project. Students must apply for internship or co-op participation through the Strome College of Business Career & Leadership Development Satellite Office. All work experiences must be approved by the faculty sponsor in the appropriate department prior to registering for credit. Students may not earn credit for previous or current work experiences. (However, academic credit for work experience may be approved in accordance with the policies for granting prior learning credit as defined in the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this catalog.) For details see the Center for Career & Leadership Development section of this catalog.

Use of Internship and Similar Hours Toward Business Administration Majors

A student may apply no more than six hours of cooperative education, student internship or practicum courses to satisfy degree requirements. Students may not use more than three hours of cooperative education, student internship or practicum courses to satisfy major elective requirements in each of the students' majors. These courses are numbered 367, 368 or 369. Additional hours of cooperative education, student internship or practicum courses, however, can be used to satisfy other requirements such as free electives or general business electives. Additional

internships must each involve substantially different kinds of work experiences. Internships must be approved by the Chief Departmental Advisor of the student's major and the CAP Coordinator of the internship.

Transfer of the Associate of Science in Business Administration Towards Degree Requirements

Students transferring to the college must complete a minimum of 10 business courses offered by the college to earn the degree from Old Dominion University, in accordance with AACSB regulations. Those transfer students holding the Associate of Science in Business Administration degree from a Virginia Community College must earn the grade of "C" or better in the following courses in order to satisfy requirements found in the first two years of the BSBA degree:

COMM 101R	Public Speaking	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
BNAL 206	Business Analytics I	3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
Upper-level ethics course		

With the exception of the courses listed above, the University's lower-division General Education requirements are deemed satisfied by the accepted AS degrees. These typically include all AS degrees from the Virginia Community College System except the applied science degrees. For more information about accepted AS degrees contact the Office of Admissions. Associate degree holders, although meeting lower-level General Education requirements, must ensure that 120 credits are completed to earn the BSBA degree. A minimum of 25% of the required credit hours must be completed through Old Dominion University, at least 12 of which are upper-level courses in the major program.

The Strome College of Business does not accept courses completed at the freshman and sophomore levels at other institutions for required courses at the junior and senior level at Old Dominion University. Please see the section on CLEP credits (Prior Learning Assessment Credit Options at the Undergraduate Level) for additional information.

Grade Average Requirements for Graduation

To graduate with a Bachelor of Science in Business Administration degree, students must present a minimum of 120 hours with a minimum overall grade point average of 2.00 in all courses taken at Old Dominion University. Students must also attain a minimum overall grade point average of 2.00 in courses taken toward the major (courses included in the major grade point average calculation are listed following the description of each major's course work).

Additionally, students must attain a minimum overall grade point average of 2.00 in the BSBA Core listed below. Only courses completed at Old Dominion University will be used to compute the BSBA Core average. Students with an Information Systems and Technology major (excluding Business Analytics) are not required to take IT 360T, so the BSBA Core grade point average is computed using the remaining courses. If the BSBA Core average is below the required 2.00 minimum, students are advised to utilize the Grade Forgiveness Policy or Adjusted Resident Credit option when appropriate to improve the grade point average.

Requirements for Completing a Bachelor of Science in Business Administration

The following sections show the courses that are requirements for all business students, regardless of the chosen major: Lower-Division General Education, BSBA Core Courses, and Upper-Division General Education.

Credit hours are listed after the course title. The student must also choose a major and complete the requirements listed for that major on the following pages.

Foundation Courses for Admission to the Strome College of Business

ENGL 110C	English Composition (C or better)	3
MATH 162M	Precalculus I (C or better)	3
ACCT 201	Principles of Financial Accounting (C or better)	3
ECON 202S	Principles of Microeconomics (C or better)	3
BUSN 110	Introduction to Contemporary Business *	1

* Not required for students pursuing an Information Systems and Technology major (excluding Business Analytics) or for students with an associate's degree in business administration or with a prior bachelor's degree in business administration.

See the section on Admission to the Undergraduate Program in Business Administration, General Requirements.

Business Elective

A business elective is a course that is offered by an accredited college of business, including the Strome College of Business at Old Dominion University. Public Affairs and Service (PAS) courses offered by the Strome College of Business are not considered as business courses. However, because some business courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate business elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Free Elective

In the majority of cases a free elective is any course offered by an accredited community college or university, including Old Dominion University. However, because some courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 162M	Precalculus I (C or better required)	3
Language and Culture I (May be waived; see requirement details)		0-3
Nature of Science I		4
Oral Communication: COMM 101R required		3
Credit Hours		13-16

Spring

MATH 200	Calculus for Business and Economics	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Language and Culture II (May be waived; see requirement details)		0-3
Nature of Science II		4
Interpreting the Past		3
Credit Hours		13-16

Sophomore

Fall

Literature		3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL/DASC 357E	Ethics and Data	
PHIL 442E	Studies in Applied Ethics	
ACCT 201	Principles of Financial Accounting (C or better required)	3
ECON 202S	Principles of Microeconomics (C or better required)	3
IT 201	Introduction to Information Systems (C or better required as prerequisite for upper-level IT courses)	3
Credit Hours		15

Spring

Information Literacy and Research		3
Human Creativity		3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
BNAL 206	Business Analytics I	3
IT 205	Introduction to Object-Oriented Programming	3
Credit Hours		18

Junior

Fall

BNAL 306	Business Analytics II	3
MGMT 325	Contemporary Organizations and Management	3
FIN 323	Introductory Financial Management	3
IT 315	Introduction to Networking and Security	3
IT 317	Enterprise Information Architecture (C or better required as prerequisite for IT 464)	3
Credit Hours		15

Spring		
FIN 331	Legal Environment of Business	3
ECON 301	Managerial Economics	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
IT 363	Systems Analysis and Design	3
Credit Hours		15
Senior		
Fall		
IT 474	Strategic IT Administration	3
IT 464	Essentials of Project Management	3
Major Elective		3
300-400 Level Business Elective		3
Upper-Division General Education		3
Credit Hours		15
Spring		
MGMT 485W	Business Policy and Strategy (C or better required)	3
IT 450	Database Concepts	3
International Business Elective		3
Major Elective		3
Upper-Division General Education		3
Elective		1
Credit Hours		16
Total Credit Hours		120-126

BSBA to MBA (Master of Business Administration) Linked Program

Students interested in the program should contact the MBA Program Office as early as possible to discuss their plans for early entry. Once admitted to the program, the MBA program manager will act as the student's co-advisor, along with the chief departmental advisor or chief discipline advisor in the student's undergraduate major. The MBA Program Office is located in 1026 Constant Hall. The phone number is 757-683-3585 and email is mbainfo@odu.edu.

BSBA to MPA (Master of Public Administration) Linked Program

The linked BSBA to MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking 12 credits of the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

A potential candidate will have:

1. Completed all lower level general education requirements
2. Achieved a cumulative GPA of at least 3.0 at the end of the junior year

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog. For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science in Business Administration Information Systems and Technology with a Major in Business Analytics (BSBA)

Weiyong Zhang, Chair

Ali Ardalani, Chief Discipline Advisor (Business Analytics)

The Information Systems and Technology program with a major in Business Analytics enables students to properly develop decision models and use computers to manipulate and analyze data in order to enhance decision making in a business environment. Students with a major in Business Analytics are typically employed in Business Analytics departments or as analysts.

A student who seeks a Bachelor of Science in Business Administration degree in Information Systems and Technology from Old Dominion University must, in addition to meeting other requirements of the University, earn a minimum of 25 percent of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) through on- or off-campus instruction. This must include a minimum of 12 credit hours of upper-level courses specifically required for the major as shown on the course lists below.

Strome College of Business (SCB) Center for Undergraduate Advising and Student Success

The mission of this office is to challenge and support students in self-exploration and, through advising, provide resources for them to develop an achievable plan for success. Our vision is for students to be aware of their academic, personal, and professional goals; empowered to pursue them; and confident in their ability to accomplish them.

Our professional advisors work with all Strome College of Business students regarding degree planning, changing majors, admissions, continuance, graduation requirements and required curricula for the majors and minors offered by the College.

Degree Requirements

Students in all of the Bachelor of Science in Business Administration degree programs must fulfill the University General Education requirements (including foreign language) as well as the Strome College of Business's core, major, and elective requirements. Students must choose at least one major area to meet requirements towards the degree.

To stay in compliance with AACSB accreditation standards, students receiving a Bachelor of Science in Business Administration from Old Dominion University must complete at least half of their business course work in residence with a minimum of four courses in their declared major. This equates to 10 business classes, thus meeting the University's residency requirement as well.

Majors in the college may not take business and public administration courses for pass/fail credit except those courses in which pass/fail is the only grading option (i.e., internships and practica).

Admission to the Undergraduate Program in Business Administration

General Requirements

Applicants for admission to the undergraduate degree program in business administration (the Bachelor of Science in Business Administration) should apply initially to the Office of Admissions of Old Dominion University. Students cannot be accepted into business administration without first being admitted to the University. Admission to the University does not guarantee admission to the Bachelor of Science in Business Administration (BSBA) program. Candidates for admission to the BSBA program should indicate on the application to the University their intention to enter the undergraduate business administration degree program.

Admission to the Bachelor's Degree Program in Business Administration:

Before Admission to the bachelor's degree program in business administration can be granted, a student must have earned a grade of C or higher in each of the business Admission courses:

BUSN 110	Introduction to Contemporary Business	1
ENGL 110C	English Composition	3
MATH 162M	Precalculus I	3
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3

- BUSN 110 is not required for students pursuing majors under the BSBA in Information Systems and Technology (excluding Business Analytics) or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
- Students may utilize the Grade Forgiveness Policy for the business Admission courses.
- Transfer students may complete business Admission courses (BUSN 110, ENGL 110C, MATH 162M, ACCT 201, and ECON 202S) at another accredited college or university, but are responsible for having Transfer Evaluation Services determine that the courses are acceptable to the University.

Eligibility to Enroll in Upper-Level (300/400-level) Business Courses

Only students who have officially completed Admission courses to the BSBA program will be eligible to enroll in upper-level (300/400) business courses (refer to exceptions for non-business majors).

However, students who are in progress with the business Admission courses may enroll in upper-level (300/400) business courses. Note: These students will need a Program Restriction Waiver (PRW) to enroll in these courses, with the exception of FIN 323, MGMT 325, MKTG 311, and OPMT 303. These courses require a junior class standing for registration.

Enrollment in 300/400-level Business Courses by Non-Business Majors

Enrollment in 300/400-level business courses will be granted without the Admission courses for the following exceptions:

1. Students pursuing a declared minor in the Strome College of Business may enroll in 300/400-level business courses appropriate to the minor.
2. Students pursuing Upper-Division General Education Requirement Option B: Interdisciplinary Minor or Option D: Six hours of elective upper-division courses outside the student's major discipline or college.
3. Students wishing to satisfy the Impact of Technology requirement may enroll in IT 360T.
4. Students pursuing a degree program other than the Bachelor of Science in Business Administration (BSBA) that requires or accepts specific 300/400-level business courses to complete the degree may enroll in the courses appropriate to the major.

5. Non-degree-seeking students may enroll in 300/400-level business courses if they have satisfied the prerequisites for these courses.

Students in categories 1 - 5 above who do not have a declared major will need a Program Restriction Waiver (PRW) in order to enroll in any 300/400-level Strome College of Business course (including Economics courses). Forms to request a PRW are available at the Strome College of Business website.

Regulations for Continuance in the Bachelor of Science in Business Administration

In addition to the Old Dominion University continuance policies, the following policies are specific to all declared Bachelor of Science in Business Administration (BSBA) students. The Strome College of Business makes a reasonable effort to notify undergraduate students who are not in good academic standing in the BSBA program of their academic status. Each undergraduate student who is placed on BSBA Academic Alarm or BSBA Termination (explained below) will be sent an e-mail message to that effect at the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business. Non-receipt of the e-mail messages by a student will not be considered grounds for granting exceptions or delays in enforcement of the BSBA continuance regulations.

BSBA Continuance Regulations

If a student's Grade Point Average (GPA) in their BSBA Core courses falls below a 2.0, then they will be on Academic Alarm within the Strome College of Business (SCB). This policy is very similar to the University's academic continuance policy, the main difference being that it is based on the core Business courses and impacts acceptance and continuance within the SCB.

Academic Alarm

The first semester in which a student's BSBA Core GPA drops to below a 2.0, they will be on Academic Alarm. Once considered on academic alarm within the college, taking courses within the BSBA Core is the only way to bring that GPA back up.

- If the student raises the BSBA Core GPA to above a 2.0, then they will no longer be on academic alarm.
- If the BSBA Core GPA does not reach a 2.0 but the semester average in the BSBA Core courses is a 2.0 or higher, then the student will remain on academic alarm and be able to continue within the SCB.

SCB Termination

While on academic alarm within the Strome College of Business, if the semester BSBA Core GPA falls below a 2.0, the student will be terminated from the SCB and their major coding will be changed from Business to Undecided. (Terminations will not be processed in summer semesters.)

Appeals

If you have been terminated, you may appeal the decision if you have extenuating circumstances and documentation to support your claim. To appeal, write a letter and include documentation of your circumstances to the Associate Dean of the Strome College of Business (Constant Hall, Suite 2004). There are specific details that need to be included with your appeal - for more information, please see the appeals process as described in the most recently issued catalog.

Guidelines for Filing a BSBA Termination Appeal

1. All students have the right to appeal their BSBA termination if they believe that extraordinary circumstances were the main reason for their poor academic performance. Notifications of pending BSBA termination are sent to the student's ODU email address and include information on the appeal process and deadlines. All BSBA termination appeals must be submitted electronically using the link provided in the email and will be reviewed by the SCB Termination Appeal Committee. Students are responsible for submitting their appeal by the stated deadline; late appeals will not be reviewed. Decisions of the Termination Appeal Committee may be appealed

to the Associate Dean for Academic Programs in the Strome College of Business whose decision is final.

2. Appeals must be based on circumstances pertinent to the semesters in which the academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the terminated student. The appeal letter must provide sufficient detail and explanation regarding the following points because there is no face-to-face meeting with the Associate Dean for Academic Programs in the Strome College of Business. The decision of the Associate Dean is final. Students without documentation will not be allowed to appeal their termination. In order to be reviewed, an appeal letter must:

- Document the extraordinary circumstances such as a death in the family, medical complications or chronic conditions, personal or family emergency, overwhelming work schedules, dorm-mate conflict, or a personal relationship conflict that have adversely affected performance: i.e., a statement or letter from a physician, employer, family members, faculty, academic advisor, Counseling Services, or Educational Accessibility.
- Explain how the extraordinary circumstances caused each semester of poor academic performance.
- State the reasons why an official withdrawal was not requested.
- Explain how the extraordinary circumstance(s) has been resolved.
- Provide a plan of action to return to good BSBA academic standing.

3. Students who do not file a BSBA termination appeal or whose appeals are denied, are no longer eligible to pursue a bachelor's degree in Business Administration. Upon BSBA termination, the student's major in the Strome College of Business will be removed. (This does not affect a declared second major outside of the BSBA.) These students are advised to work with an advisor in the SCB Center for Undergraduate Advising to explore other major options, and for referrals to other advising departments for a new major declaration.

4. BSBA-terminated students who had pre-registered for a subsequent semester lose eligibility for continued enrollment in upper-level business courses.

Applying for Readmission to the BSBA Program

After a minimum of five years has passed since a student was terminated from the BSBA program, the student may apply for readmission to the program. There must be a high probability the student will successfully complete the degree program, and approval will be at the discretion of the Strome College of Business Associate Dean.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3

Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication: COMM 101R or MKTG 200R required. Additionally, all students majoring in business administration can expect to complete several courses in which individual and/or group oral presentations will be required.

Mathematics: MATH 162M and MATH 200 required.

Information Literacy and Research: IT 150G (recommended) or any "G" course from the approved general education information literacy and research course list.

Human Behavior: Met in the Business Administration core for all majors except Economics.

Philosophy and Ethics must be satisfied by completion of either PHIL 230E or an upper-level "E" course from the approved general education ethics course list. A philosophy course designated with a P will not meet this requirement for business administration students with the exception of a "P" course taken prior to fall 2010.

Impact of Technology requirement is satisfied within each BSBA degree major except Information Systems and Technology by IT 360T. In the Information Systems and Technology majors (excluding Business Analytics), the Impact of Technology requirement is satisfied by the coursework required for the major.

Transfer students with an applicable associate's degree from a Virginia Community College or another community college that has a seamless transfer agreement with ODU, and students with a prior bachelor's degree from another university, must nevertheless have a grade of C or better in the following to be able to transfer them:

COMM 101R or MKTG 200R	Public Speaking Professional Interactions and Negotiations	3
PHIL 230E	Introduction to Ethics (Or an upper-level ethics course)	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research Writing, Rhetoric, and Research: Special Topics	3
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3

Upper-Division General Education

- Option A. Any University-approved minor, second degree, or second major.
- Option B. An interdisciplinary minor consisting of 12 credits, three of which can be in the major. Interdisciplinary minors are described in the University Catalog section labeled Requirements for Undergraduate Degrees, Upper-Division Requirements.
- Option C. An approved certification program, such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the Strome College of Business and not required by the major (6 credits).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Business Administration Core

ACCT 201	Principles of Financial Accounting *	3
ACCT 202	Principles of Managerial Accounting *	3
BNAL 206	Business Analytics I *	3
BNAL 306	Business Analytics II	3
ECON 201S	Principles of Macroeconomics *	3
ECON 202S	Principles of Microeconomics *	3
ECON 301	Managerial Economics	3
FIN 323	Introductory Financial Management	3
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology **	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 485W	Business Policy and Strategy (C or better) ***	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
Total Credit Hours		42

- * Not automatically waived for transfer students with an applicable associate's degree from a Virginia Community College or another acceptable community college, or for students with a prior bachelor's degree from another university. A grade of C or better must be earned to transfer these courses to Old Dominion University.
- ** Students completing a major or minor in Information Systems and Technology (excluding the Business Analytics major) do not take this course.
- *** Students majoring in Economics must complete MGMT 485W, but meet the writing intensive requirement by earning a grade of C or better either in MGMT 485W or in one of the ECON Writing Intensive courses.

Information Systems and Technology-Business Analytics Major

General Education

Complete lower-division requirements		35-41
Complete upper-division requirements (minimum of 6 credit hours)		6
BUSN 110	Introduction to Contemporary Business	1
MATH 200	Calculus for Business and Economics	3

Business Administration Core

Complete business administration core requirements	42

Business Analytics Required Courses

BNAL 407	Prescriptive Analytics of Management Science	3
BNAL 415	Advanced Business Analytics/Big Data Applications	3
BNAL 476	Simulation Modeling and Analysis for Business Systems	3

Major Electives

Category I-Select two of the following:	6
BNAL 403	Data Visualization and Exploration

BNAL 405 Spreadsheet-Based Data Analysis for Decision Making

BNAL 432 Predictive Analytics for Business

BNAL 495 Topics in Business Analytics

ACCT 311 Managerial Accounting

Category II-Select one of the following (may not use the same course from both lists): 3

BNAL 368 Internship

BNAL 403 Data Visualization and Exploration

BNAL 405 Spreadsheet-Based Data Analysis for Decision Making

BNAL 432 Predictive Analytics for Business

BNAL 495 Topics in Business Analytics

ECON 400 From Correlation to Causation: Applied Causal Inference

ECON 425 Introduction to Mathematical Economics

FIN 431 Investments

INBU 450 Global Business

IT 363 Systems Analysis and Design

MGMT 430 Compensation Management

MKTG 475 Marketing Analytics

MSCM 430 Strategic Sourcing and Purchasing Management

MSCM 441 Supply Chain Management and Logistics

RMI 413 Risk Analysis and Control

Electives

Application Area Electives	9
200-400 Level Business Elective *	3
300-400 Level Business Elective *	3

Total Credit Hours 120-126

- * Can be any 200-400 or 300-400 level course offered by the Strome College of Business except ECON 200S, provided that the student has the appropriate prerequisites.

Courses included in the calculation of the 2.00 grade point average for the major are: BNAL 407, BNAL 415, BNAL 476, and all courses taken from the major and application area elective listings, excluding international business courses.

Application Areas

Business analytics is an inherently applied field of study. As such, business analytics majors will complete a group of courses in an application area. Select electives from one of the following application areas to complete (9 credits):

Accounting

Two approved 300-400 level ACCT courses	6
Approved International Business Requirement (select one of the following):	3

ACCT 450 International and Advanced Accounting

ECON 450 International Economics

FIN 435 International Financial Management

IT 425 Information Systems for International Business

MGMT 361 International Business Operations

MGMT 462 Comparative International Management

MGMT 463 Management Seminar Abroad

MKTG 411 Multi-National Marketing

MSCM 370 International Shipping

Total Credit Hours 9

Economics

Two approved 300-400 level ECON courses	6
ECON 450 International Economics	3
Total Credit Hours	9

Finance

Two approved 300-400 level FIN courses	6
FIN 435 International Financial Management	3
Total Credit Hours	9

Information Technology

Two approved 400-level IT courses	6
IT 425 Information Systems for International Business	3
Total Credit Hours	9

International Business

ECON 450 International Economics	3
FIN 435 International Financial Management	3
MKTG 411 Multi-National Marketing	3
Total Credit Hours	9

Management

Two approved 300-400 level MGMT courses	6
MGMT 361 International Business Operations	3
or MGMT 462 Comparative International Management	
Total Credit Hours	9

Maritime and Supply Chain Management

Two approved 300-400 level MSCM courses	6
MSCM 370 International Shipping	3
Total Credit Hours	9

Marketing

One approved 300-400 level MKTG course	3
MKTG 411 Multi-National Marketing	3
MKTG 475 Marketing Analytics	3
Total Credit Hours	9

Additional Requirements and Information

Advanced Placement

The college accepts advanced placement credit in accordance with the rules and regulations outlined in the Academic Information section of this catalog. Students may take College-Level Examination Program (CLEP) tests to receive credit for:

ACCT 201 Principles of Financial Accounting	3
ACCT 202 Principles of Managerial Accounting	3
ECON 201S Principles of Macroeconomics	3
ECON 202S Principles of Microeconomics	3
FIN 331 Legal Environment of Business	3
MGMT 325 Contemporary Organizations and Management	3
MKTG 311 Marketing Principles and Problems	3

Students are advised to contact the Office of Prior Learning Assessment for more information regarding CLEP and other prior learning assessment credit options. For advanced placement credit in any other business or public administration course, students are advised to contact the chair of the department offering the course. Additional information about credit awarded for qualifying scores on AP and IB subject examinations can be

found on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Practical Work Experience for Business Administration Majors

Students may complement their major studies with a practical work experience, which may take the form of an internship, cooperative education experience or a class containing a real-world, hands-on project. Students must apply for internship or co-op participation through the Strome College of Business Career & Leadership Development Satellite Office. All work experiences must be approved by the faculty sponsor in the appropriate department prior to registering for credit. Students may not earn credit for previous or current work experiences. (However, academic credit for work experience may be approved in accordance with the policies for granting prior learning credit as defined in the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this catalog.) For details see the Center for Career & Leadership Development section of this catalog.

Use of Internship and Similar Hours Toward Business Administration Majors

A student may apply no more than six hours of cooperative education, student internship or practicum courses to satisfy degree requirements. Students may not use more than three hours of cooperative education, student internship or practicum courses to satisfy major elective requirements in each of the students' majors. These courses are numbered 367, 368 or 369. Additional hours of cooperative education, student internship or practicum courses, however, can be used to satisfy other requirements such as free electives or general business electives. Additional internships must each involve substantially different kinds of work experiences. Internships must be approved by the Chief Departmental Advisor of the student's major and the CAP Coordinator of the internship.

Transfer of the Associate of Science in Business Administration Towards Degree Requirements

Students transferring to the college must complete a minimum of 10 business courses offered by the college to earn the degree from Old Dominion University, in accordance with AACSB regulations. Those transfer students holding the Associate of Science in Business Administration degree from a Virginia Community College must earn the grade of "C" or better in the following courses in order to satisfy requirements found in the first two years of the BSBA degree:

COMM 101R Public Speaking	3
ENGL 211C Writing, Rhetoric, and Research	3
or ENGL 231C Writing, Rhetoric, and Research: Special Topics	
MATH 162M Precalculus I	3
MATH 200 Calculus for Business and Economics	3
ACCT 201 Principles of Financial Accounting	3
ACCT 202 Principles of Managerial Accounting	3
ECON 201S Principles of Macroeconomics	3
ECON 202S Principles of Microeconomics	3
BNAL 206 Business Analytics I	3
Select one of the following:	3
PHIL 230E Introduction to Ethics	
Upper-level ethics course	

With the exception of the courses listed above, the University's lower-division General Education requirements are deemed satisfied by the accepted AS degrees. These typically include all AS degrees from the Virginia Community College System except the applied science degrees. For more information about accepted AS degrees contact the Office of Admissions. Associate degree holders, although meeting lower-level General Education requirements, must ensure that 120 credits are completed to earn the BSBA degree. A minimum of 25% of the required credit hours must be completed through Old Dominion University, at least 12 of which are upper-level courses in the major program.

The Strome College of Business does not accept courses completed at the freshman and sophomore levels at other institutions for required courses

at the junior and senior level at Old Dominion University. Please see the section on CLEP credits (Prior Learning Assessment Credit Options at the Undergraduate Level) for additional information.

Grade Average Requirements for Graduation

To graduate with a Bachelor of Science in Business Administration degree, students must present a minimum of 120 hours with a minimum overall grade point average of 2.00 in all courses taken at Old Dominion University. Students must also attain a minimum overall grade point average of 2.00 in courses taken toward the major (courses included in the major grade point average calculation are listed following the description of each major's course work).

Additionally, students must attain a minimum overall grade point average of 2.00 in the BSBA Core listed below. Only courses completed at Old Dominion University will be used to compute the BSBA Core average. Students with an Information Systems and Technology major (excluding Business Analytics) are not required to take IT 360T, so the BSBA Core grade point average is computed using the remaining courses. If the BSBA Core average is below the required 2.00 minimum, students are advised to utilize the Grade Forgiveness Policy or Adjusted Resident Credit option when appropriate to improve the grade point average.

Requirements for Completing a Bachelor of Science in Business Administration

The following sections show the courses that are requirements for all business students, regardless of the chosen major: Lower-Division General Education, BSBA Core Courses, and Upper-Division General Education. Credit hours are listed after the course title. The student must also choose a major and complete the requirements listed for that major on the following pages.

Foundation Courses for Admission to the Strome College of Business

ENGL 110C	English Composition (C or better)	3
MATH 162M	Precalculus I (C or better)	3
ACCT 201	Principles of Financial Accounting (C or better)	3
ECON 202S	Principles of Microeconomics (C or better)	3
BUSN 110	Introduction to Contemporary Business *	1

* Not required for students pursuing an Information Systems and Technology major (excluding Business Analytics) or for students with an associate's degree in business administration or with a prior bachelor's degree in business administration.

See the section on Admission to the Undergraduate Program in Business Administration, General Requirements.

Business Elective

A business elective is a course that is offered by an accredited college of business, including the Strome College of Business at Old Dominion University. Public Affairs and Service (PAS) courses offered by the Strome College of Business are not considered as business courses. However, because some business courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate business elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Free Elective

In the majority of cases a free elective is any course offered by an accredited community college or university, including Old Dominion University. However, because some courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate elective courses.

For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 162M	Precalculus I (Grade of C or better required)	3
Language and Culture I (May be waived; see requirement details)		0-3
Nature of Science I		4
BUSN 110	Introduction to Contemporary Business (Grade of C or better required)	1
Literature		3
Credit Hours		14-17

Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MATH 200	Calculus for Business and Economics	3
Language and Culture II (May be waived; see requirement details)		0-3
Nature of Science II		4
Interpreting the Past		3
Credit Hours		13-16

Sophomore		
Fall		
Human Creativity		3
Oral Communication: COMM 101R or MKTG 200R required		3
ACCT 201	Principles of Financial Accounting (Grade of C or better required)	3
ECON 202S	Principles of Microeconomics (Grade of C or better required)	3
BNAL 206	Business Analytics I	3
Credit Hours		15

Spring		
Information Literacy and Research (IT 150G recommended)		3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
MGMT 325	Contemporary Organizations and Management	3

BNAL 306	Business Analytics II (Grade of C or better required)	3
Credit Hours		15
Junior		
Fall		
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL/DASC 357E	Ethics and Data	
PHIL 442E	Studies in Applied Ethics	
FIN 323	Introductory Financial Management	3
MKTG 311	Marketing Principles and Problems	3
ECON 301	Managerial Economics	3
Major Elective from Category I		3
Credit Hours		15
Spring		
OPMT 303	Operations Management (C or better required as prerequisite for BNAL 476)	3
FIN 331	Legal Environment of Business	3
BNAL 407	Prescriptive Analytics of Management Science	3
BNAL 415	Advanced Business Analytics/Big Data Applications	3
IT 360T	Principles of Information Technology	3
Application Area Elective		3
Credit Hours		18
Senior		
Fall		
MGMT 485W	Business Policy and Strategy (C or better required)	3
Major Elective from Category I		3
Application Area Elective		3
Application Area Elective		3
Upper-Division General Education Course		3
Credit Hours		15
Spring		
BNAL 476	Simulation Modeling and Analysis for Business Systems	3
Major Elective from Category II		3
200-400 Level Business Elective		3
300-400 Level Business Elective		3
Upper-Division General Education		3
Credit Hours		15
Total Credit Hours		120-126

BSBA to MBA (Master of Business Administration) Linked Program

Students interested in the program should contact the MBA Program Office as early as possible to discuss their plans for early entry. Once admitted to the program, the MBA program manager will act as the student's co-advisor, along with the chief departmental advisor or chief discipline advisor in the student's undergraduate major. The MBA Program Office is located in 1026 Constant Hall. The phone number is 757-683-3585 and email is mbainfo@odu.edu.

BSBA to MPA (Master of Public Administration) Linked Program

The linked BSBA to MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking 12 credits of the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

A potential candidate will have:

1. Completed all lower level general education requirements
2. Achieved a cumulative GPA of at least 3.0 at the end of the junior year

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog. For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science in Business Administration Information Systems and Technology with a Major in Business Analytics and Intelligence (BSBA)

Weiyong Zhang, Chair
Ali Ardalan, Chief Discipline Advisor (Business Analytics)

The Information Systems and Technology program with a major in Business Analytics and Intelligence enables students to properly develop decision models and use computers to manipulate and analyze data in order to enhance decision making in a business environment. Students with a major in Business Analytics are typically employed in Business Analytics departments or as analysts.

A student who seeks a Bachelor of Science in Business Administration degree in Information Systems and Technology from Old Dominion University must, in addition to meeting other requirements of the University, earn a minimum of 25 percent of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) through on- or off-campus instruction. This must include a minimum of 12 credit hours of upper-level courses specifically required for the major as shown on the course lists below.

Strome College of Business (SCB) Center for Undergraduate Advising and Student Success

The mission of this office is to challenge and support students in self-exploration and, through advising, provide resources for them to develop an achievable plan for success. Our vision is for students to be aware of their academic, personal, and professional goals; empowered to pursue them; and confident in their ability to accomplish them.

Our professional advisors work with all Strome College of Business students regarding degree planning, changing majors, admissions, continuance, graduation requirements and required curricula for the majors and minors offered by the College.

Degree Requirements

Students in all of the Bachelor of Science in Business Administration degree programs must fulfill the University General Education requirements (including foreign language) as well as the Strome College of Business's core, major, and elective requirements. Students must choose at least one major area to meet requirements towards the degree.

To stay in compliance with AACSB accreditation standards, students receiving a Bachelor of Science in Business Administration from Old Dominion University must complete at least half of their business course work in residence with a minimum of four courses in their declared major. This equates to 10 business classes, thus meeting the University's residency requirement as well.

Majors in the college may not take business and public administration courses for pass/fail credit except those courses in which pass/fail is the only grading option (i.e., internships and practica).

Admission to the Undergraduate Program in Business Administration

General Requirements

Applicants for admission to the undergraduate degree program in business administration (the Bachelor of Science in Business Administration) should apply initially to the Office of Admissions of Old Dominion University. Students cannot be accepted into business administration without first being admitted to the University. Admission to the University does not guarantee admission to the Bachelor of Science in Business Administration (BSBA) program. Candidates for admission to the BSBA program should indicate on the application to the University their intention to enter the undergraduate business administration degree program.

Admission to the Bachelor's Degree Program in Business Administration:

Before Admission to the bachelor's degree program in business administration can be granted, a student must have earned a grade of C or higher in each of the business Admission courses:

BUSN 110	Introduction to Contemporary Business	1
ENGL 110C	English Composition	3
MATH 162M	Precalculus I	3
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3

- BUSN 110 is not required for students pursuing majors under the BSBA in Information Systems and Technology (excluding Business Analytics) or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
- Students may utilize the Grade Forgiveness Policy for the business Admission courses.
- Transfer students may complete business Admission courses (BUSN 110, ENGL 110C, MATH 162M, ACCT 201, and ECON 202S) at another accredited college or university, but are responsible for having Transfer Evaluation Services determine that the courses are acceptable to the University.

Eligibility to Enroll in Upper-Level (300/400-level) Business Courses

Only students who have officially completed Admission courses to the BSBA program will be eligible to enroll in upper-level (300/400) business courses (refer to exceptions for non-business majors). However, students who are in progress with the business Admission courses may enroll in upper-level (300/400) business courses. Note: These students will need a Program Restriction Waiver (PRW) to enroll in these courses, with the exception of FIN 323, MGMT 325, MKTG 311, and OPMT 303. These courses require a junior class standing for registration.

Enrollment in 300/400-level Business Courses by Non-Business Majors

Enrollment in 300/400-level business courses will be granted without the Admission courses for the following exceptions:

1. Students pursuing a declared minor in the Strome College of Business may enroll in 300/400-level business courses appropriate to the minor.
2. Students pursuing Upper-Division General Education Requirement Option B: Interdisciplinary Minor or Option D: Six hours of elective upper-division courses outside the student's major discipline or college.
3. Students wishing to satisfy the Impact of Technology requirement may enroll in IT 360T.
4. Students pursuing a degree program other than the Bachelor of Science in Business Administration (BSBA) that requires or accepts specific 300/400-level business courses to complete the degree may enroll in the courses appropriate to the major.
5. Non-degree-seeking students may enroll in 300/400-level business courses if they have satisfied the prerequisites for these courses.

Students in categories 1 - 5 above who do not have a declared major will need a Program Restriction Waiver (PRW) in order to enroll in any 300/400-level Strome College of Business course (including Economics courses). Forms to request a PRW are available at the Strome College of Business website.

Regulations for Continuance in the Bachelor of Science in Business Administration

In addition to the Old Dominion University continuance policies, the following policies are specific to all declared Bachelor of Science in Business Administration (BSBA) students. The Strome College of Business makes a reasonable effort to notify undergraduate students who are not in good academic standing in the BSBA program of their academic status. Each undergraduate student who is placed on BSBA Academic Alarm or BSBA Termination (explained below) will be sent an e-mail message to that effect at the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business. Non-receipt of the e-mail messages by a student will not be considered grounds for granting exceptions or delays in enforcement of the BSBA continuance regulations.

BSBA Continuance Regulations

If a student's Grade Point Average (GPA) in their BSBA Core courses falls below a 2.0, then they will be on Academic Alarm within the Strome College of Business (SCB). This policy is very similar to the University's academic continuance policy, the main difference being that it is based on the core Business courses and impacts acceptance and continuance within the SCB.

Academic Alarm

The first semester in which a student's BSBA Core GPA drops to below a 2.0, they will be on Academic Alarm. Once considered on academic alarm within the college, taking courses within the BSBA Core is the only way to bring that GPA back up.

- If the student raises the BSBA Core GPA to above a 2.0, then they will no longer be on academic alarm.
- If the BSBA Core GPA does not reach a 2.0 but the semester average in the BSBA Core courses is a 2.0 or higher, then the student will remain on academic alarm and be able to continue within the SCB.

SCB Termination

While on academic alarm within the Strome College of Business, if the semester BSBA Core GPA falls below a 2.0, the student will be terminated from the SCB and their major coding will be changed from Business to Undecided. (Terminations will not be processed in summer semesters.)

Appeals

If you have been terminated, you may appeal the decision if you have extenuating circumstances and documentation to support your claim. To appeal, write a letter and include documentation of your circumstances to the Associate Dean of the Strome College of Business (Constant Hall, Suite 2004). There are specific details that need to be included with your appeal - for more information, please see the appeals process as described in the most recently issued catalog.

Guidelines for Filing a BSBA Termination Appeal

1. All students have the right to appeal their BSBA termination if they believe that extraordinary circumstances were the main reason for their poor academic performance. Notifications of pending BSBA termination are sent to the student's ODU email address and include information on the appeal process and deadlines. All BSBA termination appeals must be submitted electronically using the link provided in the email and will be reviewed by the SCB Termination Appeal Committee. Students are responsible for submitting their appeal by the stated deadline; late appeals will not be reviewed. Decisions of the Termination Appeal Committee may be appealed to the Associate Dean for Academic Programs in the Strome College of Business whose decision is final.

2. Appeals must be based on circumstances pertinent to the semesters in which the academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the terminated student. The appeal letter must provide sufficient detail and explanation regarding the following points because there is no face-to-face meeting with the Associate Dean for Academic Programs in the Strome College of Business. The decision of the Associate Dean is final. Students without documentation will not be allowed to appeal their termination. In order to be reviewed, an appeal letter must:

- Document the extraordinary circumstances such as a death in the family, medical complications or chronic conditions, personal or family emergency, overwhelming work schedules, dorm-mate conflict, or a personal relationship conflict that have adversely affected performance: i.e., a statement or letter from a physician, employer, family members, faculty, academic advisor, Counseling Services, or Educational Accessibility.
- Explain how the extraordinary circumstances caused each semester of poor academic performance.
- State the reasons why an official withdrawal was not requested.
- Explain how the extraordinary circumstance(s) has been resolved.
- Provide a plan of action to return to good BSBA academic standing.

3. Students who do not file a BSBA termination appeal or whose appeals are denied, are no longer eligible to pursue a bachelor's degree in Business Administration. Upon BSBA termination, the student's major in the Strome College of Business will be removed. (This does not affect a declared second major outside of the BSBA.) These students are advised to work with an advisor in the SCB Center for Undergraduate Advising to explore other major options, and for referrals to other advising departments for a new major declaration.

4. BSBA-terminated students who had pre-registered for a subsequent semester lose eligibility for continued enrollment in upper-level business courses.

Applying for Readmission to the BSBA Program

After a minimum of five years has passed since a student was terminated from the BSBA program, the student may apply for readmission to the program. There must be a high probability the student will successfully complete the degree program, and approval will be at the discretion of the Strome College of Business Associate Dean.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication: COMM 101R or MKTG 200R required. Additionally, all students majoring in business administration can expect to complete several courses in which individual and/or group oral presentations will be required.

Mathematics: MATH 162M and MATH 200 required.

Information Literacy and Research: IT 150G (recommended) or any "G" course from the approved general education information literacy and research course list.

Human Behavior: Met in the Business Administration core for all majors except Economics.

Philosophy and Ethics must be satisfied by completion of either PHIL 230E or an upper-level "E" course from the approved general education ethics course list. A philosophy course designated with a P will not meet this requirement for business administration students with the exception of a "P" course taken prior to fall 2010.

Impact of Technology requirement is satisfied within each BSBA degree major except Information Systems and Technology by IT 360T. In the Information Systems and Technology majors (excluding Business Analytics), the Impact of Technology requirement is satisfied by the coursework required for the major.

Transfer students with an applicable associate's degree from a Virginia Community College or another community college that has a seamless transfer agreement with ODU, and students with a prior bachelor's degree

from another university, must nevertheless have a grade of C or better in the following to be able to transfer them:

COMM 101R	Public Speaking	3
or MKTG 200R	Professional Interactions and Negotiations	
PHIL 230E	Introduction to Ethics (Or an upper-level ethics course)	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3

Upper-Division General Education

- Option A. Any University-approved minor, second degree, or second major.
- Option B. An interdisciplinary minor consisting of 12 credits, three of which can be in the major. Interdisciplinary minors are described in the University Catalog section labeled Requirements for Undergraduate Degrees, Upper-Division Requirements.
- Option C. An approved certification program, such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the Strome College of Business and not required by the major (6 credits).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Business Administration Core

ACCT 201	Principles of Financial Accounting *	3
ACCT 202	Principles of Managerial Accounting *	3
BNAL 206	Business Analytics I *	3
BNAL 306	Business Analytics II	3
ECON 201S	Principles of Macroeconomics *	3
ECON 202S	Principles of Microeconomics *	3
ECON 301	Managerial Economics	3
FIN 323	Introductory Financial Management	3
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology **	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 485W	Business Policy and Strategy (C or better) ***	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
Total Credit Hours		42

* Not automatically waived for transfer students with an applicable associate's degree from a Virginia Community College or another acceptable community college, or for students with a prior bachelor's degree from another

university. A grade of C or better must be earned to transfer these courses to Old Dominion University. Students completing a major or minor in Information Systems and Technology (excluding the Business Analytics major) do not take this course. Students majoring in Economics must complete MGMT 485W, but meet the writing intensive requirement by earning a grade of C or better either in MGMT 485W or in one of the ECON Writing Intensive courses.

Information Systems and Technology-Business Analytics and Intelligence Major

General Education

Complete lower-division requirements		35-41
Complete upper-division requirements		6
BUSN 110	Introduction to Contemporary Business +	1
MATH 200	Calculus for Business and Economics	3

Business Administration Core

Complete business administration core requirements		39

Business Analytics and Intelligence

IT 201	Introduction to Information Systems	3
IT 205	Introduction to Object-Oriented Programming	3
IT 363	Systems Analysis and Design *	3
IT 410	Business Intelligence	3
IT 450	Database Concepts	3
BNAL 405	Spreadsheet-Based Data Analysis for Decision Making	3
BNAL 407	Prescriptive Analytics of Management Science	3
BNAL 415	Advanced Business Analytics/Big Data Applications	3
BNAL 476	Simulation Modeling and Analysis for Business Systems	3

Category I-Select two of the following:		6

BNAL 403	Data Visualization and Exploration	
BNAL 432	Predictive Analytics for Business	
BNAL 495	Topics in Business Analytics	

Category II-Select one of the following:		3

ACCT 450	International and Advanced Accounting	
ECON 450	International Economics	
FIN 435	International Financial Management	
IT 425	Information Systems for International Business	
MGMT 361	International Business Operations	
MGMT 462	Comparative International Management	
MGMT 463	Management Seminar Abroad	
MKTG 411	Multi-National Marketing	
MSCM 370	International Shipping	

Total Credit Hours		120-126

+ Not required for students pursuing the IT major or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.

* Business Analytics and Intelligence majors who take IT 363 are exempt from taking IT 360T in the core.

All major courses except the international course are included when calculating the student's grade point average in the major.

Additional Requirements and Information

Advanced Placement

The college accepts advanced placement credit in accordance with the rules and regulations outlined in the Academic Information section of this catalog. Students may take College-Level Examination Program (CLEP) tests to receive credit for:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
FIN 331	Legal Environment of Business	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3

Students are advised to contact the Office of Prior Learning Assessment for more information regarding CLEP and other prior learning assessment credit options. For advanced placement credit in any other business or public administration course, students are advised to contact the chair of the department offering the course. Additional information about credit awarded for qualifying scores on AP and IB subject examinations can be found on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Practical Work Experience for Business Administration Majors

Students may complement their major studies with a practical work experience, which may take the form of an internship, cooperative education experience or a class containing a real-world, hands-on project. Students must apply for internship or co-op participation through the Strome College of Business Career & Leadership Development Satellite Office. All work experiences must be approved by the faculty sponsor in the appropriate department prior to registering for credit. Students may not earn credit for previous or current work experiences. (However, academic credit for work experience may be approved in accordance with the policies for granting prior learning credit as defined in the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this catalog.) For details see the Center for Career & Leadership Development section of this catalog.

Use of Internship and Similar Hours Toward Business Administration Majors

A student may apply no more than six hours of cooperative education, student internship or practicum courses to satisfy degree requirements. Students may not use more than three hours of cooperative education, student internship or practicum courses to satisfy major elective requirements in each of the students' majors. These courses are numbered 367, 368 or 369. Additional hours of cooperative education, student internship or practicum courses, however, can be used to satisfy other requirements such as free electives or general business electives. Additional internships must each involve substantially different kinds of work experiences. Internships must be approved by the Chief Departmental Advisor of the student's major and the CAP Coordinator of the internship.

Transfer of the Associate of Science in Business Administration Towards Degree Requirements

Students transferring to the college must complete a minimum of 10 business courses offered by the college to earn the degree from Old Dominion University, in accordance with AACSB regulations. Those transfer students holding the Associate of Science in Business Administration degree from a Virginia Community College must earn the grade of "C" or better in the following courses in order to satisfy requirements found in the first two years of the BSBA degree:

COMM 101R	Public Speaking	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research: Writing, Rhetoric, and Research: Special Topics	3
MATH 162M	Precalculus I	3

MATH 200	Calculus for Business and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
BNAL 206	Business Analytics I	3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
Upper-level ethics course		

With the exception of the courses listed above, the University's lower-division General Education requirements are deemed satisfied by the accepted AS degrees. These typically include all AS degrees from the Virginia Community College System except the applied science degrees. For more information about accepted AS degrees contact the Office of Admissions. Associate degree holders, although meeting lower-level General Education requirements, must ensure that 120 credits are completed to earn the BSBA degree. A minimum of 25% of the required credit hours must be completed through Old Dominion University, at least 12 of which are upper-level courses in the major program.

The Strome College of Business does not accept courses completed at the freshman and sophomore levels at other institutions for required courses at the junior and senior level at Old Dominion University. Please see the section on CLEP credits (Prior Learning Assessment Credit Options at the Undergraduate Level) for additional information.

Grade Average Requirements for Graduation

To graduate with a Bachelor of Science in Business Administration degree, students must present a minimum of 120 hours with a minimum overall grade point average of 2.00 in all courses taken at Old Dominion University. Students must also attain a minimum overall grade point average of 2.00 in courses taken toward the major (courses included in the major grade point average calculation are listed following the description of each major's course work).

Additionally, students must attain a minimum overall grade point average of 2.00 in the BSBA Core listed below. Only courses completed at Old Dominion University will be used to compute the BSBA Core average. Students with an Information Systems and Technology major (excluding Business Analytics) are not required to take IT 360T, so the BSBA Core grade point average is computed using the remaining courses. If the BSBA Core average is below the required 2.00 minimum, students are advised to utilize the Grade Forgiveness Policy or Adjusted Resident Credit option when appropriate to improve the grade point average.

Requirements for Completing a Bachelor of Science in Business Administration

The following sections show the courses that are requirements for all business students, regardless of the chosen major: Lower-Division General Education, BSBA Core Courses, and Upper-Division General Education. Credit hours are listed after the course title. The student must also choose a major and complete the requirements listed for that major on the following pages.

Foundation Courses for Admission to the Strome College of Business

ENGL 110C	English Composition (C or better)	3
MATH 162M	Precalculus I (C or better)	3
ACCT 201	Principles of Financial Accounting (C or better)	3
ECON 202S	Principles of Microeconomics (C or better)	3
BUSN 110	Introduction to Contemporary Business *	1

* Not required for students pursuing an Information Systems and Technology major (excluding Business Analytics) or for students with an associate's degree in business

administration or with a prior bachelor's degree in business administration.

See the section on Admission to the Undergraduate Program in Business Administration, General Requirements.

Business Elective

A business elective is a course that is offered by an accredited college of business, including the Strome College of Business at Old Dominion University. Public Affairs and Service (PAS) courses offered by the Strome College of Business are not considered as business courses. However, because some business courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate business elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Free Elective

In the majority of cases a free elective is any course offered by an accredited community college or university, including Old Dominion University. However, because some courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 162M	Precalculus I (Grade of C or better required)	3
Language and Culture I (May be waived; see requirement details)		0-3
Nature of Science I		4
BUSN 110	Introduction to Contemporary Business (Grade of C or better required)	1
Literature		3
Credit Hours		14-17
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MATH 200	Calculus for Business and Economics	3
Language and Culture II (May be waived; see requirement details)		0-3
Nature of Science II		4

Interpreting the Past		3
Credit Hours		13-16
Sophomore		
Fall		
Human Creativity		3
Oral Communication: COMM 101R or MKTG 200R required		3
ACCT 201	Principles of Financial Accounting (Grade of C or better required)	3
ECON 202S	Principles of Microeconomics (Grade of C or better required)	3
BNAL 206	Business Analytics I	3
Credit Hours		15
Spring		
Information Literacy and Research		3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
MGMT 325	Contemporary Organizations and Management	3
BNAL 306	Business Analytics II (Grade of C or better required)	3
Credit Hours		15
Junior		
Fall		
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL/DASC 357E	Ethics and Data	
PHIL 442E	Studies in Applied Ethics	
FIN 323	Introductory Financial Management	3
MKTG 311	Marketing Principles and Problems	3
ECON 301	Managerial Economics	3
Major Elective from Category I		3
Credit Hours		15
Spring		
OPMT 303	Operations Management (Grade of C or better required as prerequisite for BNAL 476)	3
FIN 331	Legal Environment of Business	3
BNAL 407	Prescriptive Analytics of Management Science	3
BNAL 415	Advanced Business Analytics/Big Data Applications	3
Major Course		3
Major Course		3
Credit Hours		18

Senior		
Fall		
MGMT 485W	Business Policy and Strategy (Grade of C or better required)	3
Major Elective from Category I		3
Major Course		3
Major Course		3
Upper-Division General Education		3
Credit Hours		15
Spring		
BNAL 476	Simulation Modeling and Analysis for Business Systems	3
Major Elective from Category II		3
Major Course		3
Major Course		3
Upper-Division General Education		3
Credit Hours		15
Total Credit Hours		120-126

BSBA to MBA (Master of Business Administration) Linked Program

Students interested in the program should contact the MBA Program Office as early as possible to discuss their plans for early entry. Once admitted to the program, the MBA program manager will act as the student's co-advisor, along with the chief departmental advisor or chief discipline advisor in the student's undergraduate major. The MBA Program Office is located in 1026 Constant Hall. The phone number is 757-683-3585 and email is mbainfo@odu.edu.

BSBA to MPA (Master of Public Administration) Linked Program

The linked BSBA to MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking 12 credits of the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

A potential candidate will have:

1. Completed all lower level general education requirements
2. Achieved a cumulative GPA of at least 3.0 at the end of the junior year

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog. For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science in Business Administration Information Systems and Technology-Database Major (BSBA)

Weiyong Zhang, Chair

Roya Ardalan, Chief Discipline Advisor

The information systems and technology program is designed to provide students with a technical background in information technology as well as a broad perspective of the business environment in which information technology plays a strategic role. The program emphasizes the development of business analysis and system implementation skills; these skills can provide a basis for job entry, career development and flexibility amid the rapid changes in information technology.

A student who seeks a Bachelor of Science in Business Administration degree in Information Systems and Technology from Old Dominion University must, in addition to meeting other requirements of the University, earn a minimum of 25 percent of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) through on- or off-campus instruction. This must include a minimum of 12 credit hours of upper-level IT courses or upper-level BNAL courses specifically listed as electives on the course lists below.

Strome College of Business (SCB) Center for Undergraduate Advising and Student Success

The mission of this office is to challenge and support students in self-exploration and, through advising, provide resources for them to develop an achievable plan for success. Our vision is for students to be aware of their academic, personal, and professional goals; empowered to pursue them; and confident in their ability to accomplish them.

Our professional advisors work with all Strome College of Business students regarding degree planning, changing majors, admissions, continuance, graduation requirements and required curricula for the majors and minors offered by the College.

Degree Requirements

Students in all of the Bachelor of Science in Business Administration degree programs must fulfill the University General Education requirements (including foreign language) as well as the Strome College of Business's core, major, and elective requirements. Students must choose at least one major area to meet requirements towards the degree.

To stay in compliance with AACSB accreditation standards, students receiving a Bachelor of Science in Business Administration from Old Dominion University must complete at least half of their business course work in residence with a minimum of four courses in their declared major. This equates to 10 business classes, thus meeting the University's residency requirement as well.

Majors in the college may not take business and public administration courses for pass/fail credit except those courses in which pass/fail is the only grading option (i.e., internships and practica).

Admission to the Undergraduate Program in Business Administration

General Requirements

Applicants for admission to the undergraduate degree program in business administration (the Bachelor of Science in Business Administration) should apply initially to the Office of Admissions of Old Dominion University. Students cannot be accepted into business administration without first being admitted to the University. Admission to the University does not guarantee admission to the Bachelor of Science in Business Administration (BSBA) program. Candidates for admission to the BSBA program should indicate on

the application to the University their intention to enter the undergraduate business administration degree program.

Admission to the Bachelor's Degree Program in Business Administration:

Before Admission to the bachelor's degree program in business administration can be granted, a student must have earned a grade of C or higher in each of the business Admission courses:

BUSN 110	Introduction to Contemporary Business	1
ENGL 110C	English Composition	3
MATH 162M	Precalculus I	3
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3

- BUSN 110 is not required for students pursuing majors under the BSBA in Information Systems and Technology (excluding Business Analytics) or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
- Students may utilize the Grade Forgiveness Policy for the business Admission courses.
- Transfer students may complete business Admission courses (BUSN 110, ENGL 110C, MATH 162M, ACCT 201, and ECON 202S) at another accredited college or university, but are responsible for having Transfer Evaluation Services determine that the courses are acceptable to the University.

Eligibility to Enroll in Upper-Level (300/400-level) Business Courses

Only students who have officially completed Admission courses to the BSBA program will be eligible to enroll in upper-level (300/400) business courses (refer to exceptions for non-business majors). However, students who are in progress with the business Admission courses may enroll in upper-level (300/400) business courses. Note: These students will need a Program Restriction Waiver (PRW) to enroll in these courses, with the exception of FIN 323, MGMT 325, MKTG 311, and OPMT 303. These courses require a junior class standing for registration.

Enrollment in 300/400-level Business Courses by Non-Business Majors

Enrollment in 300/400-level business courses will be granted without the Admission courses for the following exceptions:

1. Students pursuing a declared minor in the Strome College of Business may enroll in 300/400-level business courses appropriate to the minor.
2. Students pursuing Upper-Division General Education Requirement Option B: Interdisciplinary Minor or Option D: Six hours of elective upper-division courses outside the student's major discipline or college.
3. Students wishing to satisfy the Impact of Technology requirement may enroll in IT 360T.
4. Students pursuing a degree program other than the Bachelor of Science in Business Administration (BSBA) that requires or accepts specific 300/400-level business courses to complete the degree may enroll in the courses appropriate to the major.
5. Non-degree-seeking students may enroll in 300/400-level business courses if they have satisfied the prerequisites for these courses.

Students in categories 1 - 5 above who do not have a declared major will need a Program Restriction Waiver (PRW) in order to enroll in any 300/400-level Strome College of Business course (including Economics courses). Forms to request a PRW are available at the Strome College of Business website.

Regulations for Continuance in the Bachelor of Science in Business Administration

In addition to the Old Dominion University continuance policies, the following policies are specific to all declared Bachelor of Science in Business Administration (BSBA) students. The Strome College of Business makes a reasonable effort to notify undergraduate students who are not in good academic standing in the BSBA program of their academic status. Each undergraduate student who is placed on BSBA Academic Alarm or BSBA Termination (explained below) will be sent an e-mail message to that effect at the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business. Non-receipt of the e-mail messages by a student will not be considered grounds for granting exceptions or delays in enforcement of the BSBA continuance regulations.

BSBA Continuance Regulations

If a student's Grade Point Average (GPA) in their BSBA Core courses falls below a 2.0, then they will be on Academic Alarm within the Strome College of Business (SCB). This policy is very similar to the University's academic continuance policy, the main difference being that it is based on the core Business courses and impacts acceptance and continuance within the SCB.

Academic Alarm

The first semester in which a student's BSBA Core GPA drops to below a 2.0, they will be on Academic Alarm. Once considered on academic alarm within the college, taking courses within the BSBA Core is the only way to bring that GPA back up.

- If the student raises the BSBA Core GPA to above a 2.0, then they will no longer be on academic alarm.
- If the BSBA Core GPA does not reach a 2.0 but the semester average in the BSBA Core courses is a 2.0 or higher, then the student will remain on academic alarm and be able to continue within the SCB.

SCB Termination

While on academic alarm within the Strome College of Business, if the semester BSBA Core GPA falls below a 2.0, the student will be terminated from the SCB and their major coding will be changed from Business to Undecided. (Terminations will not be processed in summer semesters.)

Appeals

If you have been terminated, you may appeal the decision if you have extenuating circumstances and documentation to support your claim. To appeal, write a letter and include documentation of your circumstances to the Associate Dean of the Strome College of Business (Constant Hall, Suite 2004). There are specific details that need to be included with your appeal - for more information, please see the appeals process as described in the most recently issued catalog.

Guidelines for Filing a BSBA Termination Appeal

1. All students have the right to appeal their BSBA termination if they believe that extraordinary circumstances were the main reason for their poor academic performance. Notifications of pending BSBA termination are sent to the student's ODU email address and include information on the appeal process and deadlines. All BSBA termination appeals must be submitted electronically using the link provided in the email and will be reviewed by the SCB Termination Appeal Committee. Students are responsible for submitting their appeal by the stated deadline; late appeals will not be reviewed. Decisions of the Termination Appeal Committee may be appealed to the Associate Dean for Academic Programs in the Strome College of Business whose decision is final.
2. Appeals must be based on circumstances pertinent to the semesters in which the academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the terminated student. The appeal letter must provide sufficient detail and explanation regarding the following points because there is no face-to-face meeting

with the Associate Dean for Academic Programs in the Strome College of Business. The decision of the Associate Dean is final. Students without documentation will not be allowed to appeal their termination. In order to be reviewed, an appeal letter must:

- Document the extraordinary circumstances such as a death in the family, medical complications or chronic conditions, personal or family emergency, overwhelming work schedules, dorm-mate conflict, or a personal relationship conflict that have adversely affected performance: i.e., a statement or letter from a physician, employer, family members, faculty, academic advisor, Counseling Services, or Educational Accessibility.
 - Explain how the extraordinary circumstances caused each semester of poor academic performance.
 - State the reasons why an official withdrawal was not requested.
 - Explain how the extraordinary circumstance(s) has been resolved.
 - Provide a plan of action to return to good BSBA academic standing.
3. Students who do not file a BSBA termination appeal or whose appeals are denied, are no longer eligible to pursue a bachelor's degree in Business Administration. Upon BSBA termination, the student's major in the Strome College of Business will be removed. (This does not affect a declared second major outside of the BSBA.) These students are advised to work with an advisor in the SCB Center for Undergraduate Advising to explore other major options, and for referrals to other advising departments for a new major declaration.
4. BSBA-terminated students who had pre-registered for a subsequent semester lose eligibility for continued enrollment in upper-level business courses.

Applying for Readmission to the BSBA Program

After a minimum of five years has passed since a student was terminated from the BSBA program, the student may apply for readmission to the program. There must be a high probability the student will successfully complete the degree program, and approval will be at the discretion of the Strome College of Business Associate Dean.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication: COMM 101R or MKTG 200R required. Additionally, all students majoring in business administration can expect to complete several courses in which individual and/or group oral presentations will be required.

Mathematics: MATH 162M and MATH 200 required.

Information Literacy and Research: IT 150G (recommended) or any "G" course from the approved general education information literacy and research course list.

Human Behavior: Met in the Business Administration core for all majors except Economics.

Philosophy and Ethics must be satisfied by completion of either PHIL 230E or an upper-level "E" course from the approved general education ethics course list. A philosophy course designated with a P will not meet this requirement for business administration students with the exception of a "P" course taken prior to fall 2010.

Impact of Technology requirement is satisfied within each BSBA degree major except Information Systems and Technology by IT 360T. In the Information Systems and Technology majors (excluding Business Analytics), the Impact of Technology requirement is satisfied by the coursework required for the major.

Transfer students with an applicable associate's degree from a Virginia Community College or another community college that has a seamless transfer agreement with ODU, and students with a prior bachelor's degree from another university, must nevertheless have a grade of C or better in the following to be able to transfer them:

COMM 101R	Public Speaking	3
or MKTG 200R	Professional Interactions and Negotiations	
PHIL 230E	Introduction to Ethics (Or an upper-level ethics course)	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3

Upper-Division General Education

- Option A. Any University-approved minor, second degree, or second major.
- Option B. An interdisciplinary minor consisting of 12 credits, three of which can be in the major. Interdisciplinary minors are described in the University Catalog section labeled Requirements for Undergraduate Degrees, Upper-Division Requirements.
- Option C. An approved certification program, such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the Strome College of Business and not required by the major (6 credits).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Business Administration Core

ACCT 201	Principles of Financial Accounting *	3
ACCT 202	Principles of Managerial Accounting *	3
BNAL 206	Business Analytics I *	3
BNAL 306	Business Analytics II	3
ECON 201S	Principles of Macroeconomics *	3
ECON 202S	Principles of Microeconomics *	3
ECON 301	Managerial Economics	3
FIN 323	Introductory Financial Management	3
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology **	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 485W	Business Policy and Strategy (C or better) ***	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
Total Credit Hours		42

*	Not automatically waived for transfer students with an applicable associate's degree from a Virginia Community College or another acceptable community college, or for students with a prior bachelor's degree from another university. A grade of C or better must be earned to transfer these courses to Old Dominion University.
**	Students completing a major or minor in Information Systems and Technology (excluding the Business Analytics major) do not take this course.
***	Students majoring in Economics must complete MGMT 485W, but meet the writing intensive requirement by earning a grade of C or better either in MGMT 485W or in one of the ECON Writing Intensive courses.

Information Systems and Technology Core

Required Core Courses

IT 201	Introduction to Information Systems (grade of C or better required as a prerequisite for upper-level IT courses)	3
IT 205	Introduction to Object-Oriented Programming	3
IT 315	Introduction to Networking and Security	3
IT 317	Enterprise Information Architecture (grade of C or better required as prerequisite for IT 464)	3
IT 363	Systems Analysis and Design	3
IT 450	Database Concepts	3
IT 464	Essentials of Project Management	3
IT 474	Strategic IT Administration	3
Total Credit Hours		24

All courses listed above except the International Business Elective and Business Elective are included in the calculation of the 2.00 overall grade point average required for major course work.

Information Systems and Technology-Database Major

General Education

Complete lower-division requirements	35-41	
Complete upper-division requirements (minimum of 6 credit hours)	6	
MATH 200	Calculus for Business and Economics	3

Business Administration Core

Complete business administration core requirements	39

Information Systems and Technology Core

Complete information systems and technology core requirements		24
Database		
Required Courses:		
Select two IT electives from the following:		6
IT 451	Database Administration	
IT 452	Cloud Database	
IT 453	Advanced Database Concepts	
IT 454	Web-based Database Administration	
Select one additional IT elective		3
International Business Elective: select one of the following.		3
IT 425	Information Systems for International Business	
MSCM 370	International Shipping	
Total Credit Hours		119-125

Additional Requirements and Information

Advanced Placement

The college accepts advanced placement credit in accordance with the rules and regulations outlined in the Academic Information section of this catalog. Students may take College-Level Examination Program (CLEP) tests to receive credit for:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
FIN 331	Legal Environment of Business	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3

Students are advised to contact the Office of Prior Learning Assessment for more information regarding CLEP and other prior learning assessment credit options. For advanced placement credit in any other business or public administration course, students are advised to contact the chair of the department offering the course. Additional information about credit awarded for qualifying scores on AP and IB subject examinations can be found on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Practical Work Experience for Business Administration Majors

Students may complement their major studies with a practical work experience, which may take the form of an internship, cooperative education experience or a class containing a real-world, hands-on project. Students must apply for internship or co-op participation through the Strome College of Business Career & Leadership Development Satellite Office. All work experiences must be approved by the faculty sponsor in the appropriate department prior to registering for credit. Students may not earn credit for previous or current work experiences. (However, academic credit for work experience may be approved in accordance with the policies for granting prior learning credit as defined in the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this catalog.) For details see the Center for Career & Leadership Development section of this catalog.

Use of Internship and Similar Hours Toward Business Administration Majors

A student may apply no more than six hours of cooperative education, student internship or practicum courses to satisfy degree requirements. Students may not use more than three hours of cooperative education, student internship or practicum courses to satisfy major elective requirements in each of the students' majors. These courses are numbered 367, 368 or 369. Additional hours of cooperative education, student internship or practicum courses, however, can be used to satisfy other requirements such as free electives or general business electives. Additional

internships must each involve substantially different kinds of work experiences. Internships must be approved by the Chief Departmental Advisor of the student's major and the CAP Coordinator of the internship.

Transfer of the Associate of Science in Business Administration Towards Degree Requirements

Students transferring to the college must complete a minimum of 10 business courses offered by the college to earn the degree from Old Dominion University, in accordance with AACSB regulations. Those transfer students holding the Associate of Science in Business Administration degree from a Virginia Community College must earn the grade of "C" or better in the following courses in order to satisfy requirements found in the first two years of the BSBA degree:

COMM 101R	Public Speaking	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
BNAL 206	Business Analytics I	3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
Upper-level ethics course		

With the exception of the courses listed above, the University's lower-division General Education requirements are deemed satisfied by the accepted AS degrees. These typically include all AS degrees from the Virginia Community College System except the applied science degrees. For more information about accepted AS degrees contact the Office of Admissions. Associate degree holders, although meeting lower-level General Education requirements, must ensure that 120 credits are completed to earn the BSBA degree. A minimum of 25% of the required credit hours must be completed through Old Dominion University, at least 12 of which are upper-level courses in the major program.

The Strome College of Business does not accept courses completed at the freshman and sophomore levels at other institutions for required courses at the junior and senior level at Old Dominion University. Please see the section on CLEP credits (Prior Learning Assessment Credit Options at the Undergraduate Level) for additional information.

Grade Average Requirements for Graduation

To graduate with a Bachelor of Science in Business Administration degree, students must present a minimum of 120 hours with a minimum overall grade point average of 2.00 in all courses taken at Old Dominion University. Students must also attain a minimum overall grade point average of 2.00 in courses taken toward the major (courses included in the major grade point average calculation are listed following the description of each major's course work).

Additionally, students must attain a minimum overall grade point average of 2.00 in the BSBA Core listed below. Only courses completed at Old Dominion University will be used to compute the BSBA Core average. Students with an Information Systems and Technology major (excluding Business Analytics) are not required to take IT 360T, so the BSBA Core grade point average is computed using the remaining courses. If the BSBA Core average is below the required 2.00 minimum, students are advised to utilize the Grade Forgiveness Policy or Adjusted Resident Credit option when appropriate to improve the grade point average.

Requirements for Completing a Bachelor of Science in Business Administration

The following sections show the courses that are requirements for all business students, regardless of the chosen major: Lower-Division General Education, BSBA Core Courses, and Upper-Division General Education.

Credit hours are listed after the course title. The student must also choose a major and complete the requirements listed for that major on the following pages.

Foundation Courses for Admission to the Strome College of Business

ENGL 110C	English Composition (C or better)	3
MATH 162M	Precalculus I (C or better)	3
ACCT 201	Principles of Financial Accounting (C or better)	3
ECON 202S	Principles of Microeconomics (C or better)	3
BUSN 110	Introduction to Contemporary Business *	1

* Not required for students pursuing an Information Systems and Technology major (excluding Business Analytics) or for students with an associate's degree in business administration or with a prior bachelor's degree in business administration.

See the section on Admission to the Undergraduate Program in Business Administration, General Requirements.

Business Elective

A business elective is a course that is offered by an accredited college of business, including the Strome College of Business at Old Dominion University. Public Affairs and Service (PAS) courses offered by the Strome College of Business are not considered as business courses. However, because some business courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate business elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Free Elective

In the majority of cases a free elective is any course offered by an accredited community college or university, including Old Dominion University. However, because some courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 162M	Precalculus I (C or better required)	3
Language and Culture I (May be waived; see requirement details)		0-3
Nature of Science I		4
Oral Communication: COMM 101R required		3
Credit Hours		13-16

Spring		
MATH 200	Calculus for Business and Economics	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Language and Culture II (May be waived; see requirement details)		0-3
Nature of Science II		4
Interpreting the Past		3
Credit Hours		13-16
Sophomore		
Fall		
Literature		3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL/DASC 357E	Ethics and Data	
PHIL 442E	Studies in Applied Ethics	
ACCT 201	Principles of Financial Accounting (C or better required)	3
ECON 202S	Principles of Microeconomics (C or better required)	3
IT 201	Introduction to Information Systems (C or better required as prerequisite for upper-level IT courses)	3
Credit Hours		15
Spring		
Information Literacy and Research		3
Human Creativity		3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
BNAL 206	Business Analytics I	3
IT 205	Introduction to Object-Oriented Programming	3
Credit Hours		18
Junior		
Fall		
BNAL 306	Business Analytics II	3
MGMT 325	Contemporary Organizations and Management	3
FIN 323	Introductory Financial Management	3
IT 317	Enterprise Information Architecture (C or better required as prerequisite for IT 464)	3
IT 450	Database Concepts	3
Credit Hours		15

Spring		
FIN 331	Legal Environment of Business	3
ECON 301	Managerial Economics	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
IT 363	Systems Analysis and Design	3
Credit Hours		15
Senior		
Fall		
IT 464	Essentials of Project Management	3
IT 315	Introduction to Networking and Security	3
Database Elective		3
300-400 Level IT Elective		3
Upper-Division General Education		3
Credit Hours		15
Spring		
MGMT 485W	Business Policy and Strategy (C or better required)	3
IT 474	Strategic IT Administration	3
International Business Elective: IT 425 or MSCM 370		3
Upper Division General Education		3
Elective		1
Database Elective		3
Credit Hours		16
Total Credit Hours		120-126

BSBA to MBA (Master of Business Administration) Linked Program

Students interested in the program should contact the MBA Program Office as early as possible to discuss their plans for early entry. Once admitted to the program, the MBA program manager will act as the student's co-advisor, along with the chief departmental advisor or chief discipline advisor in the student's undergraduate major. The MBA Program Office is located in 1026 Constant Hall. The phone number is 757-683-3585 and email is mbainfo@odu.edu.

BSBA to MPA (Master of Public Administration) Linked Program

The linked BSBA to MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking 12 credits of the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

A potential candidate will have:

1. Completed all lower level general education requirements
2. Achieved a cumulative GPA of at least 3.0 at the end of the junior year

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog. For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science in Business Administration Information Systems and Technology-Network Engineering Major (BSBA)

Weiyong Zhang, Chair
Roya Ardalan, Chief Discipline Advisor

The information systems and technology program is designed to provide students with a technical background in information technology as well as a broad perspective of the business environment in which information technology plays a strategic role. The program emphasizes the development of business analysis and system implementation skills; these skills can provide a basis for job entry, career development and flexibility amid the rapid changes in information technology.

A student who seeks a Bachelor of Science in Business Administration degree in Information Systems and Technology from Old Dominion University must, in addition to meeting other requirements of the University, earn a minimum of 25 percent of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) through on- or off-campus instruction. This must include a minimum of 12 credit hours of upper-level IT courses or upper-level BNAL courses specifically listed as electives on the course lists below.

Strome College of Business (SCB) Center for Undergraduate Advising and Student Success

The mission of this office is to challenge and support students in self-exploration and, through advising, provide resources for them to develop an achievable plan for success. Our vision is for students to be aware of their academic, personal, and professional goals; empowered to pursue them; and confident in their ability to accomplish them.

Our professional advisors work with all Strome College of Business students regarding degree planning, changing majors, admissions, continuance, graduation requirements and required curricula for the majors and minors offered by the College.

Degree Requirements

Students in all of the Bachelor of Science in Business Administration degree programs must fulfill the University General Education requirements (including foreign language) as well as the Strome College of Business's core, major, and elective requirements. Students must choose at least one major area to meet requirements towards the degree.

To stay in compliance with AACSB accreditation standards, students receiving a Bachelor of Science in Business Administration from Old Dominion University must complete at least half of their business course work in residence with a minimum of four courses in their declared major. This equates to 10 business classes, thus meeting the University's residency requirement as well.

Majors in the college may not take business and public administration courses for pass/fail credit except those courses in which pass/fail is the only grading option (i.e., internships and practica).

Admission to the Undergraduate Program in Business Administration

General Requirements

Applicants for admission to the undergraduate degree program in business administration (the Bachelor of Science in Business Administration) should apply initially to the Office of Admissions of Old Dominion University. Students cannot be accepted into business administration without first being admitted to the University. Admission to the University does not guarantee admission to the Bachelor of Science in Business Administration (BSBA) program. Candidates for admission to the BSBA program should indicate on the application to the University their intention to enter the undergraduate business administration degree program.

Admission to the Bachelor's Degree Program in Business Administration:

Before Admission to the bachelor's degree program in business administration can be granted, a student must have earned a grade of C or higher in each of the business Admission courses:

BUSN 110	Introduction to Contemporary Business	1
ENGL 110C	English Composition	3
MATH 162M	Precalculus I	3
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3

- BUSN 110 is not required for students pursuing majors under the BSBA in Information Systems and Technology (excluding Business Analytics) or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
- Students may utilize the Grade Forgiveness Policy for the business Admission courses.
- Transfer students may complete business Admission courses (BUSN 110, ENGL 110C, MATH 162M, ACCT 201, and ECON 202S) at another accredited college or university, but are responsible for having Transfer Evaluation Services determine that the courses are acceptable to the University.

Eligibility to Enroll in Upper-Level (300/400-level) Business Courses

Only students who have officially completed Admission courses to the BSBA program will be eligible to enroll in upper-level (300/400) business courses (refer to exceptions for non-business majors). However, students who are in progress with the business Admission courses may enroll in upper-level (300/400) business courses. Note: These students will need a Program Restriction Waiver (PRW) to enroll in these courses, with the exception of FIN 323, MGMT 325, MKTG 311, and OPMT 303. These courses require a junior class standing for registration.

Enrollment in 300/400-level Business Courses by Non-Business Majors

Enrollment in 300/400-level business courses will be granted without the Admission courses for the following exceptions:

1. Students pursuing a declared minor in the Strome College of Business may enroll in 300/400-level business courses appropriate to the minor.
2. Students pursuing Upper-Division General Education Requirement Option B: Interdisciplinary Minor or Option D: Six hours of elective upper-division courses outside the student's major discipline or college.
3. Students wishing to satisfy the Impact of Technology requirement may enroll in IT 360T.
4. Students pursuing a degree program other than the Bachelor of Science in Business Administration (BSBA) that requires or accepts specific 300/400-level business courses to complete the degree may enroll in the courses appropriate to the major.

5. Non-degree-seeking students may enroll in 300/400-level business courses if they have satisfied the prerequisites for these courses.

Students in categories 1 - 5 above who do not have a declared major will need a Program Restriction Waiver (PRW) in order to enroll in any 300/400-level Strome College of Business course (including Economics courses). Forms to request a PRW are available at the Strome College of Business website.

Regulations for Continuance in the Bachelor of Science in Business Administration

In addition to the Old Dominion University continuance policies, the following policies are specific to all declared Bachelor of Science in Business Administration (BSBA) students. The Strome College of Business makes a reasonable effort to notify undergraduate students who are not in good academic standing in the BSBA program of their academic status. Each undergraduate student who is placed on BSBA Academic Alarm or BSBA Termination (explained below) will be sent an e-mail message to that effect at the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business. Non-receipt of the e-mail messages by a student will not be considered grounds for granting exceptions or delays in enforcement of the BSBA continuance regulations.

BSBA Continuance Regulations

If a student's Grade Point Average (GPA) in their BSBA Core courses falls below a 2.0, then they will be on Academic Alarm within the Strome College of Business (SCB). This policy is very similar to the University's academic continuance policy, the main difference being that it is based on the core Business courses and impacts acceptance and continuance within the SCB.

Academic Alarm

The first semester in which a student's BSBA Core GPA drops to below a 2.0, they will be on Academic Alarm. Once considered on academic alarm within the college, taking courses within the BSBA Core is the only way to bring that GPA back up.

- If the student raises the BSBA Core GPA to above a 2.0, then they will no longer be on academic alarm.
- If the BSBA Core GPA does not reach a 2.0 but the semester average in the BSBA Core courses is a 2.0 or higher, then the student will remain on academic alarm and be able to continue within the SCB.

SCB Termination

While on academic alarm within the Strome College of Business, if the semester BSBA Core GPA falls below a 2.0, the student will be terminated from the SCB and their major coding will be changed from Business to Undecided. (Terminations will not be processed in summer semesters.)

Appeals

If you have been terminated, you may appeal the decision if you have extenuating circumstances and documentation to support your claim. To appeal, write a letter and include documentation of your circumstances to the Associate Dean of the Strome College of Business (Constant Hall, Suite 2004). There are specific details that need to be included with your appeal - for more information, please see the appeals process as described in the most recently issued catalog.

Guidelines for Filing a BSBA Termination Appeal

1. All students have the right to appeal their BSBA termination if they believe that extraordinary circumstances were the main reason for their poor academic performance. Notifications of pending BSBA termination are sent to the student's ODU email address and include information on the appeal process and deadlines. All BSBA termination appeals must be submitted electronically using the link provided in the email and will be reviewed by the SCB Termination Appeal Committee. Students are responsible for submitting their appeal by the stated deadline; late appeals will not be reviewed. Decisions of the Termination Appeal Committee may be appealed

to the Associate Dean for Academic Programs in the Strome College of Business whose decision is final.

2. Appeals must be based on circumstances pertinent to the semesters in which the academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the terminated student. The appeal letter must provide sufficient detail and explanation regarding the following points because there is no face-to-face meeting with the Associate Dean for Academic Programs in the Strome College of Business. The decision of the Associate Dean is final. Students without documentation will not be allowed to appeal their termination. In order to be reviewed, an appeal letter must:

- a. Document the extraordinary circumstances such as a death in the family, medical complications or chronic conditions, personal or family emergency, overwhelming work schedules, dorm-mate conflict, or a personal relationship conflict that have adversely affected performance: i.e., a statement or letter from a physician, employer, family members, faculty, academic advisor, Counseling Services, or Educational Accessibility.
- b. Explain how the extraordinary circumstances caused each semester of poor academic performance.
- c. State the reasons why an official withdrawal was not requested.
- d. Explain how the extraordinary circumstance(s) has been resolved.
- e. Provide a plan of action to return to good BSBA academic standing.

3. Students who do not file a BSBA termination appeal or whose appeals are denied, are no longer eligible to pursue a bachelor's degree in Business Administration. Upon BSBA termination, the student's major in the Strome College of Business will be removed. (This does not affect a declared second major outside of the BSBA.) These students are advised to work with an advisor in the SCB Center for Undergraduate Advising to explore other major options, and for referrals to other advising departments for a new major declaration.

4. BSBA-terminated students who had pre-registered for a subsequent semester lose eligibility for continued enrollment in upper-level business courses.

Applying for Readmission to the BSBA Program

After a minimum of five years has passed since a student was terminated from the BSBA program, the student may apply for readmission to the program. There must be a high probability the student will successfully complete the degree program, and approval will be at the discretion of the Strome College of Business Associate Dean.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3

Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication: COMM 101R or MKTG 200R required. Additionally, all students majoring in business administration can expect to complete several courses in which individual and/or group oral presentations will be required.

Mathematics: MATH 162M and MATH 200 required.

Information Literacy and Research: IT 150G (recommended) or any "G" course from the approved general education information literacy and research course list.

Human Behavior: Met in the Business Administration core for all majors except Economics.

Philosophy and Ethics must be satisfied by completion of either PHIL 230E or an upper-level "E" course from the approved general education ethics course list. A philosophy course designated with a P will not meet this requirement for business administration students with the exception of a "P" course taken prior to fall 2010.

Impact of Technology requirement is satisfied within each BSBA degree major except Information Systems and Technology by IT 360T. In the Information Systems and Technology majors (excluding Business Analytics), the Impact of Technology requirement is satisfied by the coursework required for the major.

Transfer students with an applicable associate's degree from a Virginia Community College or another community college that has a seamless transfer agreement with ODU, and students with a prior bachelor's degree from another university, must nevertheless have a grade of C or better in the following to be able to transfer them:

COMM 101R	Public Speaking	3
or MKTG 200R	Professional Interactions and Negotiations	
PHIL 230E	Introduction to Ethics (Or an upper-level ethics course)	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3

Upper-Division General Education

- Option A. Any University-approved minor, second degree, or second major.
- Option B. An interdisciplinary minor consisting of 12 credits, three of which can be in the major. Interdisciplinary minors are described in the University Catalog section labeled Requirements for Undergraduate Degrees, Upper-Division Requirements.
- Option C. An approved certification program, such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the Strome College of Business and not required by the major (6 credits).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Business Administration Core

ACCT 201	Principles of Financial Accounting *	3
ACCT 202	Principles of Managerial Accounting *	3
BNAL 206	Business Analytics I *	3
BNAL 306	Business Analytics II	3
ECON 201S	Principles of Macroeconomics *	3
ECON 202S	Principles of Microeconomics *	3
ECON 301	Managerial Economics	3
FIN 323	Introductory Financial Management	3
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology **	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 485W	Business Policy and Strategy (C or better) ***	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
Total Credit Hours		42

- * Not automatically waived for transfer students with an applicable associate's degree from a Virginia Community College or another acceptable community college, or for students with a prior bachelor's degree from another university. A grade of C or better must be earned to transfer these courses to Old Dominion University.
- ** Students completing a major or minor in Information Systems and Technology (excluding the Business Analytics major) do not take this course.
- *** Students majoring in Economics must complete MGMT 485W, but meet the writing intensive requirement by earning a grade of C or better either in MGMT 485W or in one of the ECON Writing Intensive courses.

Information Systems and Technology Core

Required Core Courses

IT 201	Introduction to Information Systems (grade of C or better required as a prerequisite for upper-level IT courses)	3
IT 205	Introduction to Object-Oriented Programming	3
IT 315	Introduction to Networking and Security	3
IT 317	Enterprise Information Architecture (grade of C or better required as prerequisite for IT 464)	3
IT 363	Systems Analysis and Design	3
IT 450	Database Concepts	3
IT 464	Essentials of Project Management	3
IT 474	Strategic IT Administration	3
Total Credit Hours		24

All courses listed above except the International Business Elective and Business Elective are included in the calculation of the 2.00 overall grade point average required for major course work.

Information Systems and Technology- Network Engineering Major

General Education

Complete lower-division requirements	35-41
Complete upper-division requirements (minimum of 6 credit hours)	6
MATH 200 Calculus for Business and Economics	3

Business Administration Core

Complete business administration core requirements	39

Information Systems and Technology Core

Complete information systems and technology core requirements	24

Network Engineering

Required Courses:		
Select two IT electives from the list below:		6
IT 416	Network Server Configuration and Administration	
IT 417	Management of Information Security	
IT 419	Enterprise Cyber Defense	
Select one additional IT elective (any IT 300-400 course)		3
Select one of the following International Business Electives:		3
ACCT 450	International and Advanced Accounting	
ECON 450	International Economics	
FIN 435	International Financial Management	
IT 425	Information Systems for International Business	
MGMT 361	International Business Operations	
MGMT 462	Comparative International Management	
MGMT 463	Management Seminar Abroad	
MKTG 411	Multi-National Marketing	
MSCM 370	International Shipping	

Total Credit Hours	119-125

Additional Requirements and Information

Advanced Placement

The college accepts advanced placement credit in accordance with the rules and regulations outlined in the Academic Information section of this catalog. Students may take College-Level Examination Program (CLEP) tests to receive credit for:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
FIN 331	Legal Environment of Business	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3

Students are advised to contact the Office of Prior Learning Assessment for more information regarding CLEP and other prior learning assessment credit options. For advanced placement credit in any other business or public administration course, students are advised to contact the chair of the department offering the course. Additional information about credit awarded for qualifying scores on AP and IB subject examinations can be found on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Practical Work Experience for Business Administration Majors

Students may complement their major studies with a practical work experience, which may take the form of an internship, cooperative education experience or a class containing a real-world, hands-on project. Students must apply for internship or co-op participation through the Strome College

of Business Career & Leadership Development Satellite Office. All work experiences must be approved by the faculty sponsor in the appropriate department prior to registering for credit. Students may not earn credit for previous or current work experiences. (However, academic credit for work experience may be approved in accordance with the policies for granting prior learning credit as defined in the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this catalog.) For details see the Center for Career & Leadership Development section of this catalog.

Use of Internship and Similar Hours Toward Business Administration Majors

A student may apply no more than six hours of cooperative education, student internship or practicum courses to satisfy degree requirements. Students may not use more than three hours of cooperative education, student internship or practicum courses to satisfy major elective requirements in each of the students' majors. These courses are numbered 367, 368 or 369. Additional hours of cooperative education, student internship or practicum courses, however, can be used to satisfy other requirements such as free electives or general business electives. Additional internships must each involve substantially different kinds of work experiences. Internships must be approved by the Chief Departmental Advisor of the student's major and the CAP Coordinator of the internship.

Transfer of the Associate of Science in Business Administration Towards Degree Requirements

Students transferring to the college must complete a minimum of 10 business courses offered by the college to earn the degree from Old Dominion University, in accordance with AACSB regulations. Those transfer students holding the Associate of Science in Business Administration degree from a Virginia Community College must earn the grade of "C" or better in the following courses in order to satisfy requirements found in the first two years of the BSBA degree:

COMM 101R	Public Speaking	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
BNAL 206	Business Analytics I	3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
Upper-level ethics course		

With the exception of the courses listed above, the University's lower-division General Education requirements are deemed satisfied by the accepted AS degrees. These typically include all AS degrees from the Virginia Community College System except the applied science degrees. For more information about accepted AS degrees contact the Office of Admissions. Associate degree holders, although meeting lower-level General Education requirements, must ensure that 120 credits are completed to earn the BSBA degree. A minimum of 25% of the required credit hours must be completed through Old Dominion University, at least 12 of which are upper-level courses in the major program.

The Strome College of Business does not accept courses completed at the freshman and sophomore levels at other institutions for required courses at the junior and senior level at Old Dominion University. Please see the section on CLEP credits (Prior Learning Assessment Credit Options at the Undergraduate Level) for additional information.

Grade Average Requirements for Graduation

To graduate with a Bachelor of Science in Business Administration degree, students must present a minimum of 120 hours with a minimum overall grade point average of 2.00 in all courses taken at Old Dominion University. Students must also attain a minimum overall grade point average of 2.00

in courses taken toward the major (courses included in the major grade point average calculation are listed following the description of each major's course work).

Additionally, students must attain a minimum overall grade point average of 2.00 in the BSBA Core listed below. Only courses completed at Old Dominion University will be used to compute the BSBA Core average. Students with an Information Systems and Technology major (excluding Business Analytics) are not required to take IT 360T, so the BSBA Core grade point average is computed using the remaining courses. If the BSBA Core average is below the required 2.00 minimum, students are advised to utilize the Grade Forgiveness Policy or Adjusted Resident Credit option when appropriate to improve the grade point average.

Requirements for Completing a Bachelor of Science in Business Administration

The following sections show the courses that are requirements for all business students, regardless of the chosen major: Lower-Division General Education, BSBA Core Courses, and Upper-Division General Education. Credit hours are listed after the course title. The student must also choose a major and complete the requirements listed for that major on the following pages.

Foundation Courses for Admission to the Strome College of Business

ENGL 110C	English Composition (C or better)	3
MATH 162M	Precalculus I (C or better)	3
ACCT 201	Principles of Financial Accounting (C or better)	3
ECON 202S	Principles of Microeconomics (C or better)	3
BUSN 110	Introduction to Contemporary Business *	1

* Not required for students pursuing an Information Systems and Technology major (excluding Business Analytics) or for students with an associate's degree in business administration or with a prior bachelor's degree in business administration.

See the section on Admission to the Undergraduate Program in Business Administration, General Requirements.

Business Elective

A business elective is a course that is offered by an accredited college of business, including the Strome College of Business at Old Dominion University. Public Affairs and Service (PAS) courses offered by the Strome College of Business are not considered as business courses. However, because some business courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate business elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Free Elective

In the majority of cases a free elective is any course offered by an accredited community college or university, including Old Dominion University. However, because some courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work

and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
MATH 162M	Precalculus I (C or better required)	3
Language and Culture I (May be waived; see requirement details)		0-3
Nature of Science I		4
Oral Communication: COMM 101R required		3
Credit Hours		13-16
Spring		
MATH 200	Calculus for Business and Economics	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Cor better required) or Writing, Rhetoric, and Research: Special Topics	3
Language and Culture II (May be waived; see requirement details)		0-3
Nature of Science II		4
Interpreting the Past		3
Credit Hours		13-16
Sophomore		
Fall		
Literature		3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL/DASC 357E	Ethics and Data	
PHIL 442E	Studies in Applied Ethics	
ACCT 201	Principles of Financial Accounting (C or better required)	3
ECON 202S	Principles of Microeconomics (C or better required)	3
IT 201	Introduction to Information Systems (C or better required as a prerequisite for upper-level IT courses)	3
Credit Hours		15
Spring		
Information Literacy and Research		3
Human Creativity		3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
BNAL 206	Business Analytics I	3
IT 205	Introduction to Object-Oriented Programming	3
Credit Hours		18

Junior			
Fall			
BNAL 306	Business Analytics II	3	
MGMT 325	Contemporary Organizations and Management	3	
FIN 323	Introductory Financial Management	3	
IT 317	Enterprise Information Architecture (C or better required as prerequisite for IT 464)	3	
IT 315	Introduction to Networking and Security (C or better required)	3	
Credit Hours		15	
Spring			
FIN 331	Legal Environment of Business	3	
ECON 301	Managerial Economics	3	
MKTG 311	Marketing Principles and Problems	3	
OPMT 303	Operations Management	3	
IT 363	Systems Analysis and Design	3	
Credit Hours		15	
Senior			
Fall			
IT 464	Essentials of Project Management	3	
IT 450	Database Concepts	3	
Network Eng IT Elective		3	
300-400 Level IT Elective		3	
Upper-Division General Education		3	
Credit Hours		15	
Spring			
MGMT 485W	Business Policy and Strategy (C or better required)	3	
IT 474	Strategic IT Administration	3	
International Business Elective		3	
Network Eng IT Elective		3	
Upper-Division General Education		3	
Elective		1	
Credit Hours		16	
Total Credit Hours		120-126	

BSBA to MBA (Master of Business Administration) Linked Program

Students interested in the program should contact the MBA Program Office as early as possible to discuss their plans for early entry. Once admitted to the program, the MBA program manager will act as the student's co-advisor, along with the chief departmental advisor or chief discipline advisor in the student's undergraduate major. The MBA Program Office is located in 1026 Constant Hall. The phone number is 757-683-3585 and email is mbainfo@odu.edu.

BSBA to MPA (Master of Public Administration) Linked Program

The linked BSBA to MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking 12 credits of the MPA program

as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

A potential candidate will have:

1. Completed all lower level general education requirements
2. Achieved a cumulative GPA of at least 3.0 at the end of the junior year

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog. For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Business Analytics Minor Requirements

The minor in Business Analytics requires five courses (15 credit hours) comprised of:

BNAL 405	Spreadsheet-Based Data Analysis for Decision Making	3
OPMT 303	Operations Management	3
BNAL 407	Prescriptive Analytics of Management Science	3
or BNAL 476	Simulation Modeling and Analysis for Business Systems	
Select two of the following:		6
BNAL 403	Data Visualization and Exploration	
BNAL 407	Prescriptive Analytics of Management Science	
BNAL 415	Advanced Business Analytics/Big Data Applications	
BNAL 432	Predictive Analytics for Business	
BNAL 476	Simulation Modeling and Analysis for Business Systems	
BNAL 495	Topics in Business Analytics	
Total Credit Hours		15

To receive a minor, the student must achieve a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of 200-level courses and prerequisite courses. At least two of the five courses must be completed through courses offered by Old Dominion University. Business majors who want to make themselves more marketable may choose a minor in Business Analytics by taking three additional courses.

Minor Information Systems and Technology Minor

The minor in Information Systems and Technology is designed primarily for students completing the Bachelor of Science in Computer Science, the Bachelor of Science in Computer Engineering, or the Bachelor of Science in Engineering Technology (Computer Engineering). The courses in the minor have a number of technical prerequisites that are normally waived for

those students who have completed CS 150, CS 250, and either CS 170 or ECE 241 or equivalent major course work.

Requirements

IT 363	Systems Analysis and Design	3
IT 450	Database Concepts *	3
Select six credit hours from the following:		6
IT 310	Object-Oriented Programming with C++	
IT 315	Introduction to Networking and Security **	
IT 325	Web Site and Web Page Design	
IT 367	Cooperative Education ***	
IT 368	Student Internship ***	
IT 369	Practicum ***	
IT 374	C# and Applications	
IT 376	PHP and Applications	
IT 401	Mobile and Cloud Computing	
IT 408	E-Business Portal Programming	
IT 410	Business Intelligence	
IT 420	Object-Oriented Application Development Using Visual Basic	
IT 425	Information Systems for International Business	
IT 430	Object-Oriented Application Development with JAVA	
IT 451	Database Administration	
IT 452	Cloud Database	
IT 453	Advanced Database Concepts	
IT 461	Implementing Internet Applications	
IT 464	Essentials of Project Management	
IT 474	Strategic IT Administration	
IT 494	Entrepreneurship in Information Technology	
IT 495	Selected Topics in Information Systems	
Total Credit Hours		12

*	Students completing CS 450 must substitute another course for IT 450 from the elective list.
**	Computer Engineering and Computer Engineering Technology students completing CS 454 must substitute another course for IT 315 from the elective list.
***	Students seeking an internship, cooperative education or practicum must obtain permission from both the IT internship coordinator as well as the internship coordinator of the students' major department.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of prerequisite courses. A minimum of six hours in upper-level courses in the minor must be taken through courses offered by Old Dominion University.

Minor

Maritime and Supply Chain Management Minor

Requirements

A minor in maritime and supply chain management requires the completion of 12 hours of 300- and/or 400-level maritime and supply chain management courses. All courses selected must be preceded by listed prerequisites. The minor requires completion of:

OPMT 303	Operations Management	3
MSCM 370	International Shipping	3

437 Maritime and Supply Chain Management Minor

or MSCM 441	Supply Chain Management and Logistics
Select two of the following:	
MSCM 370	International Shipping
MSCM 415	Maritime Security and Risk Analysis
MSCM 430	Strategic Sourcing and Purchasing Management
MSCM 439	Quality Management
MSCM 441	Supply Chain Management and Logistics
MSCM 468	Distribution Center and Material Handling Management
MSCM 471	Shipping Management
MSCM 472	Port Management
MSCM 473	Inland Waterway and Intermodal Transportation
MSCM 495	Topics in Maritime and Supply Chain Management
MSCM 497	Independent Study

Total Credit Hours **12**

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses required for the minor exclusive of prerequisite courses. A minimum of six hours in upper-level courses in the minor must be completed through courses offered by Old Dominion University.

Management

Programs

Bachelor of Science in Business Administration Programs

- Management (BSBA) (p. 437)
- Management with a Major in Entrepreneurship (BSBA) (p. 443)
- Management with a Major in Human Resource Management (BSBA) (p. 449)
- Management with a Major in International Business (BSBA) (p. 455)

Minor Programs

- Entrepreneurship Minor (p. 460)
- International Business Minor (p. 461)
- Management Minor (p. 461)

Certificate Program

- Entrepreneurship Certificate (p. 462)

Bachelor of Science in Business Administration Management (BSBA)

Web Site: <https://www.odu.edu/business/departments/management> (<https://www.odu.edu/business/departments/management/>)

Chair of Management Department:

Shaomin Li
SLi@odu.edu

Chief Departmental Advisor and Management Area Coordinator:

Jennifer Klingner
JLKlinge@odu.edu

Faculty Advisor and Entrepreneurship Area Coordinator:

Karen Eagle
KEagle@odu.edu

A major in Management (MGMT) is about understanding how people make things happen in the world. This major provides students with a

broad overview of how to work within and manage companies, non-profits, and other teams. Recognizing that most graduates will face several career changes and job choices, the management major prepares students for success in a global economy by enhancing understanding about human behavior at work (organizational behavior), best practices and policies for managing people (human resource management), cultural differences and economic differences across countries (international business), and how top-level strategic decisions impact organizations (business policy and strategy). A variety of management major elective options give students an opportunity to pursue their interests and focus in areas such as Human Resource Management, General Management, International Business, and/or Entrepreneurship.

For the major in management, all courses must be preceded by listed prerequisites. Students must earn a grade of C- or better in all required Management Major courses and Management Elective courses. To graduate, students will need at least a 2.0 GPA for their Management Major. A student who seeks a Bachelor of Science in Business Administration degree with a major in management from Old Dominion University must, in addition to meeting other requirements of the University, earn a minimum of 25 percent of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) through on- or off-campus instruction. This must include a minimum of 12 credit hours of upper-level MGMT and/or ENTR courses.

Strome College of Business (SCB) Center for Undergraduate Advising and Student Success

The mission of this office is to challenge and support students in self-exploration and, through advising, provide resources for them to develop an achievable plan for success. Our vision is for students to be aware of their academic, personal, and professional goals; empowered to pursue them; and confident in their ability to accomplish them.

Our professional advisors work with all Strome College of Business students regarding degree planning, changing majors, admissions, continuance, graduation requirements and required curricula for the majors and minors offered by the College.

Degree Requirements

Students in all of the Bachelor of Science in Business Administration degree programs must fulfill the University General Education requirements (including foreign language) as well as the Strome College of Business's core, major, and elective requirements. Students must choose at least one major area to meet requirements towards the degree.

To stay in compliance with AACSB accreditation standards, students receiving a Bachelor of Science in Business Administration from Old Dominion University must complete at least half of their business course work in residence with a minimum of four courses in their declared major. This equates to 10 business classes, thus meeting the University's residency requirement as well.

Majors in the college may not take business and public administration courses for pass/fail credit except those courses in which pass/fail is the only grading option (i.e., internships and practica).

Admission to the Undergraduate Program in Business Administration

General Requirements

Applicants for admission to the undergraduate degree program in business administration (the Bachelor of Science in Business Administration) should apply initially to the Office of Admissions of Old Dominion University. Students cannot be accepted into business administration without first being admitted to the University. Admission to the University does not guarantee admission to the Bachelor of Science in Business Administration (BSBA) program. Candidates for admission to the BSBA program should indicate on the application to the University their intention to enter the undergraduate business administration degree program.

Admission to the Bachelor's Degree Program in Business Administration:

Before Admission to the bachelor's degree program in business administration can be granted, a student must have earned a grade of C or higher in each of the business Admission courses:

BUSN 110	Introduction to Contemporary Business	1
ENGL 110C	English Composition	3
MATH 162M	Precalculus I	3
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3

- BUSN 110 is not required for students pursuing majors under the BSBA in Information Systems and Technology (excluding Business Analytics) or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
- Students may utilize the Grade Forgiveness Policy for the business Admission courses.
- Transfer students may complete business Admission courses (BUSN 110, ENGL 110C, MATH 162M, ACCT 201, and ECON 202S) at another accredited college or university, but are responsible for having Transfer Evaluation Services determine that the courses are acceptable to the University.

Eligibility to Enroll in Upper-Level (300/400-level) Business Courses

Only students who have officially completed Admission courses to the BSBA program will be eligible to enroll in upper-level (300/400) business courses (refer to exceptions for non-business majors). However, students who are in progress with the business Admission courses may enroll in upper-level (300/400) business courses. Note: These students will need a Program Restriction Waiver (PRW) to enroll in these courses, with the exception of FIN 323, MGMT 325, MKTG 311, and OPMT 303. These courses require a junior class standing for registration.

Enrollment in 300/400-level Business Courses by Non-Business Majors

Enrollment in 300/400-level business courses will be granted without the Admission courses for the following exceptions:

1. Students pursuing a declared minor in the Strome College of Business may enroll in 300/400-level business courses appropriate to the minor.
2. Students pursuing Upper-Division General Education Requirement Option B: Interdisciplinary Minor or Option D: Six hours of elective upper-division courses outside the student's major discipline or college.
3. Students wishing to satisfy the Impact of Technology requirement may enroll in IT 360T.
4. Students pursuing a degree program other than the Bachelor of Science in Business Administration (BSBA) that requires or accepts specific 300/400-level business courses to complete the degree may enroll in the courses appropriate to the major.
5. Non-degree-seeking students may enroll in 300/400-level business courses if they have satisfied the prerequisites for these courses.

Students in categories 1 - 5 above who do not have a declared major will need a Program Restriction Waiver (PRW) in order to enroll in any 300/400-level Strome College of Business course (including Economics courses). Forms to request a PRW are available at the Strome College of Business website.

Regulations for Continuance in the Bachelor of Science in Business Administration

In addition to the Old Dominion University continuance policies, the following policies are specific to all declared Bachelor of Science in Business Administration (BSBA) students. The Strome College of Business

makes a reasonable effort to notify undergraduate students who are not in good academic standing in the BSBA program of their academic status. Each undergraduate student who is placed on BSBA Academic Alarm or BSBA Termination (explained below) will be sent an e-mail message to that effect at the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business. Non-receipt of the e-mail messages by a student will not be considered grounds for granting exceptions or delays in enforcement of the BSBA continuance regulations.

BSBA Continuance Regulations

If a student's Grade Point Average (GPA) in their BSBA Core courses falls below a 2.0, then they will be on Academic Alarm within the Strome College of Business (SCB). This policy is very similar to the University's academic continuance policy, the main difference being that it is based on the core Business courses and impacts acceptance and continuance within the SCB.

Academic Alarm

The first semester in which a student's BSBA Core GPA drops to below a 2.0, they will be on Academic Alarm. Once considered on academic alarm within the college, taking courses within the BSBA Core is the only way to bring that GPA back up.

- If the student raises the BSBA Core GPA to above a 2.0, then they will no longer be on academic alarm.
- If the BSBA Core GPA does not reach a 2.0 but the semester average in the BSBA Core courses is a 2.0 or higher, then the student will remain on academic alarm and be able to continue within the SCB.

SCB Termination

While on academic alarm within the Strome College of Business, if the semester BSBA Core GPA falls below a 2.0, the student will be terminated from the SCB and their major coding will be changed from Business to Undecided. (Terminations will not be processed in summer semesters.)

Appeals

If you have been terminated, you may appeal the decision if you have extenuating circumstances and documentation to support your claim. To appeal, write a letter and include documentation of your circumstances to the Associate Dean of the Strome College of Business (Constant Hall, Suite 2004). There are specific details that need to be included with your appeal - for more information, please see the appeals process as described in the most recently issued catalog.

Guidelines for Filing a BSBA Termination Appeal

1. All students have the right to appeal their BSBA termination if they believe that extraordinary circumstances were the main reason for their poor academic performance. Notifications of pending BSBA termination are sent to the student's ODU email address and include information on the appeal process and deadlines. All BSBA termination appeals must be submitted electronically using the link provided in the email and will be reviewed by the SCB Termination Appeal Committee. Students are responsible for submitting their appeal by the stated deadline; late appeals will not be reviewed. Decisions of the Termination Appeal Committee may be appealed to the Associate Dean for Academic Programs in the Strome College of Business whose decision is final.
2. Appeals must be based on circumstances pertinent to the semesters in which the academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the terminated student. The appeal letter must provide sufficient detail and explanation regarding the following points because there is no face-to-face meeting with the Associate Dean for Academic Programs in the Strome College of Business. The decision of the Associate Dean is final. Students without documentation will not be allowed to appeal their termination. In order to be reviewed, an appeal letter must:

- a. Document the extraordinary circumstances such as a death in the family, medical complications or chronic conditions, personal or family emergency, overwhelming work schedules, dorm-mate conflict, or a personal relationship conflict that have adversely affected performance: i.e., a statement or letter from a physician, employer, family members, faculty, academic advisor, Counseling Services, or Educational Accessibility.
 - b. Explain how the extraordinary circumstances caused each semester of poor academic performance.
 - c. State the reasons why an official withdrawal was not requested.
 - d. Explain how the extraordinary circumstance(s) has been resolved.
 - e. Provide a plan of action to return to good BSBA academic standing.
3. Students who do not file a BSBA termination appeal or whose appeals are denied, are no longer eligible to pursue a bachelor's degree in Business Administration. Upon BSBA termination, the student's major in the Strome College of Business will be removed. (This does not affect a declared second major outside of the BSBA.) These students are advised to work with an advisor in the SCB Center for Undergraduate Advising to explore other major options, and for referrals to other advising departments for a new major declaration.
 4. BSBA-terminated students who had pre-registered for a subsequent semester lose eligibility for continued enrollment in upper-level business courses.

Applying for Readmission to the BSBA Program

After a minimum of five years has passed since a student was terminated from the BSBA program, the student may apply for readmission to the program. There must be a high probability the student will successfully complete the degree program, and approval will be at the discretion of the Strome College of Business Associate Dean.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication: COMM 101R or MKTG 200R required. Additionally, all students majoring in business administration can expect to complete several courses in which individual and/or group oral presentations will be required.

Mathematics: MATH 162M and MATH 200 required.

Information Literacy and Research: IT 150G (recommended) or any "G" course from the approved general education information literacy and research course list.

Human Behavior: Met in the Business Administration core for all majors except Economics.

Philosophy and Ethics must be satisfied by completion of either PHIL 230E or an upper-level "E" course from the approved general education ethics course list. A philosophy course designated with a P will not meet this requirement for business administration students with the exception of a "P" course taken prior to fall 2010.

Impact of Technology requirement is satisfied within each BSBA degree major except Information Systems and Technology by IT 360T. In the Information Systems and Technology majors (excluding Business Analytics), the Impact of Technology requirement is satisfied by the coursework required for the major.

Transfer students with an applicable associate's degree from a Virginia Community College or another community college that has a seamless transfer agreement with ODU, and students with a prior bachelor's degree from another university, must nevertheless have a grade of C or better in the following to be able to transfer them:

COMM 101R	Public Speaking	3
or MKTG 200R	Professional Interactions and Negotiations	
PHIL 230E	Introduction to Ethics (Or an upper-level ethics course)	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3

Upper-Division General Education

- Option A. Any University-approved minor, second degree, or second major.
- Option B. An interdisciplinary minor consisting of 12 credits, three of which can be in the major. Interdisciplinary minors are described in the University Catalog section labeled Requirements for Undergraduate Degrees, Upper-Division Requirements.
- Option C. An approved certification program, such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the Strome College of Business and not required by the major (6 credits).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Business Administration Core

ACCT 201	Principles of Financial Accounting *	3
ACCT 202	Principles of Managerial Accounting *	3

BNAL 206	Business Analytics I *	3
BNAL 306	Business Analytics II	3
ECON 201S	Principles of Macroeconomics *	3
ECON 202S	Principles of Microeconomics *	3
ECON 301	Managerial Economics	3
FIN 323	Introductory Financial Management	3
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology **	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 485W	Business Policy and Strategy (C or better) ***	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
Total Credit Hours		42

- * Not automatically waived for transfer students with an applicable associate's degree from a Virginia Community College or another acceptable community college, or for students with a prior bachelor's degree from another university. A grade of C or better must be earned to transfer these courses to Old Dominion University.
- ** Students completing a major or minor in Information Systems and Technology (excluding the Business Analytics major) do not take this course.
- *** Students majoring in Economics must complete MGMT 485W, but meet the writing intensive requirement by earning a grade of C or better either in MGMT 485W or in one of the ECON Writing Intensive courses.

Management Major

A grade of C- or better is required in all management courses counted toward the major.

General Education

Complete lower-division requirements		35-41
Complete upper-division requirements (minimum of 6 credit hours)		6
BUSN 110	Introduction to Contemporary Business *	1
MATH 200	Calculus for Business and Economics	3

Business Administration Core

Complete business administration core requirements		42
Management Major		
MGMT 330	Organizational Behavior	3
MGMT 340	Human Resource Management	3
MGMT 361	International Business Operations	3
Select four of the following MGMT or ENTR Electives:		12

MGMT 327	Business Communication
MGMT 336	International Entrepreneurship
MGMT 350	Employee Relations Problems and Practices
MGMT 360	Labor Management Relations
MGMT 368	Management Internship
MGMT 410	Leadership in Organizations
MGMT 417	Employment Law
MGMT 418	Advanced Human Resource Management: Contemporary Issues
MGMT 420	Business Development
MGMT 424	Technology and Innovation Management
MGMT 427	Business and Society
MGMT 430	Compensation Management
MGMT 440	Human Resource Staffing Strategies
MGMT 450	Performance Measurement and Management
MGMT 452	Negotiations and Change Management

MGMT 460	Human Resource Analytics	
MGMT 462	Comparative International Management	
MGMT 463	Management Seminar Abroad	
MGMT 465	SHRM Learning System	
MGMT 490	Management Consulting	
MGMT 495	Selected Topics in Management	
ENTR 301	Fundamentals of Entrepreneurship	
ENTR 410	Small Business Management	
ENTR 440	Digital Entrepreneurship: New Venture Creation	
200-400 Level Free Elective		3
300-400 Level Free Elective		3
Free Electives		6
Total Credit Hours		120-126

* Not required for students pursuing the IT major or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.

All 300-400 level MGMT courses, except for MGMT 325 and MGMT 485W, are included in the calculation of the 2.00 overall grade point average for major course work for graduation.

Additional Requirements and Information

Advanced Placement

The college accepts advanced placement credit in accordance with the rules and regulations outlined in the Academic Information section of this catalog. Students may take College-Level Examination Program (CLEP) tests to receive credit for:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
FIN 331	Legal Environment of Business	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3

Students are advised to contact the Office of Prior Learning Assessment for more information regarding CLEP and other prior learning assessment credit options. For advanced placement credit in any other business or public administration course, students are advised to contact the chair of the department offering the course. Additional information about credit awarded for qualifying scores on AP and IB subject examinations can be found on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Practical Work Experience for Business Administration Majors

Students may complement their major studies with a practical work experience, which may take the form of an internship, cooperative education experience or a class containing a real-world, hands-on project. Students must apply for internship or co-op participation through the Strome College of Business Career & Leadership Development Satellite Office. All work experiences must be approved by the faculty sponsor in the appropriate department prior to registering for credit. Students may not earn credit for previous or current work experiences. (However, academic credit for work experience may be approved in accordance with the policies for granting prior learning credit as defined in the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this catalog.) For details see the Center for Career & Leadership Development section of this catalog.

Use of Internship and Similar Hours Toward Business Administration Majors

A student may apply no more than six hours of cooperative education, student internship or practicum courses to satisfy degree requirements. Students may not use more than three hours of cooperative education, student internship or practicum courses to satisfy major elective requirements in each of the students' majors. These courses are numbered 367, 368 or 369. Additional hours of cooperative education, student internship or practicum courses, however, can be used to satisfy other requirements such as free electives or general business electives. Additional internships must each involve substantially different kinds of work experiences. Internships must be approved by the Chief Departmental Advisor of the student's major and the CAP Coordinator of the internship.

Transfer of the Associate of Science in Business Administration Towards Degree Requirements

Students transferring to the college must complete a minimum of 10 business courses offered by the college to earn the degree from Old Dominion University, in accordance with AACSB regulations. Those transfer students holding the Associate of Science in Business Administration degree from a Virginia Community College must earn the grade of "C" or better in the following courses in order to satisfy requirements found in the first two years of the BSBA degree:

COMM 101R	Public Speaking	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
BNAL 206	Business Analytics I	3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
Upper-level ethics course		

With the exception of the courses listed above, the University's lower-division General Education requirements are deemed satisfied by the accepted AS degrees. These typically include all AS degrees from the Virginia Community College System except the applied science degrees. For more information about accepted AS degrees contact the Office of Admissions. Associate degree holders, although meeting lower-level General Education requirements, must ensure that 120 credits are completed to earn the BSBA degree. A minimum of 25% of the required credit hours must be completed through Old Dominion University, at least 12 of which are upper-level courses in the major program.

The Strome College of Business does not accept courses completed at the freshman and sophomore levels at other institutions for required courses at the junior and senior level at Old Dominion University. Please see the section on CLEP credits (Prior Learning Assessment Credit Options at the Undergraduate Level) for additional information.

Grade Average Requirements for Graduation

To graduate with a Bachelor of Science in Business Administration degree, students must present a minimum of 120 hours with a minimum overall grade point average of 2.00 in all courses taken at Old Dominion University. Students must also attain a minimum overall grade point average of 2.00 in courses taken toward the major (courses included in the major grade point average calculation are listed following the description of each major's course work).

Additionally, students must attain a minimum overall grade point average of 2.00 in the BSBA Core listed below. Only courses completed at Old Dominion University will be used to compute the BSBA Core average. Students with an Information Systems and Technology major (excluding Business Analytics) are not required to take IT 360T, so the BSBA Core

grade point average is computed using the remaining courses. If the BSBA Core average is below the required 2.00 minimum, students are advised to utilize the Grade Forgiveness Policy or Adjusted Resident Credit option when appropriate to improve the grade point average.

Requirements for Completing a Bachelor of Science in Business Administration

The following sections show the courses that are requirements for all business students, regardless of the chosen major: Lower-Division General Education, BSBA Core Courses, and Upper-Division General Education. Credit hours are listed after the course title. The student must also choose a major and complete the requirements listed for that major on the following pages.

Foundation Courses for Admission to the Strome College of Business

ENGL 110C	English Composition (C or better)	3
MATH 162M	Precalculus I (C or better)	3
ACCT 201	Principles of Financial Accounting (C or better)	3
ECON 202S	Principles of Microeconomics (C or better)	3
BUSN 110	Introduction to Contemporary Business *	1

* Not required for students pursuing an Information Systems and Technology major (excluding Business Analytics) or for students with an associate's degree in business administration or with a prior bachelor's degree in business administration.

See the section on Admission to the Undergraduate Program in Business Administration, General Requirements.

Business Elective

A business elective is a course that is offered by an accredited college of business, including the Strome College of Business at Old Dominion University. Public Affairs and Service (PAS) courses offered by the Strome College of Business are not considered as business courses. However, because some business courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate business elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Free Elective

In the majority of cases a free elective is any course offered by an accredited community college or university, including Old Dominion University. However, because some courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
MATH 162M	Precalculus I (C or better required)	3
Language and Culture I (May be waived; see requirement details)		0-3
BUSN 110	Introduction to Contemporary Business (C or better required)	1
Nature of Science I		4
Free Elective		3
Credit Hours		14-17
Spring		
MATH 200	Calculus for Business and Economics	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Language and Culture II (May be waived; see requirement details)		0-3
Nature of Science II		4
Interpreting the Past		3
Credit Hours		13-16
Sophomore		
Fall		
Literature		3
Oral Communication: COMM 101R or MKTG 200R required		3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL/DASC 357E	Ethics and Data	
PHIL 442E	Studies in Applied Ethics	
ACCT 201	Principles of Financial Accounting (C or better required)	3
ECON 202S	Principles of Microeconomics (C or better required)	3
Credit Hours		15
Spring		
Human Creativity		3
Information Literacy and Research		3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
BNAL 206	Business Analytics I	3
Credit Hours		15
Junior		
Fall		
BNAL 306	Business Analytics II	3

FIN 323	Introductory Financial Management	3
IT 360T	Principles of Information Technology	3
MGMT 325	Contemporary Organizations and Management (C- or better required)	3
MKTG 311	Marketing Principles and Problems	3
Credit Hours		15
Spring		
OPMT 303	Operations Management	3
FIN 331	Legal Environment of Business	3
ECON 301	Managerial Economics	3
MGMT 330	Organizational Behavior (C- or better required)	3
MGMT 340	Human Resource Management (C- or better required)	3
Free Elective		3
Credit Hours		18
Senior		
Fall		
MGMT 485W	Business Policy and Strategy (C or better required)	3
MGMT 361	International Business Operations (C- or better required)	3
MGMT Major Elective (C- or better required)		3
MGMT Major Elective (C- or better required)		3
Upper-Division General Education		3
Credit Hours		15
Spring		
MGMT Major Elective (C- or better required)		3
MGMT Major Elective (C- or better required)		3
200-400 Level Free Elective		3
300-400 Level Free Elective		3
Upper-Division General Education		3
Credit Hours		15
Total Credit Hours		120-126

BSBA to MBA (Master of Business Administration) Linked Program

Students interested in the program should contact the MBA Program Office as early as possible to discuss their plans for early entry. Once admitted to the program, the MBA program manager will act as the student's co-advisor, along with the chief departmental advisor or chief discipline advisor in the student's undergraduate major. The MBA Program Office is located in 1026 Constant Hall. The phone number is 757-683-3585 and email is mbainfo@odu.edu.

BSBA to MPA (Master of Public Administration) Linked Program

The linked BSBA to MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking 12 credits of the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors,

but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

A potential candidate will have:

1. Completed all lower level general education requirements
2. Achieved a cumulative GPA of at least 3.0 at the end of the junior year

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog. For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science in Business Administration Management with a Major in Entrepreneurship (BSBA)

Web Site: <https://www.odu.edu/management-a-major-entrepreneurship-bsba> (<https://www.odu.edu/management-a-major-entrepreneurship-bsba/>)

Chair of Management Department:

Shaomin Li
SLi@odu.edu

Faculty Advisor & Entrepreneurship Area Coordinator:

Karen Eagle
KEagle@odu.edu

A major in entrepreneurship allows students to practice their own creative talents while applying fundamental business concepts. Students learn to embrace uncertainty, overcome challenges, create value, and develop an entrepreneurial mindset to make a difference in the world and in the marketplace. Courses give students the information, abilities, and entrepreneurial spirit necessary to start their own businesses, take on leadership roles in already-existing enterprises, manage small and family-owned firms, and approach difficult problems with new perspectives, making them more equipped to handle the demands of the modern economy, which is fast-paced and unpredictable, and where success is determined by the ability to see opportunities, innovate, and move quickly to market.

Strome College of Business (SCB) Center for Undergraduate Advising and Student Success

The mission of this office is to challenge and support students in self-exploration and, through advising, provide resources for them to develop an achievable plan for success. Our vision is for students to be aware of their academic, personal, and professional goals; empowered to pursue them; and confident in their ability to accomplish them.

Our professional advisors work with all Strome College of Business students regarding degree planning, changing majors, admissions, continuance, graduation requirements and required curricula for the majors and minors offered by the College.

Degree Requirements

Students in all of the Bachelor of Science in Business Administration degree programs must fulfill the University General Education requirements (including foreign language) as well as the Strome College of Business's core, major, and elective requirements. Students must choose at least one major area to meet requirements towards the degree.

To stay in compliance with AACSB accreditation standards, students receiving a Bachelor of Science in Business Administration from Old Dominion University must complete at least half of their business course

work in residence with a minimum of four courses in their declared major. This equates to 10 business classes, thus meeting the University's residency requirement as well.

Majors in the college may not take business and public administration courses for pass/fail credit except those courses in which pass/fail is the only grading option (i.e., internships and practica).

Admission to the Undergraduate Program in Business Administration

General Requirements

Applicants for admission to the undergraduate degree program in business administration (the Bachelor of Science in Business Administration) should apply initially to the Office of Admissions of Old Dominion University. Students cannot be accepted into business administration without first being admitted to the University. Admission to the University does not guarantee admission to the Bachelor of Science in Business Administration (BSBA) program. Candidates for admission to the BSBA program should indicate on the application to the University their intention to enter the undergraduate business administration degree program.

Admission to the Bachelor's Degree Program in Business Administration:

Before Admission to the bachelor's degree program in business administration can be granted, a student must have earned a grade of C or higher in each of the business Admission courses:

BUSN 110	Introduction to Contemporary Business	1
ENGL 110C	English Composition	3
MATH 162M	Precalculus I	3
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3

- BUSN 110 is not required for students pursuing majors under the BSBA in Information Systems and Technology (excluding Business Analytics) or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
- Students may utilize the Grade Forgiveness Policy for the business Admission courses.
- Transfer students may complete business Admission courses (BUSN 110, ENGL 110C, MATH 162M, ACCT 201, and ECON 202S) at another accredited college or university, but are responsible for having Transfer Evaluation Services determine that the courses are acceptable to the University.

Eligibility to Enroll in Upper-Level (300/400-level) Business Courses

Only students who have officially completed Admission courses to the BSBA program will be eligible to enroll in upper-level (300/400) business courses (refer to exceptions for non-business majors).

However, students who are in progress with the business Admission courses may enroll in upper-level (300/400) business courses. Note: These students will need a Program Restriction Waiver (PRW) to enroll in these courses, with the exception of FIN 323, MGMT 325, MKTG 311, and OPMT 303. These courses require a junior class standing for registration.

Enrollment in 300/400-level Business Courses by Non-Business Majors

Enrollment in 300/400-level business courses will be granted without the Admission courses for the following exceptions:

1. Students pursuing a declared minor in the Strome College of Business may enroll in 300/400-level business courses appropriate to the minor.
2. Students pursuing Upper-Division General Education Requirement Option B: Interdisciplinary Minor or Option D: Six hours of elective upper-division courses outside the student's major discipline or college.

3. Students wishing to satisfy the Impact of Technology requirement may enroll in IT 360T.

4. Students pursuing a degree program other than the Bachelor of Science in Business Administration (BSBA) that requires or accepts specific 300/400-level business courses to complete the degree may enroll in the courses appropriate to the major.

5. Non-degree-seeking students may enroll in 300/400-level business courses if they have satisfied the prerequisites for these courses.

Students in categories 1 - 5 above who do not have a declared major will need a Program Restriction Waiver (PRW) in order to enroll in any 300/400-level Strome College of Business course (including Economics courses). Forms to request a PRW are available at the Strome College of Business website.

Regulations for Continuance in the Bachelor of Science in Business Administration

In addition to the Old Dominion University continuance policies, the following policies are specific to all declared Bachelor of Science in Business Administration (BSBA) students. The Strome College of Business makes a reasonable effort to notify undergraduate students who are not in good academic standing in the BSBA program of their academic status. Each undergraduate student who is placed on BSBA Academic Alarm or BSBA Termination (explained below) will be sent an e-mail message to that effect at the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business. Non-receipt of the e-mail messages by a student will not be considered grounds for granting exceptions or delays in enforcement of the BSBA continuance regulations.

BSBA Continuance Regulations

If a student's Grade Point Average (GPA) in their BSBA Core courses falls below a 2.0, then they will be on Academic Alarm within the Strome College of Business (SCB). This policy is very similar to the University's academic continuance policy, the main difference being that it is based on the core Business courses and impacts acceptance and continuance within the SCB.

Academic Alarm

The first semester in which a student's BSBA Core GPA drops to below a 2.0, they will be on Academic Alarm. Once considered on academic alarm within the college, taking courses within the BSBA Core is the only way to bring that GPA back up.

- If the student raises the BSBA Core GPA to above a 2.0, then they will no longer be on academic alarm.
- If the BSBA Core GPA does not reach a 2.0 but the semester average in the BSBA Core courses is a 2.0 or higher, then the student will remain on academic alarm and be able to continue within the SCB.

SCB Termination

While on academic alarm within the Strome College of Business, if the semester BSBA Core GPA falls below a 2.0, the student will be terminated from the SCB and their major coding will be changed from Business to Undecided. (Terminations will not be processed in summer semesters.)

Appeals

If you have been terminated, you may appeal the decision if you have extenuating circumstances and documentation to support your claim. To appeal, write a letter and include documentation of your circumstances to the Associate Dean of the Strome College of Business (Constant Hall, Suite 2004). There are specific details that need to be included with your appeal - for more information, please see the appeals process as described in the most recently issued catalog.

Guidelines for Filing a BSBA Termination Appeal

1. All students have the right to appeal their BSBA termination if they believe that extraordinary circumstances were the main reason for their poor

academic performance. Notifications of pending BSBA termination are sent to the student's ODU email address and include information on the appeal process and deadlines. All BSBA termination appeals must be submitted electronically using the link provided in the email and will be reviewed by the SCB Termination Appeal Committee. Students are responsible for submitting their appeal by the stated deadline; late appeals will not be reviewed. Decisions of the Termination Appeal Committee may be appealed to the Associate Dean for Academic Programs in the Strome College of Business whose decision is final.

2. Appeals must be based on circumstances pertinent to the semesters in which the academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the terminated student. The appeal letter must provide sufficient detail and explanation regarding the following points because there is no face-to-face meeting with the Associate Dean for Academic Programs in the Strome College of Business. The decision of the Associate Dean is final. Students without documentation will not be allowed to appeal their termination. In order to be reviewed, an appeal letter must:

- Document the extraordinary circumstances such as a death in the family, medical complications or chronic conditions, personal or family emergency, overwhelming work schedules, dorm-mate conflict, or a personal relationship conflict that have adversely affected performance: i.e., a statement or letter from a physician, employer, family members, faculty, academic advisor, Counseling Services, or Educational Accessibility.
- Explain how the extraordinary circumstances caused each semester of poor academic performance.
- State the reasons why an official withdrawal was not requested.
- Explain how the extraordinary circumstance(s) has been resolved.
- Provide a plan of action to return to good BSBA academic standing.

3. Students who do not file a BSBA termination appeal or whose appeals are denied, are no longer eligible to pursue a bachelor's degree in Business Administration. Upon BSBA termination, the student's major in the Strome College of Business will be removed. (This does not affect a declared second major outside of the BSBA.) These students are advised to work with an advisor in the SCB Center for Undergraduate Advising to explore other major options, and for referrals to other advising departments for a new major declaration.

4. BSBA-terminated students who had pre-registered for a subsequent semester lose eligibility for continued enrollment in upper-level business courses.

Applying for Readmission to the BSBA Program

After a minimum of five years has passed since a student was terminated from the BSBA program, the student may apply for readmission to the program. There must be a high probability the student will successfully complete the degree program, and approval will be at the discretion of the Strome College of Business Associate Dean.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3

Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication: COMM 101R or MKTG 200R required. Additionally, all students majoring in business administration can expect to complete several courses in which individual and/or group oral presentations will be required.

Mathematics: MATH 162M and MATH 200 required.

Information Literacy and Research: IT 150G (recommended) or any "G" course from the approved general education information literacy and research course list.

Human Behavior: Met in the Business Administration core for all majors except Economics.

Philosophy and Ethics must be satisfied by completion of either PHIL 230E or an upper-level "E" course from the approved general education ethics course list. A philosophy course designated with a P will not meet this requirement for business administration students with the exception of a "P" course taken prior to fall 2010.

Impact of Technology requirement is satisfied within each BSBA degree major except Information Systems and Technology by IT 360T. In the Information Systems and Technology majors (excluding Business Analytics), the Impact of Technology requirement is satisfied by the coursework required for the major.

Transfer students with an applicable associate's degree from a Virginia Community College or another community college that has a seamless transfer agreement with ODU, and students with a prior bachelor's degree from another university, must nevertheless have a grade of C or better in the following to be able to transfer them:

COMM 101R	Public Speaking	3
or MKTG 200R	Professional Interactions and Negotiations	
PHIL 230E	Introduction to Ethics (Or an upper-level ethics course)	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3

Upper-Division General Education

- Option A. Any University-approved minor, second degree, or second major.
- Option B. An interdisciplinary minor consisting of 12 credits, three of which can be in the major. Interdisciplinary minors are described in the University Catalog section labeled Requirements for Undergraduate Degrees, Upper-Division Requirements.
- Option C. An approved certification program, such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the Strome College of Business and not required by the major (6 credits).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Business Administration Core

ACCT 201	Principles of Financial Accounting *	3
ACCT 202	Principles of Managerial Accounting *	3
BNAL 206	Business Analytics I *	3
BNAL 306	Business Analytics II	3
ECON 201S	Principles of Macroeconomics *	3
ECON 202S	Principles of Microeconomics *	3
ECON 301	Managerial Economics	3
FIN 323	Introductory Financial Management	3
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology **	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 485W	Business Policy and Strategy (C or better) ***	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
Total Credit Hours		42

- * Not automatically waived for transfer students with an applicable associate's degree from a Virginia Community College or another acceptable community college, or for students with a prior bachelor's degree from another university. A grade of C or better must be earned to transfer these courses to Old Dominion University.
- ** Students completing a major or minor in Information Systems and Technology (excluding the Business Analytics major) do not take this course.
- *** Students majoring in Economics must complete MGMT 485W, but meet the writing intensive requirement by earning a grade of C or better either in MGMT 485W or in one of the ECON Writing Intensive courses.

Entrepreneurship Major

Students must earn a grade of C- or better in all required Entrepreneurship Major core courses and Entrepreneurship Major Elective courses. To graduate, students will need at least a 2.0 GPA for their Entrepreneurship Major. Students in this major will take ENTR 490 - Entrepreneurship Capstone during their senior year at Old Dominion University.

General Education		
Complete lower-division requirements		35-41
Complete upper-division requirements		6
BUSN 110	Introduction to Contemporary Business *	1
MATH 200	Calculus for Business and Economics	3
Business Administration Core		
Complete business administration core requirements		42

Entrepreneurship Major Core Classes		
ENTR 201S	Introduction to Entrepreneurship	3
ENTR 301	Fundamentals of Entrepreneurship	3
ENTR 490	Entrepreneurship Capstone	3
Entrepreneurship Major Electives		
Select three of the following ENTR or MGMT Electives:		9
ENTR 368	Entrepreneurship Internship	
ENTR 410	Small Business Management	
ENTR 440	Digital Entrepreneurship: New Venture Creation	
MGMT 336	International Entrepreneurship	
MGMT 340	Human Resource Management	
MGMT 420	Business Development	
MGMT 424	Technology and Innovation Management	
MGMT 452	Negotiations and Change Management	
Select one of the following MKTG Electives:		3
MKTG 402	Consumer Behavior	
MKTG 455	Social Media Marketing	
MKTG 450	Marketing on the Internet	
200-400 Level Free Elective		3
300-400 Level Free Elective		3
Free Electives		6
Total Credit Hours		120-126

* Not required for students pursuing the IT major or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.

Additional Requirements and Information

Advanced Placement

The college accepts advanced placement credit in accordance with the rules and regulations outlined in the Academic Information section of this catalog. Students may take College-Level Examination Program (CLEP) tests to receive credit for:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
FIN 331	Legal Environment of Business	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3

Students are advised to contact the Office of Prior Learning Assessment for more information regarding CLEP and other prior learning assessment credit options. For advanced placement credit in any other business or public administration course, students are advised to contact the chair of the department offering the course. Additional information about credit awarded for qualifying scores on AP and IB subject examinations can be found on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Practical Work Experience for Business Administration Majors

Students may complement their major studies with a practical work experience, which may take the form of an internship, cooperative education experience or a class containing a real-world, hands-on project. Students must apply for internship or co-op participation through the Strome College of Business Career & Leadership Development Satellite Office. All work experiences must be approved by the faculty sponsor in the appropriate department prior to registering for credit. Students may not earn credit for previous or current work experiences. (However, academic credit for work

experience may be approved in accordance with the policies for granting prior learning credit as defined in the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this catalog.) For details see the Center for Career & Leadership Development section of this catalog.

Use of Internship and Similar Hours Toward Business Administration Majors

A student may apply no more than six hours of cooperative education, student internship or practicum courses to satisfy degree requirements. Students may not use more than three hours of cooperative education, student internship or practicum courses to satisfy major elective requirements in each of the students' majors. These courses are numbered 367, 368 or 369. Additional hours of cooperative education, student internship or practicum courses, however, can be used to satisfy other requirements such as free electives or general business electives. Additional internships must each involve substantially different kinds of work experiences. Internships must be approved by the Chief Departmental Advisor of the student's major and the CAP Coordinator of the internship.

Transfer of the Associate of Science in Business Administration Towards Degree Requirements

Students transferring to the college must complete a minimum of 10 business courses offered by the college to earn the degree from Old Dominion University, in accordance with AACSB regulations. Those transfer students holding the Associate of Science in Business Administration degree from a Virginia Community College must earn the grade of "C" or better in the following courses in order to satisfy requirements found in the first two years of the BSBA degree:

COMM 101R	Public Speaking	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
BNAL 206	Business Analytics I	3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
Upper-level ethics course		

With the exception of the courses listed above, the University's lower-division General Education requirements are deemed satisfied by the accepted AS degrees. These typically include all AS degrees from the Virginia Community College System except the applied science degrees. For more information about accepted AS degrees contact the Office of Admissions. Associate degree holders, although meeting lower-level General Education requirements, must ensure that 120 credits are completed to earn the BSBA degree. A minimum of 25% of the required credit hours must be completed through Old Dominion University, at least 12 of which are upper-level courses in the major program.

The Strome College of Business does not accept courses completed at the freshman and sophomore levels at other institutions for required courses at the junior and senior level at Old Dominion University. Please see the section on CLEP credits (Prior Learning Assessment Credit Options at the Undergraduate Level) for additional information.

Grade Average Requirements for Graduation

To graduate with a Bachelor of Science in Business Administration degree, students must present a minimum of 120 hours with a minimum overall grade point average of 2.00 in all courses taken at Old Dominion University. Students must also attain a minimum overall grade point average of 2.00 in courses taken toward the major (courses included in the major grade point average calculation are listed following the description of each major's course work).

Additionally, students must attain a minimum overall grade point average of 2.00 in the BSBA Core listed below. Only courses completed at Old Dominion University will be used to compute the BSBA Core average. Students with an Information Systems and Technology major (excluding Business Analytics) are not required to take IT 360T, so the BSBA Core grade point average is computed using the remaining courses. If the BSBA Core average is below the required 2.00 minimum, students are advised to utilize the Grade Forgiveness Policy or Adjusted Resident Credit option when appropriate to improve the grade point average.

Requirements for Completing a Bachelor of Science in Business Administration

The following sections show the courses that are requirements for all business students, regardless of the chosen major: Lower-Division General Education, BSBA Core Courses, and Upper-Division General Education. Credit hours are listed after the course title. The student must also choose a major and complete the requirements listed for that major on the following pages.

Foundation Courses for Admission to the Strome College of Business

ENGL 110C	English Composition (C or better)	3
MATH 162M	Precalculus I (C or better)	3
ACCT 201	Principles of Financial Accounting (C or better)	3
ECON 202S	Principles of Microeconomics (C or better)	3
BUSN 110	Introduction to Contemporary Business *	1

* Not required for students pursuing an Information Systems and Technology major (excluding Business Analytics) or for students with an associate's degree in business administration or with a prior bachelor's degree in business administration.

See the section on Admission to the Undergraduate Program in Business Administration, General Requirements.

Business Elective

A business elective is a course that is offered by an accredited college of business, including the Strome College of Business at Old Dominion University. Public Affairs and Service (PAS) courses offered by the Strome College of Business are not considered as business courses. However, because some business courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate business elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Free Elective

In the majority of cases a free elective is any course offered by an accredited community college or university, including Old Dominion University. However, because some courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
MATH 162M	Precalculus I (C or better required)	3
Language and Culture I (May be waived; see requirement details)		0-3
BUSN 110	Introduction to Contemporary Business (C or better required)	1
Nature of Science I		4
Free Elective		3
Credit Hours		14-17
Spring		
MATH 200	Calculus for Business and Economics	3
ENGL 211C	Writing, Rhetoric, and Research (C or better required)	3
Language and Culture II (May be waived; see requirement details)		0-3
Nature of Science II		4
Interpreting the Past		3
Credit Hours		13-16
Sophomore		
Fall		
Literature		3
Oral Communication: COMM 101R or MKTG 200R required		3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL/DASC 357E	Ethics and Data	
PHIL 442E	Studies in Applied Ethics	
ACCT 201	Principles of Financial Accounting (C or better required)	3
ECON 202S	Principles of Microeconomics (C or better required)	3
Credit Hours		15
Spring		
Human Creativity		3
Information Literacy and Research		3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
BNAL 206	Business Analytics I	3
Credit Hours		15
Junior		
Fall		
BNAL 306	Business Analytics II	3
ENTR 201S	Introduction to Entrepreneurship (C- or better required)	3

FIN 323	Introductory Financial Management	3
IT 360T	Principles of Information Technology	3
MGMT 325	Contemporary Organizations and Management (C- or better required)	3
Credit Hours		15
Spring		
ECON 301	Managerial Economics	3
ENTR 301	Fundamentals of Entrepreneurship (C- or better required)	3
FIN 331	Legal Environment of Business	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
Free Elective		3
Credit Hours		18
Senior		
Fall		
MGMT 485W	Business Policy and Strategy (C or better required)	3
ENTR Major Elective (C- or better required)		3
ENTR Major Elective (C- or better required)		3
200-400 Level Free Elective		3
Upper-Division General Education		3
Credit Hours		15
Spring		
ENTR 490	Entrepreneurship Capstone (C- or better required)	3
ENTR Major Elective (C- or better required)		3
ENTR Major Elective (C- or better required)		3
300-400 Level Free Elective		3
Upper-Division General Education		3
Credit Hours		15
Total Credit Hours		120-126

BSBA to MBA (Master of Business Administration) Linked Program

Students interested in the program should contact the MBA Program Office as early as possible to discuss their plans for early entry. Once admitted to the program, the MBA program manager will act as the student's co-advisor, along with the chief departmental advisor or chief discipline advisor in the student's undergraduate major. The MBA Program Office is located in 1026 Constant Hall. The phone number is 757-683-3585 and email is mbainfo@odu.edu.

BSBA to MPA (Master of Public Administration) Linked Program

The linked BSBA to MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking 12 credits of the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's

senior undergraduate year. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

A potential candidate will have:

1. Completed all lower level general education requirements
2. Achieved a cumulative GPA of at least 3.0 at the end of the junior year

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog. For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science in Business Administration Management with a Major in Human Resource Management (BSBA)

Web Site: <https://www.odu.edu/management-a-major-human-resource-management-bsba> (<https://www.odu.edu/management-a-major-human-resource-management-bsba/>)

Chair of Management Department:

Shaomin Li
SLi@odu.edu

Chief Departmental Advisor and Management Area Coordinator:

Jennifer Klinger
JLKlinge@odu.edu

Human Resource Management Area Coordinator:

Sheila Keener
SKeener@odu.edu

Director of ADP HCM (Human Capital Management) Academy:

Ryan Klinger
RKlinger@odu.edu

Designing and implementing policies, practices, and systems that optimize employee performance and cultivate positive work environments, **Human Resource Management** is the strategic approach to effectively managing people in organizations.

Why Earn a Degree in Human Resource Management?

A degree in human resource management paves the way for a variety of human resource jobs and specialist roles in analytics, talent acquisition, training and development, performance management, compensation and benefits management, employee relations, and diversity, equity, and inclusion. Whether you intend to pursue a career in human resources or aspire to any organizational leadership position, the knowledge and skills you develop in this program lay a solid foundation for career success.

What Skills and Knowledge Will You Learn?

Students learn best practices for managing, motivating, and supporting employees across all stages of the employment life cycle. Students learn how to create policies, practices, and systems to efficiently organize employee behavior and how to create team processes and workplace cultures to promote both employee well-being and business success. Students develop critical skills in communication, conflict management, and ethical decision making as well as acquire topically relevant knowledge about legal workplace issues, emerging technology, and evolving workplace trends. These skills and knowledge are both highly valued within human resources and transferable across career paths.

Program Highlights

The Department of Management has partnered with ADP, one of the region's largest private-sector employers and an industry-leading provider of Human Capital Management (HCM) solutions to create the ADP HCM Academy @ ODU to provide Human Resource Management majors with real-world skills, technology training, and networking opportunities to supplement traditional classroom learning. Highlights include:

1. **Cutting-Edge Curriculum:** Courses are designed and continuously modernized to reflect the latest trends and challenges in the field, including HR analytics, generative AI in the workplace, and evolving technological, global, and legal workplace trends.
2. **HR Technology Training:** Thanks to the unique partnership with ADP, all students receive free access to, and training on, ADP's award-winning and market-leading human resource management software: ADP Workforce Now. Students enter the workforce with valuable HRIS credentials and experience.
3. **Hands-on Learning:** The program emphasizes practical, hands-on learning through simulation projects, case studies, and real-world community consulting projects.
4. **Professional Certification Prep:** ODU's Human Resource Management curriculum is continuously evaluated by the international human resource accrediting body (the Society for Human Resource Management) to ensure that learning objectives are aligned with the field and students are prepared to earn professional certifications. As part of the program, students can take courses to prepare for the SHRM-CP (certified professional in human resources) exam or other specialized human resource certifications.
5. **Networking Opportunities:** Through partnerships with ADP, our active student SHRM club, and community professional human resource networks, the program offers students opportunities to connect with professional mentors and learn from leaders both within and outside the classroom. Thriving talent pipelines with organizations of all types ensure students have opportunities to complete internships and earn jobs.

Strome College of Business (SCB) Center for Undergraduate Advising and Student Success

The mission of this office is to challenge and support students in self-exploration and, through advising, provide resources for them to develop an achievable plan for success. Our vision is for students to be aware of their academic, personal, and professional goals; empowered to pursue them; and confident in their ability to accomplish them.

Our professional advisors work with all Strome College of Business students regarding degree planning, changing majors, admissions, continuance, graduation requirements and required curricula for the majors and minors offered by the College.

Degree Requirements

Students in all of the Bachelor of Science in Business Administration degree programs must fulfill the University General Education requirements (including foreign language) as well as the Strome College of Business's core, major, and elective requirements. Students must choose at least one major area to meet requirements towards the degree.

To stay in compliance with AACSB accreditation standards, students receiving a Bachelor of Science in Business Administration from Old Dominion University must complete at least half of their business course work in residence with a minimum of four courses in their declared major. This equates to 10 business classes, thus meeting the University's residency requirement as well.

Majors in the college may not take business and public administration courses for pass/fail credit except those courses in which pass/fail is the only grading option (i.e., internships and practica).

Admission to the Undergraduate Program in Business Administration

General Requirements

Applicants for admission to the undergraduate degree program in business administration (the Bachelor of Science in Business Administration) should apply initially to the Office of Admissions of Old Dominion University. Students cannot be accepted into business administration without first being admitted to the University. Admission to the University does not guarantee admission to the Bachelor of Science in Business Administration (BSBA) program. Candidates for admission to the BSBA program should indicate on the application to the University their intention to enter the undergraduate business administration degree program.

Admission to the Bachelor's Degree Program in Business Administration:

Before Admission to the bachelor's degree program in business administration can be granted, a student must have earned a grade of C or higher in each of the business Admission courses:

BUSN 110	Introduction to Contemporary Business	1
ENGL 110C	English Composition	3
MATH 162M	Precalculus I	3
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3

- BUSN 110 is not required for students pursuing majors under the BSBA in Information Systems and Technology (excluding Business Analytics) or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
- Students may utilize the Grade Forgiveness Policy for the business Admission courses.
- Transfer students may complete business Admission courses (BUSN 110, ENGL 110C, MATH 162M, ACCT 201, and ECON 202S) at another accredited college or university, but are responsible for having Transfer Evaluation Services determine that the courses are acceptable to the University.

Eligibility to Enroll in Upper-Level (300/400-level) Business Courses

Only students who have officially completed Admission courses to the BSBA program will be eligible to enroll in upper-level (300/400) business courses (refer to exceptions for non-business majors).

However, students who are in progress with the business Admission courses may enroll in upper-level (300/400) business courses. Note: These students will need a Program Restriction Waiver (PRW) to enroll in these courses, with the exception of FIN 323, MGMT 325, MKTG 311, and OPMT 303. These courses require a junior class standing for registration.

Enrollment in 300/400-level Business Courses by Non-Business Majors

Enrollment in 300/400-level business courses will be granted without the Admission courses for the following exceptions:

1. Students pursuing a declared minor in the Strome College of Business may enroll in 300/400-level business courses appropriate to the minor.
2. Students pursuing Upper-Division General Education Requirement Option B: Interdisciplinary Minor or Option D: Six hours of elective upper-division courses outside the student's major discipline or college.
3. Students wishing to satisfy the Impact of Technology requirement may enroll in IT 360T.
4. Students pursuing a degree program other than the Bachelor of Science in Business Administration (BSBA) that requires or accepts specific 300/400-level business courses to complete the degree may enroll in the courses appropriate to the major.

5. Non-degree-seeking students may enroll in 300/400-level business courses if they have satisfied the prerequisites for these courses.

Students in categories 1 - 5 above who do not have a declared major will need a Program Restriction Waiver (PRW) in order to enroll in any 300/400-level Strome College of Business course (including Economics courses). Forms to request a PRW are available at the Strome College of Business website.

Regulations for Continuance in the Bachelor of Science in Business Administration

In addition to the Old Dominion University continuance policies, the following policies are specific to all declared Bachelor of Science in Business Administration (BSBA) students. The Strome College of Business makes a reasonable effort to notify undergraduate students who are not in good academic standing in the BSBA program of their academic status. Each undergraduate student who is placed on BSBA Academic Alarm or BSBA Termination (explained below) will be sent an e-mail message to that effect at the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business. Non-receipt of the e-mail messages by a student will not be considered grounds for granting exceptions or delays in enforcement of the BSBA continuance regulations.

BSBA Continuance Regulations

If a student's Grade Point Average (GPA) in their BSBA Core courses falls below a 2.0, then they will be on Academic Alarm within the Strome College of Business (SCB). This policy is very similar to the University's academic continuance policy, the main difference being that it is based on the core Business courses and impacts acceptance and continuance within the SCB.

Academic Alarm

The first semester in which a student's BSBA Core GPA drops to below a 2.0, they will be on Academic Alarm. Once considered on academic alarm within the college, taking courses within the BSBA Core is the only way to bring that GPA back up.

- If the student raises the BSBA Core GPA to above a 2.0, then they will no longer be on academic alarm.
- If the BSBA Core GPA does not reach a 2.0 but the semester average in the BSBA Core courses is a 2.0 or higher, then the student will remain on academic alarm and be able to continue within the SCB.

SCB Termination

While on academic alarm within the Strome College of Business, if the semester BSBA Core GPA falls below a 2.0, the student will be terminated from the SCB and their major coding will be changed from Business to Undecided. (Terminations will not be processed in summer semesters.)

Appeals

If you have been terminated, you may appeal the decision if you have extenuating circumstances and documentation to support your claim. To appeal, write a letter and include documentation of your circumstances to the Associate Dean of the Strome College of Business (Constant Hall, Suite 2004). There are specific details that need to be included with your appeal - for more information, please see the appeals process as described in the most recently issued catalog.

Guidelines for Filing a BSBA Termination Appeal

1. All students have the right to appeal their BSBA termination if they believe that extraordinary circumstances were the main reason for their poor academic performance. Notifications of pending BSBA termination are sent to the student's ODU email address and include information on the appeal process and deadlines. All BSBA termination appeals must be submitted electronically using the link provided in the email and will be reviewed by the SCB Termination Appeal Committee. Students are responsible for submitting their appeal by the stated deadline; late appeals will not be reviewed. Decisions of the Termination Appeal Committee may be appealed

to the Associate Dean for Academic Programs in the Strome College of Business whose decision is final.

2. Appeals must be based on circumstances pertinent to the semesters in which the academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the terminated student. The appeal letter must provide sufficient detail and explanation regarding the following points because there is no face-to-face meeting with the Associate Dean for Academic Programs in the Strome College of Business. The decision of the Associate Dean is final. Students without documentation will not be allowed to appeal their termination. In order to be reviewed, an appeal letter must:

- Document the extraordinary circumstances such as a death in the family, medical complications or chronic conditions, personal or family emergency, overwhelming work schedules, dorm-mate conflict, or a personal relationship conflict that have adversely affected performance: i.e., a statement or letter from a physician, employer, family members, faculty, academic advisor, Counseling Services, or Educational Accessibility.
- Explain how the extraordinary circumstances caused each semester of poor academic performance.
- State the reasons why an official withdrawal was not requested.
- Explain how the extraordinary circumstance(s) has been resolved.
- Provide a plan of action to return to good BSBA academic standing.

3. Students who do not file a BSBA termination appeal or whose appeals are denied, are no longer eligible to pursue a bachelor's degree in Business Administration. Upon BSBA termination, the student's major in the Strome College of Business will be removed. (This does not affect a declared second major outside of the BSBA.) These students are advised to work with an advisor in the SCB Center for Undergraduate Advising to explore other major options, and for referrals to other advising departments for a new major declaration.

4. BSBA-terminated students who had pre-registered for a subsequent semester lose eligibility for continued enrollment in upper-level business courses.

Applying for Readmission to the BSBA Program

After a minimum of five years has passed since a student was terminated from the BSBA program, the student may apply for readmission to the program. There must be a high probability the student will successfully complete the degree program, and approval will be at the discretion of the Strome College of Business Associate Dean.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3

Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication: COMM 101R or MKTG 200R required. Additionally, all students majoring in business administration can expect to complete several courses in which individual and/or group oral presentations will be required.

Mathematics: MATH 162M and MATH 200 required.

Information Literacy and Research: IT 150G (recommended) or any "G" course from the approved general education information literacy and research course list.

Human Behavior: Met in the Business Administration core for all majors except Economics.

Philosophy and Ethics must be satisfied by completion of either PHIL 230E or an upper-level "E" course from the approved general education ethics course list. A philosophy course designated with a P will not meet this requirement for business administration students with the exception of a "P" course taken prior to fall 2010.

Impact of Technology requirement is satisfied within each BSBA degree major except Information Systems and Technology by IT 360T. In the Information Systems and Technology majors (excluding Business Analytics), the Impact of Technology requirement is satisfied by the coursework required for the major.

Transfer students with an applicable associate's degree from a Virginia Community College or another community college that has a seamless transfer agreement with ODU, and students with a prior bachelor's degree from another university, must nevertheless have a grade of C or better in the following to be able to transfer them:

COMM 101R or MKTG 200R	Public Speaking Professional Interactions and Negotiations	3
PHIL 230E	Introduction to Ethics (Or an upper-level ethics course)	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research Writing, Rhetoric, and Research: Special Topics	3
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3

Upper-Division General Education

- Option A. Any University-approved minor, second degree, or second major.
- Option B. An interdisciplinary minor consisting of 12 credits, three of which can be in the major. Interdisciplinary minors are described in the University Catalog section labeled Requirements for Undergraduate Degrees, Upper-Division Requirements.
- Option C. An approved certification program, such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the Strome College of Business and not required by the major (6 credits).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Business Administration Core

ACCT 201	Principles of Financial Accounting *	3
ACCT 202	Principles of Managerial Accounting *	3
BNAL 206	Business Analytics I *	3
BNAL 306	Business Analytics II	3
ECON 201S	Principles of Macroeconomics *	3
ECON 202S	Principles of Microeconomics *	3
ECON 301	Managerial Economics	3
FIN 323	Introductory Financial Management	3
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology **	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 485W	Business Policy and Strategy (C or better) ***	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
Total Credit Hours		42

- * Not automatically waived for transfer students with an applicable associate's degree from a Virginia Community College or another acceptable community college, or for students with a prior bachelor's degree from another university. A grade of C or better must be earned to transfer these courses to Old Dominion University.
- ** Students completing a major or minor in Information Systems and Technology (excluding the Business Analytics major) do not take this course.
- *** Students majoring in Economics must complete MGMT 485W, but meet the writing intensive requirement by earning a grade of C or better either in MGMT 485W or in one of the ECON Writing Intensive courses.

Human Resource Management Major

Students must earn a grade of C- or better in all required Human Resource Management Major courses and Human Resource Management Elective courses. To graduate, students will need at least a 2.0 GPA for their Human Resource Management Major. Students in this major will take MGMT 460 Human Resource Analytics during their senior year at Old Dominion University.

General Education

Complete lower-division requirements		35-41
Complete upper-division requirements (minimum of 6 credit hours)		6
BUSN 110	Introduction to Contemporary Business *	1
MATH 200	Calculus for Business and Economics	3

Business Administration Core

Complete business administration core requirements	42

Human Resource Management Major Core Classes

MGMT 330	Organizational Behavior	3
MGMT 340	Human Resource Management	3
MGMT 361	International Business Operations	3
MGMT 460	Human Resource Analytics	3

Human Resource Management Major Electives

Select two of the following HR electives:	6

MGMT 350	Employee Relations Problems and Practices
MGMT 360	Labor Management Relations
MGMT 417	Employment Law
MGMT 418	Advanced Human Resource Management: Contemporary Issues
MGMT 430	Compensation Management
MGMT 440	Human Resource Staffing Strategies
MGMT 450	Performance Measurement and Management
MGMT 465	SHRM Learning System
INBU 437	International Human Resource Management

Select one of the following HR electives:	3

MGMT 327	Business Communication
MGMT 350	Employee Relations Problems and Practices
MGMT 360	Labor Management Relations
MGMT 368	Management Internship (with approval of Program Director)
MGMT 410	Leadership in Organizations
MGMT 417	Employment Law
MGMT 418	Advanced Human Resource Management: Contemporary Issues
MGMT 430	Compensation Management
MGMT 440	Human Resource Staffing Strategies
MGMT 450	Performance Measurement and Management
MGMT 452	Negotiations and Change Management
MGMT 465	SHRM Learning System
MGMT 490	Management Consulting
INBU 437	International Human Resource Management

200-400 Level Free Elective	3

300-400 Level Free Elective	3

Free Electives	6

Total Credit Hours	120-126

- * Not required for students pursuing the IT major or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.

All 300-400 level MGMT courses, except for MGMT 325 and MGMT 485W, are included in the calculation of the 2.00 overall grade point average for major course work for graduation.

Additional Requirements and Information

Advanced Placement

The college accepts advanced placement credit in accordance with the rules and regulations outlined in the Academic Information section of this catalog. Students may take College-Level Examination Program (CLEP) tests to receive credit for:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
FIN 331	Legal Environment of Business	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3

Students are advised to contact the Office of Prior Learning Assessment for more information regarding CLEP and other prior learning assessment credit options. For advanced placement credit in any other business or public administration course, students are advised to contact the chair of the department offering the course. Additional information about credit

awarded for qualifying scores on AP and IB subject examinations can be found on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Practical Work Experience for Business Administration Majors

Students may complement their major studies with a practical work experience, which may take the form of an internship, cooperative education experience or a class containing a real-world, hands-on project. Students must apply for internship or co-op participation through the Strome College of Business Career & Leadership Development Satellite Office. All work experiences must be approved by the faculty sponsor in the appropriate department prior to registering for credit. Students may not earn credit for previous or current work experiences. (However, academic credit for work experience may be approved in accordance with the policies for granting prior learning credit as defined in the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this catalog.) For details see the Center for Career & Leadership Development section of this catalog.

Use of Internship and Similar Hours Toward Business Administration Majors

A student may apply no more than six hours of cooperative education, student internship or practicum courses to satisfy degree requirements. Students may not use more than three hours of cooperative education, student internship or practicum courses to satisfy major elective requirements in each of the students' majors. These courses are numbered 367, 368 or 369. Additional hours of cooperative education, student internship or practicum courses, however, can be used to satisfy other requirements such as free electives or general business electives. Additional internships must each involve substantially different kinds of work experiences. Internships must be approved by the Chief Departmental Advisor of the student's major and the CAP Coordinator of the internship.

Transfer of the Associate of Science in Business Administration Towards Degree Requirements

Students transferring to the college must complete a minimum of 10 business courses offered by the college to earn the degree from Old Dominion University, in accordance with AACSB regulations. Those transfer students holding the Associate of Science in Business Administration degree from a Virginia Community College must earn the grade of "C" or better in the following courses in order to satisfy requirements found in the first two years of the BSBA degree:

COMM 101R	Public Speaking	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
BNAL 206	Business Analytics I	3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
Upper-level ethics course		

With the exception of the courses listed above, the University's lower-division General Education requirements are deemed satisfied by the accepted AS degrees. These typically include all AS degrees from the Virginia Community College System except the applied science degrees. For more information about accepted AS degrees contact the Office of Admissions. Associate degree holders, although meeting lower-level General Education requirements, must ensure that 120 credits are completed to earn the BSBA degree. A minimum of 25% of the required credit hours must be completed through Old Dominion University, at least 12 of which are upper-level courses in the major program.

The Strome College of Business does not accept courses completed at the freshman and sophomore levels at other institutions for required courses at the junior and senior level at Old Dominion University. Please see the section on CLEP credits (Prior Learning Assessment Credit Options at the Undergraduate Level) for additional information.

Grade Average Requirements for Graduation

To graduate with a Bachelor of Science in Business Administration degree, students must present a minimum of 120 hours with a minimum overall grade point average of 2.00 in all courses taken at Old Dominion University. Students must also attain a minimum overall grade point average of 2.00 in courses taken toward the major (courses included in the major grade point average calculation are listed following the description of each major's course work).

Additionally, students must attain a minimum overall grade point average of 2.00 in the BSBA Core listed below. Only courses completed at Old Dominion University will be used to compute the BSBA Core average. Students with an Information Systems and Technology major (excluding Business Analytics) are not required to take IT 360T, so the BSBA Core grade point average is computed using the remaining courses. If the BSBA Core average is below the required 2.00 minimum, students are advised to utilize the Grade Forgiveness Policy or Adjusted Resident Credit option when appropriate to improve the grade point average.

Requirements for Completing a Bachelor of Science in Business Administration

The following sections show the courses that are requirements for all business students, regardless of the chosen major: Lower-Division General Education, BSBA Core Courses, and Upper-Division General Education. Credit hours are listed after the course title. The student must also choose a major and complete the requirements listed for that major on the following pages.

Foundation Courses for Admission to the Strome College of Business

ENGL 110C	English Composition (C or better)	3
MATH 162M	Precalculus I (C or better)	3
ACCT 201	Principles of Financial Accounting (C or better)	3
ECON 202S	Principles of Microeconomics (C or better)	3
BUSN 110	Introduction to Contemporary Business *	1

* Not required for students pursuing an Information Systems and Technology major (excluding Business Analytics) or for students with an associate's degree in business administration or with a prior bachelor's degree in business administration.

See the section on Admission to the Undergraduate Program in Business Administration, General Requirements.

Business Elective

A business elective is a course that is offered by an accredited college of business, including the Strome College of Business at Old Dominion University. Public Affairs and Service (PAS) courses offered by the Strome College of Business are not considered as business courses. However, because some business courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate business elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Free Elective

In the majority of cases a free elective is any course offered by an accredited community college or university, including Old Dominion University. However, because some courses cannot be used to satisfy the requirements

of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
MATH 162M	Precalculus I (C or better required)	3
Language and Culture I (May be waived; see requirement details)		0-3
BUSN 110	Introduction to Contemporary Business (C or better required)	1
Nature of Science I		4
Free Elective		3
Credit Hours		14-17
Spring		
MATH 200	Calculus for Business and Economics	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Language and Culture II (May be waived; see requirement details)		0-3
Nature of Science II		4
Interpreting the Past		3
Credit Hours		13-16
Sophomore		
Fall		
Literature		3
Oral Communication: COMM 101R or MKTG 200R required		3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL/DASC 357E	Ethics and Data	
PHIL 442E	Studies in Applied Ethics	
ACCT 201	Principles of Financial Accounting (C or better required)	3
ECON 202S	Principles of Microeconomics (C or better required)	3
Credit Hours		15

Spring		
Human Creativity		3
Information Literacy and Research		3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
BNAL 206	Business Analytics I	3
Credit Hours		15
Junior		
Fall		
BNAL 306	Business Analytics II	3
FIN 323	Introductory Financial Management	3
IT 360T	Principles of Information Technology	3
MGMT 325	Contemporary Organizations and Management (C- or better required)	3
MGMT 330	Organizational Behavior (C- or better required)	3
Credit Hours		15
Spring		
OPMT 303	Operations Management	3
FIN 331	Legal Environment of Business	3
MKTG 311	Marketing Principles and Problems	3
ECON 301	Managerial Economics	3
MGMT 340	Human Resource Management (C- or better required)	3
Free Elective		3
Credit Hours		18
Senior		
Fall		
MGMT 485W	Business Policy and Strategy (C or better required)	3
MGMT 361	International Business Operations (C- or better required)	3
MGMT 460	Human Resource Analytics (C- or better required)	3
HR Major Elective (C- or better required)		3
Upper-Division General Education		3
Credit Hours		15
Spring		
HR Major Elective (C- or better required)		3
HR Major Elective (C- or better required)		3
200-400 Level Free Elective		3
300-400 Level Free Elective		3
Upper-Division General Education		3
Credit Hours		15
Total Credit Hours		120-126

BSBA to MBA (Master of Business Administration) Linked Program

Students interested in the program should contact the MBA Program Office as early as possible to discuss their plans for early entry. Once admitted

to the program, the MBA program manager will act as the student's co-advisor, along with the chief departmental advisor or chief discipline advisor in the student's undergraduate major. The MBA Program Office is located in 1026 Constant Hall. The phone number is 757-683-3585 and email is mbainfo@odu.edu.

BSBA to MPA (Master of Public Administration) Linked Program

The linked BSBA to MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking 12 credits of the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

A potential candidate will have:

1. Completed all lower level general education requirements
2. Achieved a cumulative GPA of at least 3.0 at the end of the junior year

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog. For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science in Business Administration Management with a Major in International Business (BSBA)

Web Site: <https://www.odu.edu/management-a-major-international-business-bsba> (<https://www.odu.edu/management-a-major-international-business-bsba/>)

Chair of Management Department:

Shaomin Li
SLi@odu.edu

International Business Area Coordinator::

Robert Pidduck
RPidduck@odu.edu

A major in International Business (IB) provides students with the tools to succeed in today's global environment. The business arena in which the College's graduates will be working is no longer local, regional or national in nature. It is international and requires an understanding and sensitivity to different cultures and business environments. The program embraces three different levels of analysis. These three levels of analyses are as follows.

Global Citizen

First, at the individual level, students learn to identify, comprehend, and manage cross-cultural differences between individuals. As global citizens, students learn to build on cultural differences, learn to be proactive on an international level, and generate new business solutions accordingly.

Multinational Enterprise

At the business discipline level, the program builds on the knowledge of business subjects that are taught in the Bachelor of Science in Business Administration (BSBA) core. The IB major will advance students'

understanding by teaching them the intricacies of the global marketplace. The IB major builds on these core business subjects and teaches students how each business subject operates in an international business setting.

International Context

Finally, the international context inherent to international business helps students identify economic trends, rules of law, and policy shifts in the global landscape. Students will be able to understand and respond to the changes of formal and informal institutions of nations and how these changes influence the way multinational enterprises conduct business internationally.

A Problem-Solving Focus

Parallel to this hierarchical focus (individual, firm specific as well as international level), students will also learn how to deal with organization specific and societal challenges. Problem solving is an integral component of the program and is related to the subjects at the heart of business administration, including strategy, marketing, finance, accounting, organization, human resources, logistics, and technology. Students work with existing businesses and help them expand abroad.

All students majoring in international business are required to participate in an approved study abroad program, international-focused project or international internship. International students are exempt from the study abroad requirement. Exemptions need written approval of the discipline coordinator. Students can choose from an extensive list of sites abroad. International business students have recently studied in Denmark, England, Japan, Mexico, the Philippines and Korea.

International business students are encouraged to minor in a business functional area such as accounting, finance, marketing, or management.

Strome College of Business (SCB) Center for Undergraduate Advising and Student Success

The mission of this office is to challenge and support students in self-exploration and, through advising, provide resources for them to develop an achievable plan for success. Our vision is for students to be aware of their academic, personal, and professional goals; empowered to pursue them; and confident in their ability to accomplish them.

Our professional advisors work with all Strome College of Business students regarding degree planning, changing majors, admissions, continuance, graduation requirements and required curricula for the majors and minors offered by the College.

Degree Requirements

Students in all of the Bachelor of Science in Business Administration degree programs must fulfill the University General Education requirements (including foreign language) as well as the Strome College of Business's core, major, and elective requirements. Students must choose at least one major area to meet requirements towards the degree.

To stay in compliance with AACSB accreditation standards, students receiving a Bachelor of Science in Business Administration from Old Dominion University must complete at least half of their business course work in residence with a minimum of four courses in their declared major. This equates to 10 business classes, thus meeting the University's residency requirement as well.

Majors in the college may not take business and public administration courses for pass/fail credit except those courses in which pass/fail is the only grading option (i.e., internships and practica).

Admission to the Undergraduate Program in Business Administration

General Requirements

Applicants for admission to the undergraduate degree program in business administration (the Bachelor of Science in Business Administration) should apply initially to the Office of Admissions of Old Dominion University.

Students cannot be accepted into business administration without first being admitted to the University. Admission to the University does not guarantee admission to the Bachelor of Science in Business Administration (BSBA) program. Candidates for admission to the BSBA program should indicate on the application to the University their intention to enter the undergraduate business administration degree program.

Admission to the Bachelor's Degree Program in Business Administration:

Before Admission to the bachelor's degree program in business administration can be granted, a student must have earned a grade of C or higher in each of the business Admission courses:

BUSN 110	Introduction to Contemporary Business	1
ENGL 110C	English Composition	3
MATH 162M	Precalculus I	3
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3

- BUSN 110 is not required for students pursuing majors under the BSBA in Information Systems and Technology (excluding Business Analytics) or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
- Students may utilize the Grade Forgiveness Policy for the business Admission courses.
- Transfer students may complete business Admission courses (BUSN 110, ENGL 110C, MATH 162M, ACCT 201, and ECON 202S) at another accredited college or university, but are responsible for having Transfer Evaluation Services determine that the courses are acceptable to the University.

Eligibility to Enroll in Upper-Level (300/400-level) Business Courses

Only students who have officially completed Admission courses to the BSBA program will be eligible to enroll in upper-level (300/400) business courses (refer to exceptions for non-business majors). However, students who are in progress with the business Admission courses may enroll in upper-level (300/400) business courses. Note: These students will need a Program Restriction Waiver (PRW) to enroll in these courses, with the exception of FIN 323, MGMT 325, MKTG 311, and OPMT 303. These courses require a junior class standing for registration.

Enrollment in 300/400-level Business Courses by Non-Business Majors

Enrollment in 300/400-level business courses will be granted without the Admission courses for the following exceptions:

1. Students pursuing a declared minor in the Strome College of Business may enroll in 300/400-level business courses appropriate to the minor.
2. Students pursuing Upper-Division General Education Requirement Option B: Interdisciplinary Minor or Option D: Six hours of elective upper-division courses outside the student's major discipline or college.
3. Students wishing to satisfy the Impact of Technology requirement may enroll in IT 360T.
4. Students pursuing a degree program other than the Bachelor of Science in Business Administration (BSBA) that requires or accepts specific 300/400-level business courses to complete the degree may enroll in the courses appropriate to the major.
5. Non-degree-seeking students may enroll in 300/400-level business courses if they have satisfied the prerequisites for these courses.

Students in categories 1 - 5 above who do not have a declared major will need a Program Restriction Waiver (PRW) in order to enroll in any 300/400-level Strome College of Business course (including Economics courses). Forms to request a PRW are available at the Strome College of Business website.

Regulations for Continuance in the Bachelor of Science in Business Administration

In addition to the Old Dominion University continuance policies, the following policies are specific to all declared Bachelor of Science in Business Administration (BSBA) students. The Strome College of Business makes a reasonable effort to notify undergraduate students who are not in good academic standing in the BSBA program of their academic status. Each undergraduate student who is placed on BSBA Academic Alarm or BSBA Termination (explained below) will be sent an e-mail message to that effect at the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business. Non-receipt of the e-mail messages by a student will not be considered grounds for granting exceptions or delays in enforcement of the BSBA continuance regulations.

BSBA Continuance Regulations

If a student's Grade Point Average (GPA) in their BSBA Core courses falls below a 2.0, then they will be on Academic Alarm within the Strome College of Business (SCB). This policy is very similar to the University's academic continuance policy, the main difference being that it is based on the core Business courses and impacts acceptance and continuance within the SCB.

Academic Alarm

The first semester in which a student's BSBA Core GPA drops to below a 2.0, they will be on Academic Alarm. Once considered on academic alarm within the college, taking courses within the BSBA Core is the only way to bring that GPA back up.

- If the student raises the BSBA Core GPA to above a 2.0, then they will no longer be on academic alarm.
- If the BSBA Core GPA does not reach a 2.0 but the semester average in the BSBA Core courses is a 2.0 or higher, then the student will remain on academic alarm and be able to continue within the SCB.

SCB Termination

While on academic alarm within the Strome College of Business, if the semester BSBA Core GPA falls below a 2.0, the student will be terminated from the SCB and their major coding will be changed from Business to Undecided. (Terminations will not be processed in summer semesters.)

Appeals

If you have been terminated, you may appeal the decision if you have extenuating circumstances and documentation to support your claim. To appeal, write a letter and include documentation of your circumstances to the Associate Dean of the Strome College of Business (Constant Hall, Suite 2004). There are specific details that need to be included with your appeal - for more information, please see the appeals process as described in the most recently issued catalog.

Guidelines for Filing a BSBA Termination Appeal

1. All students have the right to appeal their BSBA termination if they believe that extraordinary circumstances were the main reason for their poor academic performance. Notifications of pending BSBA termination are sent to the student's ODU email address and include information on the appeal process and deadlines. All BSBA termination appeals must be submitted electronically using the link provided in the email and will be reviewed by the SCB Termination Appeal Committee. Students are responsible for submitting their appeal by the stated deadline; late appeals will not be reviewed. Decisions of the Termination Appeal Committee may be appealed to the Associate Dean for Academic Programs in the Strome College of Business whose decision is final.
2. Appeals must be based on circumstances pertinent to the semesters in which the academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the terminated student. The appeal letter must provide sufficient detail and explanation regarding the following points because there is no face-to-face meeting

with the Associate Dean for Academic Programs in the Strome College of Business. The decision of the Associate Dean is final. Students without documentation will not be allowed to appeal their termination. In order to be reviewed, an appeal letter must:

- Document the extraordinary circumstances such as a death in the family, medical complications or chronic conditions, personal or family emergency, overwhelming work schedules, dorm-mate conflict, or a personal relationship conflict that have adversely affected performance: i.e., a statement or letter from a physician, employer, family members, faculty, academic advisor, Counseling Services, or Educational Accessibility.
 - Explain how the extraordinary circumstances caused each semester of poor academic performance.
 - State the reasons why an official withdrawal was not requested.
 - Explain how the extraordinary circumstance(s) has been resolved.
 - Provide a plan of action to return to good BSBA academic standing.
3. Students who do not file a BSBA termination appeal or whose appeals are denied, are no longer eligible to pursue a bachelor's degree in Business Administration. Upon BSBA termination, the student's major in the Strome College of Business will be removed. (This does not affect a declared second major outside of the BSBA.) These students are advised to work with an advisor in the SCB Center for Undergraduate Advising to explore other major options, and for referrals to other advising departments for a new major declaration.
4. BSBA-terminated students who had pre-registered for a subsequent semester lose eligibility for continued enrollment in upper-level business courses.

Applying for Readmission to the BSBA Program

After a minimum of five years has passed since a student was terminated from the BSBA program, the student may apply for readmission to the program. There must be a high probability the student will successfully complete the degree program, and approval will be at the discretion of the Strome College of Business Associate Dean.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication: COMM 101R or MKTG 200R required. Additionally, all students majoring in business administration can expect to complete several courses in which individual and/or group oral presentations will be required.

Mathematics: MATH 162M and MATH 200 required.

Information Literacy and Research: IT 150G (recommended) or any "G" course from the approved general education information literacy and research course list.

Human Behavior: Met in the Business Administration core for all majors except Economics.

Philosophy and Ethics must be satisfied by completion of either PHIL 230E or an upper-level "E" course from the approved general education ethics course list. A philosophy course designated with a P will not meet this requirement for business administration students with the exception of a "P" course taken prior to fall 2010.

Impact of Technology requirement is satisfied within each BSBA degree major except Information Systems and Technology by IT 360T. In the Information Systems and Technology majors (excluding Business Analytics), the Impact of Technology requirement is satisfied by the coursework required for the major.

Transfer students with an applicable associate's degree from a Virginia Community College or another community college that has a seamless transfer agreement with ODU, and students with a prior bachelor's degree from another university, must nevertheless have a grade of C or better in the following to be able to transfer them:

COMM 101R	Public Speaking	3
or MKTG 200R	Professional Interactions and Negotiations	
PHIL 230E	Introduction to Ethics (Or an upper-level ethics course)	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3

Upper-Division General Education

- Option A. Any University-approved minor, second degree, or second major.
- Option B. An interdisciplinary minor consisting of 12 credits, three of which can be in the major. Interdisciplinary minors are described in the University Catalog section labeled Requirements for Undergraduate Degrees, Upper-Division Requirements.
- Option C. An approved certification program, such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the Strome College of Business and not required by the major (6 credits).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Business Administration Core

ACCT 201	Principles of Financial Accounting *	3
ACCT 202	Principles of Managerial Accounting *	3
BNAL 206	Business Analytics I *	3
BNAL 306	Business Analytics II	3
ECON 201S	Principles of Macroeconomics *	3
ECON 202S	Principles of Microeconomics *	3
ECON 301	Managerial Economics	3
FIN 323	Introductory Financial Management	3
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology **	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 485W	Business Policy and Strategy (C or better) ***	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
Total Credit Hours		42

*	Not automatically waived for transfer students with an applicable associate's degree from a Virginia Community College or another acceptable community college, or for students with a prior bachelor's degree from another university. A grade of C or better must be earned to transfer these courses to Old Dominion University.
**	Students completing a major or minor in Information Systems and Technology (excluding the Business Analytics major) do not take this course.
***	Students majoring in Economics must complete MGMT 485W, but meet the writing intensive requirement by earning a grade of C or better either in MGMT 485W or in one of the ECON Writing Intensive courses.

International Business Major

General Education

Complete lower-division requirements		35-41
Complete upper-division requirements (minimum of 6 credit hours)		6
BUSN 110	Introduction to Contemporary Business *	1
MATH 200	Calculus for Business and Economics	3

Business Administration Core

Complete business administration core requirements	42

International Business

ECON 450	International Economics	3
INBU 436	International Business Law	3
INBU 437	International Human Resource Management	3
INBU 450	Global Business	3
MGMT 336	International Entrepreneurship	3
MKTG 411	Multi-National Marketing	3
WCS 350	Global Communications for International Business	3
INBU Major Elective (Select three credits from the following):		3
INBU 368	Internship in International Business	
INBU 438	Globalization and International Trade	
INBU 495	Topics in International Business	
MGMT 462	Comparative International Management	
MGMT 463	Management Seminar Abroad	
FIN 435	International Financial Management	
POLS 325W	World Politics	

Total Credit Hours	111-117

Elective Credit

Elective credit may be needed to meet the minimum 120 credit hours required for the degree.

Additional Requirements and Information

Advanced Placement

The college accepts advanced placement credit in accordance with the rules and regulations outlined in the Academic Information section of this catalog. Students may take College-Level Examination Program (CLEP) tests to receive credit for:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
FIN 331	Legal Environment of Business	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3

Students are advised to contact the Office of Prior Learning Assessment for more information regarding CLEP and other prior learning assessment credit options. For advanced placement credit in any other business or public administration course, students are advised to contact the chair of the department offering the course. Additional information about credit awarded for qualifying scores on AP and IB subject examinations can be found on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Practical Work Experience for Business Administration Majors

Students may complement their major studies with a practical work experience, which may take the form of an internship, cooperative education experience or a class containing a real-world, hands-on project. Students must apply for internship or co-op participation through the Strome College of Business Career & Leadership Development Satellite Office. All work experiences must be approved by the faculty sponsor in the appropriate department prior to registering for credit. Students may not earn credit for previous or current work experiences. (However, academic credit for work experience may be approved in accordance with the policies for granting prior learning credit as defined in the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this catalog.) For details see the Center for Career & Leadership Development section of this catalog.

Use of Internship and Similar Hours Toward Business Administration Majors

A student may apply no more than six hours of cooperative education, student internship or practicum courses to satisfy degree requirements. Students may not use more than three hours of cooperative education, student internship or practicum courses to satisfy major elective requirements in each of the students' majors. These courses are numbered 367, 368 or 369. Additional hours of cooperative education, student internship or practicum courses, however, can be used to satisfy other requirements such as free electives or general business electives. Additional internships must each involve substantially different kinds of work experiences. Internships must be approved by the Chief Departmental Advisor of the student's major and the CAP Coordinator of the internship.

Transfer of the Associate of Science in Business Administration Towards Degree Requirements

Students transferring to the college must complete a minimum of 10 business courses offered by the college to earn the degree from Old Dominion University, in accordance with AACSB regulations. Those transfer students holding the Associate of Science in Business Administration degree from a Virginia Community College must earn the grade of "C" or better in the following courses in order to satisfy requirements found in the first two years of the BSBA degree:

COMM 101R	Public Speaking	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
BNAL 206	Business Analytics I	3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
Upper-level ethics course		

With the exception of the courses listed above, the University's lower-division General Education requirements are deemed satisfied by the accepted AS degrees. These typically include all AS degrees from the Virginia Community College System except the applied science degrees. For more information about accepted AS degrees contact the Office of Admissions. Associate degree holders, although meeting lower-level General Education requirements, must ensure that 120 credits are completed to earn the BSBA degree. A minimum of 25% of the required credit hours must be completed through Old Dominion University, at least 12 of which are upper-level courses in the major program.

The Strome College of Business does not accept courses completed at the freshman and sophomore levels at other institutions for required courses at the junior and senior level at Old Dominion University. Please see the section on CLEP credits (Prior Learning Assessment Credit Options at the Undergraduate Level) for additional information.

Grade Average Requirements for Graduation

To graduate with a Bachelor of Science in Business Administration degree, students must present a minimum of 120 hours with a minimum overall grade point average of 2.00 in all courses taken at Old Dominion University. Students must also attain a minimum overall grade point average of 2.00 in courses taken toward the major (courses included in the major grade point average calculation are listed following the description of each major's course work).

Additionally, students must attain a minimum overall grade point average of 2.00 in the BSBA Core listed below. Only courses completed at Old Dominion University will be used to compute the BSBA Core average. Students with an Information Systems and Technology major (excluding Business Analytics) are not required to take IT 360T, so the BSBA Core grade point average is computed using the remaining courses. If the BSBA Core average is below the required 2.00 minimum, students are advised to utilize the Grade Forgiveness Policy or Adjusted Resident Credit option when appropriate to improve the grade point average.

Requirements for Completing a Bachelor of Science in Business Administration

The following sections show the courses that are requirements for all business students, regardless of the chosen major: Lower-Division General Education, BSBA Core Courses, and Upper-Division General Education. Credit hours are listed after the course title. The student must also choose a major and complete the requirements listed for that major on the following pages.

Foundation Courses for Admission to the Strome College of Business

ENGL 110C	English Composition (C or better)	3
MATH 162M	Precalculus I (C or better)	3
ACCT 201	Principles of Financial Accounting (C or better)	3
ECON 202S	Principles of Microeconomics (C or better)	3
BUSN 110	Introduction to Contemporary Business *	1

* Not required for students pursuing an Information Systems and Technology major (excluding Business Analytics) or for students with an associate's degree in business administration or with a prior bachelor's degree in business administration.

See the section on Admission to the Undergraduate Program in Business Administration, General Requirements.

Business Elective

A business elective is a course that is offered by an accredited college of business, including the Strome College of Business at Old Dominion University. Public Affairs and Service (PAS) courses offered by the Strome College of Business are not considered as business courses. However, because some business courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate business elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Free Elective

In the majority of cases a free elective is any course offered by an accredited community college or university, including Old Dominion University. However, because some courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 162M	Precalculus I (C or better required)	3
IT 150G	Basic Information Literacy and Research	3
Human Creativity		3
Elective or Language & Culture I (May be waived; See requirement details)		3
Credit Hours		15
Spring		
MATH 200	Calculus for Business and Economics	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
COMM 101R or MKTG 200R	Public Speaking or Professional Interactions and Negotiations	3

ECON 202S	Principles of Microeconomics	3
Elective or Language & Culture I (May be waived; See requirement details)		3
Credit Hours		15
Sophomore		
Fall		
ACCT 201	Principles of Financial Accounting (C or better required)	3
Nature of Science I		4
Interpreting the Past		3
PHIL 230E	Introduction to Ethics (or upper-level PHIL "E" course)	3
ECON 201S	Principles of Macroeconomics (C or better required)	3
Credit Hours		16
Spring		
ACCT 202	Principles of Managerial Accounting	3
BNAL 206	Business Analytics I	3
Nature of Science II		4
BUSN 110	Introduction to Contemporary Business	1
Literature		3
Credit Hours		14
Junior		
Fall		
BNAL 306	Business Analytics II	3
FIN 323	Introductory Financial Management (C or better required)	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3
MGMT 336	International Entrepreneurship	3
Credit Hours		15
Spring		
OPMT 303	Operations Management	3
ECON 301	Managerial Economics	3
MKTG 411	Multi-National Marketing	3
WCS 350	Global Communications for International Business	3
Elective		3
Credit Hours		15
Senior		
Fall		
FIN 331	Legal Environment of Business	3
INBU 437	International Human Resource Management	3
MGMT 485W	Business Policy and Strategy	3
ECON 450	International Economics	3
Upper-Division General Education Option D		3
Credit Hours		15

Spring

IT 360T	Principles of Information Technology	3
INBU 436	International Business Law	3
INBU 450	Global Business	3
Upper-Division General Education Option D		3
INBU Major Elective		3
Credit Hours		15
Total Credit Hours		120

* INBU elective (Select 3 credits from the following): FIN 435, POLS 325W, INBU 438, INBU 495, MGMT 463, INBU 368

BSBA to MBA (Master of Business Administration) Linked Program

Students interested in the program should contact the MBA Program Office as early as possible to discuss their plans for early entry. Once admitted to the program, the MBA program manager will act as the student's co-advisor, along with the chief departmental advisor or chief discipline advisor in the student's undergraduate major. The MBA Program Office is located in 1026 Constant Hall. The phone number is 757-683-3585 and email is mbainfo@odu.edu.

BSBA to MPA (Master of Public Administration) Linked Program

The linked BSBA to MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking 12 credits of the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

A potential candidate will have:

1. Completed all lower level general education requirements
2. Achieved a cumulative GPA of at least 3.0 at the end of the junior year

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog. For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Entrepreneurship Minor

Chair of Management Department:

Shaomin Li
SLi@odu.edu

Faculty Advisor & Entrepreneurship Area Coordinator:

Karen Eagle
KEagle@odu.edu

The entrepreneurship interdisciplinary minor is intended to prepare students to solve business and social problems by creating new ventures within or outside existing organizations. A minor in entrepreneurship allows students to practice their own creative talents while applying fundamental business concepts. Students learn to embrace uncertainty, overcome challenges,

create value, and develop an entrepreneurial mindset to make a difference in the world and in the marketplace. Courses give students the information, abilities, and entrepreneurial spirit necessary to start their own businesses, take on leadership roles in already-existing enterprises, manage small and family-owned firms, and approach difficult problems with new perspectives, making them more equipped to handle the demands of the modern economy, which is fast-paced and unpredictable, and where success is determined by the ability to see opportunities, innovate, and move quickly to market.

The interdisciplinary minor requires 12 credit hours of 300/400-level courses selected from at least two different disciplines with a maximum of six credits from any one discipline. For completion of the interdisciplinary minor, students must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses. At least six hours of upper-level courses must be taken through courses offered by Old Dominion University. Three credit hours may be in the major, if a major course is listed as an option for the interdisciplinary minor. As such, it will be credited toward both the major and the interdisciplinary minor.

Requirements

ENTR 201S is a prerequisite for the minor and is not included in the calculation of the grade point average for the minor. Requirements for the minor are completion of 12 hours from the following,

ENTR 301	Fundamentals of Entrepreneurship	3
Functional Expertise: Select two of the following:		6
ACCT 300	Accounting for Entrepreneurs	
COMM 305	Work-Life Communication	
COMM 351	Interpersonal Communication in Organizations	
ENMA 401	Project Management	
ENMA 421	Decision Techniques in Engineering	
ENTR 410	Small Business Management	
ENTR 440	Digital Entrepreneurship: New Venture Creation	
FIN 323	Introductory Financial Management	
HLSC 440	Finance and Budgeting in Healthcare	
HNRS 401	Social Entrepreneurship	
MGMT 336	International Entrepreneurship	
MGMT 340	Human Resource Management	
MGMT 420	Business Development	
MGMT 424	Technology and Innovation Management	
MGMT 452	Negotiations and Change Management	
MKTG 311	Marketing Principles and Problems	
MKTG 316	Professional Selling	
MKTG 450	Marketing on the Internet	
MKTG 455	Social Media Marketing	
PSYC 344	Human Factors	
PRTS 441	Marketing of Hospitality Services	
SMGT 414	Sport Marketing	
Capstone-Project Course: Select one of the following:		3
ENTR 490	Entrepreneurship Capstone	
ENTR 368	Entrepreneurship Internship	
ENTR 498	Tutorial Work in Special Topics in Entrepreneurship	
ENMA 410	Agile Project Management	
SEPS 480	Senior Project: Merchandise Retailing	
Total Credit Hours		12

Minor International Business Minor

Web Site: <https://www.odu.edu/business/international-business> (<https://www.odu.edu/business/international-business/>)

Chair of Management Department:
Shaomin Li
SLi@odu.edu

International Business Area Coordinator:
Robert Pidduck
RPidduck@odu.edu

A minor in International Business (IB) provides students with the tools to succeed in today’s global environment. The business arena in which the College’s graduates will be working is no longer local, regional or national in nature. It is international and requires an understanding and sensitivity to different cultures and business environments. Students seeking the Bachelor of Science in Business Administration may also minor in International Business.

Requirements

Students seeking the Bachelor of Science in Business Administration may also minor in international business by completing the following courses:

ECON 450	International Economics	3
FIN 435	International Financial Management	3
MKTG 411	Multi-National Marketing	3
Select one of the following:		3
INBU 368	Internship in International Business	
INBU 436	International Business Law	
INBU 437	International Human Resource Management	
INBU 438	Globalization and International Trade	
INBU 450	Global Business	
MGMT 462	Comparative International Management	
MGMT 463	Management Seminar Abroad	
Total Credit Hours		12

For completion of the minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of 100/200-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor through courses offered by Old Dominion University.

Minor Management Minor

Web Site: <https://www.odu.edu/academics/programs/minor/management> (<https://www.odu.edu/academics/programs/minor/management/>)

Chair of Management Department:
Shaomin Li
SLi@odu.edu

Chief Departmental Advisor and Management Area Coordinator:
Jennifer Klingner
JLKlinge@odu.edu

Faculty Advisor and Entrepreneurship Area Coordinator:
Karen Eagle
KEagle@odu.edu

A management minor is suitable for students who want to complement their major with “soft skills.” Surveys of employers have frequently found they prefer to recruit graduates with leadership, communication, entrepreneurial, and strategic thinking skills. A minor in Management (MGMT) is focused on understanding how people make things happen in the world. This minor provides students with a broad overview of how to work within and manage

companies, non-profits, and other teams. A variety of management elective options give students an opportunity to pursue their interests and focus in areas such as Human Resource Management, General Management, International Business, and/or Entrepreneurship.

Requirements

A minor in management requires the completion of MGMT 325 plus 12 hours of 300- or 400-level management or entrepreneurship courses except for MGMT 485W. All courses selected must be preceded by listed prerequisites. For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of prerequisite courses. In addition, a grade of C- or better is required in all management and entrepreneurship courses counted toward the minor. A minimum of six hours in upper-level courses in the minor must be taken through courses offered by Old Dominion University.

MGMT 325	Contemporary Organizations and Management	3
Select four of the following MGMT or ENTR Electives:		12
MGMT 327	Business Communication	
MGMT 330	Organizational Behavior	
MGMT 336	International Entrepreneurship	
MGMT 340	Human Resource Management	
MGMT 350	Employee Relations Problems and Practices	
MGMT 360	Labor Management Relations	
MGMT 361	International Business Operations	
MGMT 368	Management Internship	
MGMT 410	Leadership in Organizations	
MGMT 417	Employment Law	
MGMT 418	Advanced Human Resource Management: Contemporary Issues	
MGMT 420	Business Development	
MGMT 424	Technology and Innovation Management	
MGMT 427	Business and Society	
MGMT 430	Compensation Management	
MGMT 440	Human Resource Staffing Strategies	
MGMT 450	Performance Measurement and Management	
MGMT 452	Negotiations and Change Management	
MGMT 460	Human Resource Analytics	
MGMT 462	Comparative International Management	
MGMT 463	Management Seminar Abroad	
MGMT 465	SHRM Learning System	
MGMT 490	Management Consulting	
MGMT 495	Selected Topics in Management	
ENTR 301	Fundamentals of Entrepreneurship	
ENTR 410	Small Business Management	
ENTR 440	Digital Entrepreneurship: New Venture Creation	

Certificate

Entrepreneurship Certificate

The certificate in entrepreneurship offers a focus on business creation in a variety of fields. Students will be provided with tools that support the establishment of new ventures, including resource management, analytical processes, and other factors that contribute to the development of new organizations. Students will be required to complete a foundational course that will introduce them to the concepts and practical work required in entrepreneurial ventures. They will also complete a capstone course that covers the creation, structure and management of new organizations. Students will also complete two courses from areas that align with their major or new business interest. Students who complete the certificate will be able to take ideas and mold them into the foundation of a new

business, regardless of career selection. They will also gain a heightened understanding of critical thinking in support of establishing new ventures.

An overall grade point average of 2.0 or above in all courses specified as a requirement for the certificate is required for the award of the certificate. Students must complete a minimum of six hours in upper-level courses required for the certificate through courses offered by Old Dominion University.

Requirements

ENTR 201S	Introduction to Entrepreneurship	3
Restricted Electives: Select two of the following:		6
ACCT 300	Accounting for Entrepreneurs	
COMM 305	Work-Life Communication	
COMM 351	Interpersonal Communication in Organizations	
DNTH 416	Administrative Leadership and Professional Development	
ENMA 401	Project Management	
ENMA 421	Decision Techniques in Engineering	
ENTR 301	Fundamentals of Entrepreneurship	
ENTR 410	Small Business Management	
ENTR 440	Digital Entrepreneurship: New Venture Creation	
FIN 323	Introductory Financial Management	
HLSC 440	Finance and Budgeting in Healthcare	
HLTH 425	Leadership and Management for Health Professionals	
HNRS 301	Monarch Think Tank II	
MGMT 336	International Entrepreneurship	
MGMT 340	Human Resource Management	
MGMT 420	Business Development	
MGMT 424	Technology and Innovation Management	
MGMT 452	Negotiations and Change Management	
MKTG 311	Marketing Principles and Problems	
MKTG 316	Professional Selling	
MKTG 450	Marketing on the Internet	
MKTG 455	Social Media Marketing	
PRTS 441	Marketing of Hospitality Services	
PSYC 344	Human Factors	
SMGT 414	Sport Marketing	
Capstone:		
ENTR 490	Entrepreneurship Capstone	3
Total Credit Hours		12

Marketing

Web Site: <http://www.odu.edu/business/departments/mktgdept> (<http://www.odu.edu/business/departments/mktgdept/>)

Programs

Bachelor of Science in Business Administration Programs

- Marketing Management with a Major in Digital Marketing (BSBA) (p. 468)
- Marketing Management with a Major in Marketing (BSBA) (p. 463)
- Marketing Management with a Major in Marketing Analytics and Research (BSBA) (p. 474)
- Marketing Management with a Major in Professional Sales (BSBA) (p. 480)

Minor Program

- Marketing Minor (p. 468)
- Marketing-Digital Marketing Minor (p. 474)
- Marketing-Marketing Analytics Minor (p. 480)
- Marketing-Professional Sales Minor (p. 486)

Bachelor of Science in Business Administration Marketing Management with a Major in Marketing (BSBA)

Chuanyi Tang, Chair
Michelle Carpenter, Chief Departmental Advisor

From building iconic brands to understanding why people buy what they buy, marketing is the exciting interface between companies and their customers and other stakeholders. It builds valuable relationships for companies and makes them more competitive in the marketplace. The marketing management degree program teaches students marketing, communication, and analytical knowledge and prepares students for high-demand marketing career opportunities in today's and tomorrow's global environment.

The marketing management degree program offers a general marketing major and three distinctive career-oriented majors:

1. Digital marketing major, which equips graduates with the knowledge base and skill set to leverage digital marketing platforms such as social media and search engines;
2. Marketing analytics and research major, which produces graduates for fast-growing career opportunities in the field of deriving deep customer insight and effective marketing strategy from data; also suitable for students interested in pursuing a graduate degree in marketing or related areas;
3. Professional sales major, which prepares graduates for a successful career in business-to-business sales.

For completion of a major under marketing management, a student must have a minimum overall cumulative grade point average of 2.00 in all courses taken toward the major. In addition, a grade of C- or better is required in all marketing courses counted toward the major. A student who seeks a Bachelor of Science in Business Administration degree in one of the marketing management majors from Old Dominion University must, in addition to meeting other requirements of the University, earn a minimum of 25 percent of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) through on- or off-campus instruction. This must include a minimum of 12 credit hours of upper-level MKTG courses.

Strome College of Business (SCB) Center for Undergraduate Advising and Student Success

The mission of this office is to challenge and support students in self-exploration and, through advising, provide resources for them to develop an achievable plan for success. Our vision is for students to be aware of their academic, personal, and professional goals; empowered to pursue them; and confident in their ability to accomplish them.

Our professional advisors work with all Strome College of Business students regarding degree planning, changing majors, admissions, continuance, graduation requirements and required curricula for the majors and minors offered by the College.

Degree Requirements

Students in all of the Bachelor of Science in Business Administration degree programs must fulfill the University General Education requirements (including foreign language) as well as the Strome College of Business's

core, major, and elective requirements. Students must choose at least one major area to meet requirements towards the degree.

To stay in compliance with AACSB accreditation standards, students receiving a Bachelor of Science in Business Administration from Old Dominion University must complete at least half of their business course work in residence with a minimum of four courses in their declared major. This equates to 10 business classes, thus meeting the University's residency requirement as well.

Majors in the college may not take business and public administration courses for pass/fail credit except those courses in which pass/fail is the only grading option (i.e., internships and practica).

Admission to the Undergraduate Program in Business Administration

General Requirements

Applicants for admission to the undergraduate degree program in business administration (the Bachelor of Science in Business Administration) should apply initially to the Office of Admissions of Old Dominion University. Students cannot be accepted into business administration without first being admitted to the University. Admission to the University does not guarantee admission to the Bachelor of Science in Business Administration (BSBA) program. Candidates for admission to the BSBA program should indicate on the application to the University their intention to enter the undergraduate business administration degree program.

Admission to the Bachelor's Degree Program in Business Administration:

Before Admission to the bachelor's degree program in business administration can be granted, a student must have earned a grade of C or higher in each of the business Admission courses:

BUSN 110	Introduction to Contemporary Business	1
ENGL 110C	English Composition	3
MATH 162M	Precalculus I	3
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3

- BUSN 110 is not required for students pursuing majors under the BSBA in Information Systems and Technology (excluding Business Analytics) or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
- Students may utilize the Grade Forgiveness Policy for the business Admission courses.
- Transfer students may complete business Admission courses (BUSN 110, ENGL 110C, MATH 162M, ACCT 201, and ECON 202S) at another accredited college or university, but are responsible for having Transfer Evaluation Services determine that the courses are acceptable to the University.

Eligibility to Enroll in Upper-Level (300/400-level) Business Courses

Only students who have officially completed Admission courses to the BSBA program will be eligible to enroll in upper-level (300/400) business courses (refer to exceptions for non-business majors). However, students who are in progress with the business Admission courses may enroll in upper-level (300/400) business courses. Note: These students will need a Program Restriction Waiver (PRW) to enroll in these courses, with the exception of FIN 323, MGMT 325, MKTG 311, and OPMT 303. These courses require a junior class standing for registration.

Enrollment in 300/400-level Business Courses by Non-Business Majors

Enrollment in 300/400-level business courses will be granted without the Admission courses for the following exceptions:

1. Students pursuing a declared minor in the Strome College of Business may enroll in 300/400-level business courses appropriate to the minor.
2. Students pursuing Upper-Division General Education Requirement Option B: Interdisciplinary Minor or Option D: Six hours of elective upper-division courses outside the student's major discipline or college.
3. Students wishing to satisfy the Impact of Technology requirement may enroll in IT 360T.
4. Students pursuing a degree program other than the Bachelor of Science in Business Administration (BSBA) that requires or accepts specific 300/400-level business courses to complete the degree may enroll in the courses appropriate to the major.
5. Non-degree-seeking students may enroll in 300/400-level business courses if they have satisfied the prerequisites for these courses.

Students in categories 1 - 5 above who do not have a declared major will need a Program Restriction Waiver (PRW) in order to enroll in any 300/400-level Strome College of Business course (including Economics courses). Forms to request a PRW are available at the Strome College of Business website.

Regulations for Continuance in the Bachelor of Science in Business Administration

In addition to the Old Dominion University continuance policies, the following policies are specific to all declared Bachelor of Science in Business Administration (BSBA) students. The Strome College of Business makes a reasonable effort to notify undergraduate students who are not in good academic standing in the BSBA program of their academic status. Each undergraduate student who is placed on BSBA Academic Alarm or BSBA Termination (explained below) will be sent an e-mail message to that effect at the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business. Non-receipt of the e-mail messages by a student will not be considered grounds for granting exceptions or delays in enforcement of the BSBA continuance regulations.

BSBA Continuance Regulations

If a student's Grade Point Average (GPA) in their BSBA Core courses falls below a 2.0, then they will be on Academic Alarm within the Strome College of Business (SCB). This policy is very similar to the University's academic continuance policy, the main difference being that it is based on the core Business courses and impacts acceptance and continuance within the SCB.

Academic Alarm

The first semester in which a student's BSBA Core GPA drops to below a 2.0, they will be on Academic Alarm. Once considered on academic alarm within the college, taking courses within the BSBA Core is the only way to bring that GPA back up.

- If the student raises the BSBA Core GPA to above a 2.0, then they will no longer be on academic alarm.
- If the BSBA Core GPA does not reach a 2.0 but the semester average in the BSBA Core courses is a 2.0 or higher, then the student will remain on academic alarm and be able to continue within the SCB.

SCB Termination

While on academic alarm within the Strome College of Business, if the semester BSBA Core GPA falls below a 2.0, the student will be terminated from the SCB and their major coding will be changed from Business to Undecided. (Terminations will not be processed in summer semesters.)

Appeals

If you have been terminated, you may appeal the decision if you have extenuating circumstances and documentation to support your claim. To appeal, write a letter and include documentation of your circumstances to the Associate Dean of the Strome College of Business (Constant Hall, Suite 2004). There are specific details that need to be included with your appeal -

for more information, please see the appeals process as described in the most recently issued catalog.

Guidelines for Filing a BSBA Termination Appeal

1. All students have the right to appeal their BSBA termination if they believe that extraordinary circumstances were the main reason for their poor academic performance. Notifications of pending BSBA termination are sent to the student's ODU email address and include information on the appeal process and deadlines. All BSBA termination appeals must be submitted electronically using the link provided in the email and will be reviewed by the SCB Termination Appeal Committee. Students are responsible for submitting their appeal by the stated deadline; late appeals will not be reviewed. Decisions of the Termination Appeal Committee may be appealed to the Associate Dean for Academic Programs in the Strome College of Business whose decision is final.

2. Appeals must be based on circumstances pertinent to the semesters in which the academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the terminated student. The appeal letter must provide sufficient detail and explanation regarding the following points because there is no face-to-face meeting with the Associate Dean for Academic Programs in the Strome College of Business. The decision of the Associate Dean is final. Students without documentation will not be allowed to appeal their termination. In order to be reviewed, an appeal letter must:

- a. Document the extraordinary circumstances such as a death in the family, medical complications or chronic conditions, personal or family emergency, overwhelming work schedules, dorm-mate conflict, or a personal relationship conflict that have adversely affected performance: i.e., a statement or letter from a physician, employer, family members, faculty, academic advisor, Counseling Services, or Educational Accessibility.
- b. Explain how the extraordinary circumstances caused each semester of poor academic performance.
- c. State the reasons why an official withdrawal was not requested.
- d. Explain how the extraordinary circumstance(s) has been resolved.
- e. Provide a plan of action to return to good BSBA academic standing.

3. Students who do not file a BSBA termination appeal or whose appeals are denied, are no longer eligible to pursue a bachelor's degree in Business Administration. Upon BSBA termination, the student's major in the Strome College of Business will be removed. (This does not affect a declared second major outside of the BSBA.) These students are advised to work with an advisor in the SCB Center for Undergraduate Advising to explore other major options, and for referrals to other advising departments for a new major declaration.

4. BSBA-terminated students who had pre-registered for a subsequent semester lose eligibility for continued enrollment in upper-level business courses.

Applying for Readmission to the BSBA Program

After a minimum of five years has passed since a student was terminated from the BSBA program, the student may apply for readmission to the program. There must be a high probability the student will successfully complete the degree program, and approval will be at the discretion of the Strome College of Business Associate Dean.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3

Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication: COMM 101R or MKTG 200R required. Additionally, all students majoring in business administration can expect to complete several courses in which individual and/or group oral presentations will be required.

Mathematics: MATH 162M and MATH 200 required.

Information Literacy and Research: IT 150G (recommended) or any "G" course from the approved general education information literacy and research course list.

Human Behavior: Met in the Business Administration core for all majors except Economics.

Philosophy and Ethics must be satisfied by completion of either PHIL 230E or an upper-level "E" course from the approved general education ethics course list. A philosophy course designated with a P will not meet this requirement for business administration students with the exception of a "P" course taken prior to fall 2010.

Impact of Technology requirement is satisfied within each BSBA degree major except Information Systems and Technology by IT 360T. In the Information Systems and Technology majors (excluding Business Analytics), the Impact of Technology requirement is satisfied by the coursework required for the major.

Transfer students with an applicable associate's degree from a Virginia Community College or another community college that has a seamless transfer agreement with ODU, and students with a prior bachelor's degree from another university, must nevertheless have a grade of C or better in the following to be able to transfer them:

COMM 101R	Public Speaking	3
or MKTG 200R	Professional Interactions and Negotiations	
PHIL 230E	Introduction to Ethics (Or an upper-level ethics course)	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3

Upper-Division General Education

- Option A. Any University-approved minor, second degree, or second major.
- Option B. An interdisciplinary minor consisting of 12 credits, three of which can be in the major. Interdisciplinary minors are described in the University Catalog section labeled Requirements for Undergraduate Degrees, Upper-Division Requirements.

- Option C. An approved certification program, such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the Strome College of Business and not required by the major (6 credits).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Business Administration Core

ACCT 201	Principles of Financial Accounting *	3
ACCT 202	Principles of Managerial Accounting *	3
BNAL 206	Business Analytics I *	3
BNAL 306	Business Analytics II	3
ECON 201S	Principles of Macroeconomics *	3
ECON 202S	Principles of Microeconomics *	3
ECON 301	Managerial Economics	3
FIN 323	Introductory Financial Management	3
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology **	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 485W	Business Policy and Strategy (C or better) ***	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
Total Credit Hours		42

* Not automatically waived for transfer students with an applicable associate's degree from a Virginia Community College or another acceptable community college, or for students with a prior bachelor's degree from another university. A grade of C or better must be earned to transfer these courses to Old Dominion University.

** Students completing a major or minor in Information Systems and Technology (excluding the Business Analytics major) do not take this course.

*** Students majoring in Economics must complete MGMT 485W, but meet the writing intensive requirement by earning a grade of C or better either in MGMT 485W or in one of the ECON Writing Intensive courses.

Marketing - General Major*

General Education

Complete lower-division requirements		35-41
Complete upper-division requirements (minimum of 6 credit hours)		6
BUSN 110	Introduction to Contemporary Business **	1
MATH 200	Calculus for Business and Economics	3

Business Administration Core

Complete business administration core requirements	42

Marketing - General Major

MKTG 402	Consumer Behavior	3
MKTG 407	Marketing Research	3
MKTG 411	Multi-National Marketing	3
MKTG 490	Marketing Policy and Strategy	3
Select four from the following:		12
MKTG 316	Professional Selling	
MKTG 367	Cooperative Education	
MKTG 368	Marketing Internship	
MKTG 369	Practicum	
MKTG 403	Advertising Strategy	
MKTG 404	Sales Management	
MKTG 406	Public Relations	
MKTG 412	Retail Marketing	
MKTG 414	Ethics and Social Issues in Administration	
MKTG 417	Advanced Professional Selling	
MKTG 428	Marketing of Services	
MKTG 450	Marketing on the Internet	
MKTG 455	Social Media Marketing	
MKTG 460	Web Analytics	
MKTG 475	Marketing Analytics	
MKTG 496	Selected Topics in Marketing	
200-400 Level Free Elective		3
Free Electives		6
Total Credit Hours		120-126

- * A grade of C- or better is required in all marketing courses counted toward the major. A grade of C or better is required in MKTG 311 as a prerequisite to upper-level MKTG courses.
- ** Not required for students pursuing the IT major or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.

All 300-400 level MKTG courses, except for MKTG 311, are included in the calculation of the 2.00 overall grade point average for major course work for graduation.

Additional Requirements and Information

Advanced Placement

The college accepts advanced placement credit in accordance with the rules and regulations outlined in the Academic Information section of this catalog. Students may take College-Level Examination Program (CLEP) tests to receive credit for:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
FIN 331	Legal Environment of Business	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3

Students are advised to contact the Office of Prior Learning Assessment for more information regarding CLEP and other prior learning assessment credit options. For advanced placement credit in any other business or public administration course, students are advised to contact the chair of the department offering the course. Additional information about credit awarded for qualifying scores on AP and IB subject examinations can be found on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Practical Work Experience for Business Administration Majors

Students may complement their major studies with a practical work experience, which may take the form of an internship, cooperative education experience or a class containing a real-world, hands-on project. Students must apply for internship or co-op participation through the Strome College of Business Career & Leadership Development Satellite Office. All work experiences must be approved by the faculty sponsor in the appropriate department prior to registering for credit. Students may not earn credit for previous or current work experiences. (However, academic credit for work experience may be approved in accordance with the policies for granting prior learning credit as defined in the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this catalog.) For details see the Center for Career & Leadership Development section of this catalog.

Use of Internship and Similar Hours Toward Business Administration Majors

A student may apply no more than six hours of cooperative education, student internship or practicum courses to satisfy degree requirements. Students may not use more than three hours of cooperative education, student internship or practicum courses to satisfy major elective requirements in each of the students' majors. These courses are numbered 367, 368 or 369. Additional hours of cooperative education, student internship or practicum courses, however, can be used to satisfy other requirements such as free electives or general business electives. Additional internships must each involve substantially different kinds of work experiences. Internships must be approved by the Chief Departmental Advisor of the student's major and the CAP Coordinator of the internship.

Transfer of the Associate of Science in Business Administration Towards Degree Requirements

Students transferring to the college must complete a minimum of 10 business courses offered by the college to earn the degree from Old Dominion University, in accordance with AACSB regulations. Those transfer students holding the Associate of Science in Business Administration degree from a Virginia Community College must earn the grade of "C" or better in the following courses in order to satisfy requirements found in the first two years of the BSBA degree:

COMM 101R	Public Speaking	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
BNAL 206	Business Analytics I	3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
Upper-level ethics course		

With the exception of the courses listed above, the University's lower-division General Education requirements are deemed satisfied by the accepted AS degrees. These typically include all AS degrees from the Virginia Community College System except the applied science degrees. For more information about accepted AS degrees contact the Office of Admissions. Associate degree holders, although meeting lower-level General Education requirements, must ensure that 120 credits are completed to earn the BSBA degree. A minimum of 25% of the required credit hours must be completed through Old Dominion University, at least 12 of which are upper-level courses in the major program.

The Strome College of Business does not accept courses completed at the freshman and sophomore levels at other institutions for required courses at the junior and senior level at Old Dominion University. Please see the section on CLEP credits (Prior Learning Assessment Credit Options at the Undergraduate Level) for additional information.

Grade Average Requirements for Graduation

To graduate with a Bachelor of Science in Business Administration degree, students must present a minimum of 120 hours with a minimum overall grade point average of 2.00 in all courses taken at Old Dominion University. Students must also attain a minimum overall grade point average of 2.00 in courses taken toward the major (courses included in the major grade point average calculation are listed following the description of each major's course work).

Additionally, students must attain a minimum overall grade point average of 2.00 in the BSBA Core listed below. Only courses completed at Old Dominion University will be used to compute the BSBA Core average. Students with an Information Systems and Technology major (excluding Business Analytics) are not required to take IT 360T, so the BSBA Core grade point average is computed using the remaining courses. If the BSBA Core average is below the required 2.00 minimum, students are advised to utilize the Grade Forgiveness Policy or Adjusted Resident Credit option when appropriate to improve the grade point average.

Requirements for Completing a Bachelor of Science in Business Administration

The following sections show the courses that are requirements for all business students, regardless of the chosen major: Lower-Division General Education, BSBA Core Courses, and Upper-Division General Education. Credit hours are listed after the course title. The student must also choose a major and complete the requirements listed for that major on the following pages.

Foundation Courses for Admission to the Strome College of Business

ENGL 110C	English Composition (C or better)	3
MATH 162M	Precalculus I (C or better)	3
ACCT 201	Principles of Financial Accounting (C or better)	3
ECON 202S	Principles of Microeconomics (C or better)	3
BUSN 110	Introduction to Contemporary Business *	1

* Not required for students pursuing an Information Systems and Technology major (excluding Business Analytics) or for students with an associate's degree in business administration or with a prior bachelor's degree in business administration.

See the section on Admission to the Undergraduate Program in Business Administration, General Requirements.

Business Elective

A business elective is a course that is offered by an accredited college of business, including the Strome College of Business at Old Dominion University. Public Affairs and Service (PAS) courses offered by the Strome College of Business are not considered as business courses. However, because some business courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate business elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Free Elective

In the majority of cases a free elective is any course offered by an accredited community college or university, including Old Dominion University. However, because some courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and

Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
MATH 162M	Precalculus I (C or better required)	3
Language and Culture I (May be waived; see requirement details)		0-3
Nature of Science I		4
BUSN 110	Introduction to Contemporary Business (C or better required)	1
Free Elective		3

Credit Hours 14-17

Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MATH 200	Calculus for Business and Economics	3
Language and Culture II (May be waived; see requirement details)		0-3
Nature of Science II		4
Interpreting the Past		3

Credit Hours 13-16

Sophomore		
Fall		
Literature		3
Oral Communication: COMM 101R required		3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL/DASC 357E	Ethics and Data	
PHIL 442E	Studies in Applied Ethics	
ACCT 201	Principles of Financial Accounting (C or better required)	3
ECON 202S	Principles of Microeconomics (C or better required)	3
Credit Hours		15

Spring		
Human Creativity		3
Information Literacy and Research		3
ACCT 202	Principles of Managerial Accounting	3

ECON 201S	Principles of Macroeconomics	3
BNAL 206	Business Analytics I	3
Credit Hours		15
Junior		
Fall		
MKTG 311	Marketing Principles and Problems (C or better required as a prerequisite to upper-level MKTG courses) **	3
BNAL 306	Business Analytics II	3
FIN 323	Introductory Financial Management	3
IT 360T	Principles of Information Technology	3
MGMT 325	Contemporary Organizations and Management	3
Credit Hours		15
Spring		
OPMT 303	Operations Management	3
FIN 331	Legal Environment of Business	3
ECON 301	Managerial Economics	3
MKTG 402	Consumer Behavior (C- or better required)	3
MKTG 411	Multi-National Marketing (C- or better required)	3
Free Elective		3
Credit Hours		18
Senior		
Fall		
MGMT 485W	Business Policy and Strategy (C or better required)	3
MKTG 407	Marketing Research (C- or better required)	3
MKTG Major Elective (C- or better required)		3
MKTG Major Elective (C- or better required)		3
Upper-Division General Education		3
Credit Hours		15
Spring		
MKTG 490	Marketing Policy and Strategy (C- or better required)	3
MKTG Major Elective (C- or better required)		3
MKTG Major Elective (C- or better required)		3
200-400 Level Free Elective		3
Upper-Division General Education		3
Credit Hours		15
Total Credit Hours		120-126

** C or better required as a prerequisite to upper-level MKTG courses.

BSBA to MBA (Master of Business Administration) Linked Program

Students interested in the program should contact the MBA Program Office as early as possible to discuss their plans for early entry. Once admitted to the program, the MBA program manager will act as the student's co-advisor, along with the chief departmental advisor or chief discipline advisor

in the student's undergraduate major. The MBA Program Office is located in 1026 Constant Hall. The phone number is 757-683-3585 and email is mbainfo@odu.edu.

BSBA to MPA (Master of Public Administration) Linked Program

The linked BSBA to MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking 12 credits of the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

A potential candidate will have:

1. Completed all lower level general education requirements
2. Achieved a cumulative GPA of at least 3.0 at the end of the junior year

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog. For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Marketing Minor Requirements Marketing Minor

A minor in marketing requires the completion of MKTG 311 plus 12 hours of 300/400-level marketing courses. All courses selected must be preceded by listed prerequisites. A grade of C or better is required in MKTG 311 as a prerequisite to upper-level MKTG courses.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of prerequisite courses. In addition, a grade of C- or better is required in all marketing courses counted toward the minor. A minimum of six hours in upper-level courses in the minor must be taken through courses offered by Old Dominion University.

Bachelor of Science in Business Administration Marketing Management with a Major in Digital Marketing (BSBA)

Chuanyi Tang, Chair
Michelle Carpenter, Chief Departmental Advisor

From building iconic brands to understanding why people buy what they buy, marketing is the exciting interface between companies and their customers and other stakeholders. It builds valuable relationships for companies and makes them more competitive in the marketplace. The marketing management degree program teaches students marketing, communication, and analytical knowledge and prepares students for high-demand marketing career opportunities in today's and tomorrow's global environment.

The marketing management degree program offers a general marketing major and three distinctive career-oriented majors:

1. Digital marketing major, which equips graduates with the knowledge base and skill set to leverage digital marketing platforms such as social media and search engines;
2. Marketing analytics and research major, which produces graduates for fast-growing career opportunities in the field of deriving deep customer insight and effective marketing strategy from data; also suitable for students interested in pursuing a graduate degree in marketing or related areas;
3. Professional sales major, which prepares graduates for a successful career in business-to-business sales.

For completion of a major under marketing management, a student must have a minimum overall cumulative grade point average of 2.00 in all courses taken toward the major. In addition, a grade of C- or better is required in all marketing courses counted toward the major. A student who seeks a Bachelor of Science in Business Administration degree in one of the marketing management majors from Old Dominion University must, in addition to meeting other requirements of the University, earn a minimum of 25 percent of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) through on- or off-campus instruction. This must include a minimum of 12 credit hours of upper-level MKTG courses.

Strome College of Business (SCB) Center for Undergraduate Advising and Student Success

The mission of this office is to challenge and support students in self-exploration and, through advising, provide resources for them to develop an achievable plan for success. Our vision is for students to be aware of their academic, personal, and professional goals; empowered to pursue them; and confident in their ability to accomplish them.

Our professional advisors work with all Strome College of Business students regarding degree planning, changing majors, admissions, continuance, graduation requirements and required curricula for the majors and minors offered by the College.

Degree Requirements

Students in all of the Bachelor of Science in Business Administration degree programs must fulfill the University General Education requirements (including foreign language) as well as the Strome College of Business's core, major, and elective requirements. Students must choose at least one major area to meet requirements towards the degree.

To stay in compliance with AACSB accreditation standards, students receiving a Bachelor of Science in Business Administration from Old Dominion University must complete at least half of their business course work in residence with a minimum of four courses in their declared major. This equates to 10 business classes, thus meeting the University's residency requirement as well.

Majors in the college may not take business and public administration courses for pass/fail credit except those courses in which pass/fail is the only grading option (i.e., internships and practica).

Admission to the Undergraduate Program in Business Administration

General Requirements

Applicants for admission to the undergraduate degree program in business administration (the Bachelor of Science in Business Administration) should apply initially to the Office of Admissions of Old Dominion University. Students cannot be accepted into business administration without first being admitted to the University. Admission to the University does not guarantee admission to the Bachelor of Science in Business Administration (BSBA) program. Candidates for admission to the BSBA program should indicate on the application to the University their intention to enter the undergraduate business administration degree program.

Admission to the Bachelor's Degree Program in Business Administration:

Before Admission to the bachelor's degree program in business administration can be granted, a student must have earned a grade of C or higher in each of the business Admission courses:

BUSN 110	Introduction to Contemporary Business	1
ENGL 110C	English Composition	3
MATH 162M	Precalculus I	3
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3

- BUSN 110 is not required for students pursuing majors under the BSBA in Information Systems and Technology (excluding Business Analytics) or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
- Students may utilize the Grade Forgiveness Policy for the business Admission courses.
- Transfer students may complete business Admission courses (BUSN 110, ENGL 110C, MATH 162M, ACCT 201, and ECON 202S) at another accredited college or university, but are responsible for having Transfer Evaluation Services determine that the courses are acceptable to the University.

Eligibility to Enroll in Upper-Level (300/400-level) Business Courses

Only students who have officially completed Admission courses to the BSBA program will be eligible to enroll in upper-level (300/400) business courses (refer to exceptions for non-business majors). However, students who are in progress with the business Admission courses may enroll in upper-level (300/400) business courses. Note: These students will need a Program Restriction Waiver (PRW) to enroll in these courses, with the exception of FIN 323, MGMT 325, MKTG 311, and OPMT 303. These courses require a junior class standing for registration.

Enrollment in 300/400-level Business Courses by Non-Business Majors

Enrollment in 300/400-level business courses will be granted without the Admission courses for the following exceptions:

1. Students pursuing a declared minor in the Strome College of Business may enroll in 300/400-level business courses appropriate to the minor.
2. Students pursuing Upper-Division General Education Requirement Option B: Interdisciplinary Minor or Option D: Six hours of elective upper-division courses outside the student's major discipline or college.
3. Students wishing to satisfy the Impact of Technology requirement may enroll in IT 360T.
4. Students pursuing a degree program other than the Bachelor of Science in Business Administration (BSBA) that requires or accepts specific 300/400-level business courses to complete the degree may enroll in the courses appropriate to the major.
5. Non-degree-seeking students may enroll in 300/400-level business courses if they have satisfied the prerequisites for these courses.

Students in categories 1 - 5 above who do not have a declared major will need a Program Restriction Waiver (PRW) in order to enroll in any 300/400-level Strome College of Business course (including Economics courses). Forms to request a PRW are available at the Strome College of Business website.

Regulations for Continuance in the Bachelor of Science in Business Administration

In addition to the Old Dominion University continuance policies, the following policies are specific to all declared Bachelor of Science in Business Administration (BSBA) students. The Strome College of Business

makes a reasonable effort to notify undergraduate students who are not in good academic standing in the BSBA program of their academic status. Each undergraduate student who is placed on BSBA Academic Alarm or BSBA Termination (explained below) will be sent an e-mail message to that effect at the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business. Non-receipt of the e-mail messages by a student will not be considered grounds for granting exceptions or delays in enforcement of the BSBA continuance regulations.

BSBA Continuance Regulations

If a student's Grade Point Average (GPA) in their BSBA Core courses falls below a 2.0, then they will be on Academic Alarm within the Strome College of Business (SCB). This policy is very similar to the University's academic continuance policy, the main difference being that it is based on the core Business courses and impacts acceptance and continuance within the SCB.

Academic Alarm

The first semester in which a student's BSBA Core GPA drops to below a 2.0, they will be on Academic Alarm. Once considered on academic alarm within the college, taking courses within the BSBA Core is the only way to bring that GPA back up.

- If the student raises the BSBA Core GPA to above a 2.0, then they will no longer be on academic alarm.
- If the BSBA Core GPA does not reach a 2.0 but the semester average in the BSBA Core courses is a 2.0 or higher, then the student will remain on academic alarm and be able to continue within the SCB.

SCB Termination

While on academic alarm within the Strome College of Business, if the semester BSBA Core GPA falls below a 2.0, the student will be terminated from the SCB and their major coding will be changed from Business to Undecided. (Terminations will not be processed in summer semesters.)

Appeals

If you have been terminated, you may appeal the decision if you have extenuating circumstances and documentation to support your claim. To appeal, write a letter and include documentation of your circumstances to the Associate Dean of the Strome College of Business (Constant Hall, Suite 2004). There are specific details that need to be included with your appeal - for more information, please see the appeals process as described in the most recently issued catalog.

Guidelines for Filing a BSBA Termination Appeal

1. All students have the right to appeal their BSBA termination if they believe that extraordinary circumstances were the main reason for their poor academic performance. Notifications of pending BSBA termination are sent to the student's ODU email address and include information on the appeal process and deadlines. All BSBA termination appeals must be submitted electronically using the link provided in the email and will be reviewed by the SCB Termination Appeal Committee. Students are responsible for submitting their appeal by the stated deadline; late appeals will not be reviewed. Decisions of the Termination Appeal Committee may be appealed to the Associate Dean for Academic Programs in the Strome College of Business whose decision is final.
2. Appeals must be based on circumstances pertinent to the semesters in which the academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the terminated student. The appeal letter must provide sufficient detail and explanation regarding the following points because there is no face-to-face meeting with the Associate Dean for Academic Programs in the Strome College of Business. The decision of the Associate Dean is final. Students without documentation will not be allowed to appeal their termination. In order to be reviewed, an appeal letter must:

- a. Document the extraordinary circumstances such as a death in the family, medical complications or chronic conditions, personal or family emergency, overwhelming work schedules, dorm-mate conflict, or a personal relationship conflict that have adversely affected performance: i.e., a statement or letter from a physician, employer, family members, faculty, academic advisor, Counseling Services, or Educational Accessibility.
 - b. Explain how the extraordinary circumstances caused each semester of poor academic performance.
 - c. State the reasons why an official withdrawal was not requested.
 - d. Explain how the extraordinary circumstance(s) has been resolved.
 - e. Provide a plan of action to return to good BSBA academic standing.
3. Students who do not file a BSBA termination appeal or whose appeals are denied, are no longer eligible to pursue a bachelor's degree in Business Administration. Upon BSBA termination, the student's major in the Strome College of Business will be removed. (This does not affect a declared second major outside of the BSBA.) These students are advised to work with an advisor in the SCB Center for Undergraduate Advising to explore other major options, and for referrals to other advising departments for a new major declaration.
 4. BSBA-terminated students who had pre-registered for a subsequent semester lose eligibility for continued enrollment in upper-level business courses.

Applying for Readmission to the BSBA Program

After a minimum of five years has passed since a student was terminated from the BSBA program, the student may apply for readmission to the program. There must be a high probability the student will successfully complete the degree program, and approval will be at the discretion of the Strome College of Business Associate Dean.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication: COMM 101R or MKTG 200R required. Additionally, all students majoring in business administration can expect to complete several courses in which individual and/or group oral presentations will be required.

Mathematics: MATH 162M and MATH 200 required.

Information Literacy and Research: IT 150G (recommended) or any "G" course from the approved general education information literacy and research course list.

Human Behavior: Met in the Business Administration core for all majors except Economics.

Philosophy and Ethics must be satisfied by completion of either PHIL 230E or an upper-level "E" course from the approved general education ethics course list. A philosophy course designated with a P will not meet this requirement for business administration students with the exception of a "P" course taken prior to fall 2010.

Impact of Technology requirement is satisfied within each BSBA degree major except Information Systems and Technology by IT 360T. In the Information Systems and Technology majors (excluding Business Analytics), the Impact of Technology requirement is satisfied by the coursework required for the major.

Transfer students with an applicable associate's degree from a Virginia Community College or another community college that has a seamless transfer agreement with ODU, and students with a prior bachelor's degree from another university, must nevertheless have a grade of C or better in the following to be able to transfer them:

COMM 101R	Public Speaking	3
or MKTG 200R	Professional Interactions and Negotiations	
PHIL 230E	Introduction to Ethics (Or an upper-level ethics course)	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3

Upper-Division General Education

- Option A. Any University-approved minor, second degree, or second major.
- Option B. An interdisciplinary minor consisting of 12 credits, three of which can be in the major. Interdisciplinary minors are described in the University Catalog section labeled Requirements for Undergraduate Degrees, Upper-Division Requirements.
- Option C. An approved certification program, such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the Strome College of Business and not required by the major (6 credits).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Business Administration Core

ACCT 201	Principles of Financial Accounting *	3
ACCT 202	Principles of Managerial Accounting *	3

BNAL 206	Business Analytics I *	3
BNAL 306	Business Analytics II	3
ECON 201S	Principles of Macroeconomics *	3
ECON 202S	Principles of Microeconomics *	3
ECON 301	Managerial Economics	3
FIN 323	Introductory Financial Management	3
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology **	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 485W	Business Policy and Strategy (C or better) ***	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
Total Credit Hours		42

- * Not automatically waived for transfer students with an applicable associate's degree from a Virginia Community College or another acceptable community college, or for students with a prior bachelor's degree from another university. A grade of C or better must be earned to transfer these courses to Old Dominion University.
- ** Students completing a major or minor in Information Systems and Technology (excluding the Business Analytics major) do not take this course.
- *** Students majoring in Economics must complete MGMT 485W, but meet the writing intensive requirement by earning a grade of C or better either in MGMT 485W or in one of the ECON Writing Intensive courses.

Digital Marketing Major*

General Education

Complete lower-division requirements		35-41
Complete upper-division requirements (minimum of 6 credit hours)		6
BUSN 110	Introduction to Contemporary Business **	1
MATH 200	Calculus for Business and Economics	3

Business Administration Core

Complete business administration core requirements	42

Digital Marketing

MKTG 402	Consumer Behavior	3
MKTG 407	Marketing Research	3
MKTG 411	Multi-National Marketing	3
MKTG 450	Marketing on the Internet	3
MKTG 455	Social Media Marketing	3
MKTG 460	Web Analytics	3
MKTG 490	Marketing Policy and Strategy	3

Select one of the following:	3

IT 325	Web Site and Web Page Design
MKTG 367	Cooperative Education
MKTG 368	Marketing Internship
MKTG 369	Practicum
MKTG 406	Public Relations
MKTG 412	Retail Marketing
MKTG 496	Selected Topics in Marketing

200-400 Level Free Elective	3

Free Electives	6

Total Credit Hours	120-126

- * A grade of C- or better is required in all marketing courses counted toward the major. A grade of C or better is required in MKTG 311 as a prerequisite to upper-level MKTG courses.

****** Not required for students pursuing the IT major or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.

All 300-400 level MKTG courses, except for MKTG 311, are included in the calculation of the 2.00 overall grade point average for major course work for graduation.

Additional Requirements and Information

Advanced Placement

The college accepts advanced placement credit in accordance with the rules and regulations outlined in the Academic Information section of this catalog. Students may take College-Level Examination Program (CLEP) tests to receive credit for:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
FIN 331	Legal Environment of Business	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3

Students are advised to contact the Office of Prior Learning Assessment for more information regarding CLEP and other prior learning assessment credit options. For advanced placement credit in any other business or public administration course, students are advised to contact the chair of the department offering the course. Additional information about credit awarded for qualifying scores on AP and IB subject examinations can be found on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Practical Work Experience for Business Administration Majors

Students may complement their major studies with a practical work experience, which may take the form of an internship, cooperative education experience or a class containing a real-world, hands-on project. Students must apply for internship or co-op participation through the Strome College of Business Career & Leadership Development Satellite Office. All work experiences must be approved by the faculty sponsor in the appropriate department prior to registering for credit. Students may not earn credit for previous or current work experiences. (However, academic credit for work experience may be approved in accordance with the policies for granting prior learning credit as defined in the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this catalog.) For details see the Center for Career & Leadership Development section of this catalog.

Use of Internship and Similar Hours Toward Business Administration Majors

A student may apply no more than six hours of cooperative education, student internship or practicum courses to satisfy degree requirements. Students may not use more than three hours of cooperative education, student internship or practicum courses to satisfy major elective requirements in each of the students' majors. These courses are numbered 367, 368 or 369. Additional hours of cooperative education, student internship or practicum courses, however, can be used to satisfy other requirements such as free electives or general business electives. Additional internships must each involve substantially different kinds of work experiences. Internships must be approved by the Chief Departmental Advisor of the student's major and the CAP Coordinator of the internship.

Transfer of the Associate of Science in Business Administration Towards Degree Requirements

Students transferring to the college must complete a minimum of 10 business courses offered by the college to earn the degree from Old Dominion University, in accordance with AACSB regulations. Those transfer students

holding the Associate of Science in Business Administration degree from a Virginia Community College must earn the grade of "C" or better in the following courses in order to satisfy requirements found in the first two years of the BSBA degree:

COMM 101R	Public Speaking	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
BNAL 206	Business Analytics I	3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
Upper-level ethics course		

With the exception of the courses listed above, the University's lower-division General Education requirements are deemed satisfied by the accepted AS degrees. These typically include all AS degrees from the Virginia Community College System except the applied science degrees. For more information about accepted AS degrees contact the Office of Admissions. Associate degree holders, although meeting lower-level General Education requirements, must ensure that 120 credits are completed to earn the BSBA degree. A minimum of 25% of the required credit hours must be completed through Old Dominion University, at least 12 of which are upper-level courses in the major program.

The Strome College of Business does not accept courses completed at the freshman and sophomore levels at other institutions for required courses at the junior and senior level at Old Dominion University. Please see the section on CLEP credits (Prior Learning Assessment Credit Options at the Undergraduate Level) for additional information.

Grade Average Requirements for Graduation

To graduate with a Bachelor of Science in Business Administration degree, students must present a minimum of 120 hours with a minimum overall grade point average of 2.00 in all courses taken at Old Dominion University. Students must also attain a minimum overall grade point average of 2.00 in courses taken toward the major (courses included in the major grade point average calculation are listed following the description of each major's course work).

Additionally, students must attain a minimum overall grade point average of 2.00 in the BSBA Core listed below. Only courses completed at Old Dominion University will be used to compute the BSBA Core average. Students with an Information Systems and Technology major (excluding Business Analytics) are not required to take IT 360T, so the BSBA Core grade point average is computed using the remaining courses. If the BSBA Core average is below the required 2.00 minimum, students are advised to utilize the Grade Forgiveness Policy or Adjusted Resident Credit option when appropriate to improve the grade point average.

Requirements for Completing a Bachelor of Science in Business Administration

The following sections show the courses that are requirements for all business students, regardless of the chosen major: Lower-Division General Education, BSBA Core Courses, and Upper-Division General Education. Credit hours are listed after the course title. The student must also choose a major and complete the requirements listed for that major on the following pages.

Foundation Courses for Admission to the Strome College of Business

ENGL 110C	English Composition (C or better)	3
MATH 162M	Precalculus I (C or better)	3
ACCT 201	Principles of Financial Accounting (C or better)	3

ECON 202S	Principles of Microeconomics (C or better)	3
BUSN 110	Introduction to Contemporary Business *	1

* Not required for students pursuing an Information Systems and Technology major (excluding Business Analytics) or for students with an associate's degree in business administration or with a prior bachelor's degree in business administration.

See the section on Admission to the Undergraduate Program in Business Administration, General Requirements.

Business Elective

A business elective is a course that is offered by an accredited college of business, including the Strome College of Business at Old Dominion University. Public Affairs and Service (PAS) courses offered by the Strome College of Business are not considered as business courses. However, because some business courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate business elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Free Elective

In the majority of cases a free elective is any course offered by an accredited community college or university, including Old Dominion University. However, because some courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
MATH 162M	Precalculus I (C or better required)	3
Language and Culture I (May be waived; see requirement details)		0-3
Nature of Science I		4
BUSN 110	Introduction to Contemporary Business (C or better required)	1
Free Elective		3
Credit Hours		14-17
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MATH 200	Calculus for Business and Economics	3

Language and Culture II (May be waived; see requirement details)	0-3
Nature of Science II	4
Interpreting the Past	3

Credit Hours 13-16

Sophomore

Fall

Literature	3
Oral Communication: COMM 101R required	3
Select one of the following:	3

PHIL 230E	Introduction to Ethics	
PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL/DASC 357E	Ethics and Data	
PHIL 442E	Studies in Applied Ethics	
ACCT 201	Principles of Financial Accounting (C or better required)	3
ECON 202S	Principles of Microeconomics (C or better required)	3

Credit Hours 15

Spring

Human Creativity		3
Information Literacy and Research		3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
BNAL 206	Business Analytics I	3

Credit Hours 15

Junior

Fall

MKTG 311	Marketing Principles and Problems (C or better required for major prerequisite) **	3
BNAL 306	Business Analytics II	3
FIN 323	Introductory Financial Management	3
IT 360T	Principles of Information Technology	3
MGMT 325	Contemporary Organizations and Management	3

Credit Hours 15

Spring

OPMT 303	Operations Management	3
FIN 331	Legal Environment of Business	3
ECON 301	Managerial Economics	3
MKTG 402	Consumer Behavior (C- or better required)	3
MKTG 411	Multi-National Marketing (C- or better required)	3
Free Elective		3

Credit Hours 18

Senior		
Fall		
MGMT 485W	Business Policy and Strategy (C or better required)	3
MKTG 407	Marketing Research (C- or better required)	3
MKTG 450	Marketing on the Internet	3
MKTG 455	Social Media Marketing	3
Upper-Division General Education		3
Credit Hours		15
Spring		
MKTG 490	Marketing Policy and Strategy (C- or better required)	3
MKTG 460	Web Analytics	3
200-400 Level Free Elective		3
Upper-Division General Education		3
Select one of the following:		3
IT 325	Web Site and Web Page Design	
MKTG 367	Cooperative Education	
MKTG 368	Marketing Internship	
MKTG 369	Practicum	
MKTG 406	Public Relations	
MKTG 412	Retail Marketing	
MKTG 496	Selected Topics in Marketing	
Credit Hours		15
Total Credit Hours		120-126

** C or better required as a prerequisite to upper-level MKTG courses.

BSBA to MBA (Master of Business Administration) Linked Program

Students interested in the program should contact the MBA Program Office as early as possible to discuss their plans for early entry. Once admitted to the program, the MBA program manager will act as the student's co-advisor, along with the chief departmental advisor or chief discipline advisor in the student's undergraduate major. The MBA Program Office is located in 1026 Constant Hall. The phone number is 757-683-3585 and email is mbainfo@odu.edu.

BSBA to MPA (Master of Public Administration) Linked Program

The linked BSBA to MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking 12 credits of the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

A potential candidate will have:

1. Completed all lower level general education requirements
2. Achieved a cumulative GPA of at least 3.0 at the end of the junior year

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog. For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Marketing-Digital Marketing Minor

Marketing-Digital Marketing Minor

MKTG 311	Marketing Principles and Problems *	3
MKTG 450	Marketing on the Internet	3
MKTG 455	Social Media Marketing	3
Select one of the following:		3
MKTG 318	AI in Business: Foundations and Applications	
MKTG 319	Artificial Intelligence (AI) in Digital Marketing Management	
MKTG 403	Advertising Strategy	
MKTG 406	Public Relations	
MKTG 460	Web Analytics	
300/400-level marketing course		3
Total Credit Hours		15

* A grade of C or better is required in MKTG 311 as a prerequisite to upper-level MKTG courses.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of prerequisite courses. In addition, a grade of C- or better is required in all marketing courses counted toward the minor. A minimum of six hours in upper-level courses in the minor must be taken through courses offered by Old Dominion University.

Bachelor of Science in Business Administration Marketing Management with a Major in Marketing Analytics and Research (BSBA)

Chuanyi Tang, Chair
Michelle Carpenter, Chief Departmental Advisor

From building iconic brands to understanding why people buy what they buy, marketing is the exciting interface between companies and their customers and other stakeholders. It builds valuable relationships for companies and makes them more competitive in the marketplace. The marketing management degree program teaches students marketing, communication, and analytical knowledge and prepares students for high-demand marketing career opportunities in today's and tomorrow's global environment.

The marketing management degree program offers a general marketing major and three distinctive career-oriented majors:

1. Digital marketing major, which equips graduates with the knowledge base and skill set to leverage digital marketing platforms such as social media and search engines;

2. Marketing analytics and research major, which produces graduates for fast-growing career opportunities in the field of deriving deep customer insight and effective marketing strategy from data; also suitable for students interested in pursuing a graduate degree in marketing or related areas;
3. Professional sales major, which prepares graduates for a successful career in business-to-business sales.

For completion of a major under marketing management, a student must have a minimum overall cumulative grade point average of 2.00 in all courses taken toward the major. In addition, a grade of C- or better is required in all marketing courses counted toward the major. A student who seeks a Bachelor of Science in Business Administration degree in one of the marketing management majors from Old Dominion University must, in addition to meeting other requirements of the University, earn a minimum of 25 percent of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) through on- or off-campus instruction. This must include a minimum of 12 credit hours of upper-level MKTG courses.

Strome College of Business (SCB) Center for Undergraduate Advising and Student Success

The mission of this office is to challenge and support students in self-exploration and, through advising, provide resources for them to develop an achievable plan for success. Our vision is for students to be aware of their academic, personal, and professional goals; empowered to pursue them; and confident in their ability to accomplish them.

Our professional advisors work with all Strome College of Business students regarding degree planning, changing majors, admissions, continuance, graduation requirements and required curricula for the majors and minors offered by the College.

Degree Requirements

Students in all of the Bachelor of Science in Business Administration degree programs must fulfill the University General Education requirements (including foreign language) as well as the Strome College of Business's core, major, and elective requirements. Students must choose at least one major area to meet requirements towards the degree.

To stay in compliance with AACSB accreditation standards, students receiving a Bachelor of Science in Business Administration from Old Dominion University must complete at least half of their business course work in residence with a minimum of four courses in their declared major. This equates to 10 business classes, thus meeting the University's residency requirement as well.

Majors in the college may not take business and public administration courses for pass/fail credit except those courses in which pass/fail is the only grading option (i.e., internships and practica).

Admission to the Undergraduate Program in Business Administration

General Requirements

Applicants for admission to the undergraduate degree program in business administration (the Bachelor of Science in Business Administration) should apply initially to the Office of Admissions of Old Dominion University. Students cannot be accepted into business administration without first being admitted to the University. Admission to the University does not guarantee admission to the Bachelor of Science in Business Administration (BSBA) program. Candidates for admission to the BSBA program should indicate on the application to the University their intention to enter the undergraduate business administration degree program.

Admission to the Bachelor's Degree Program in Business Administration:

Before Admission to the bachelor's degree program in business administration can be granted, a student must have earned a grade of C or higher in each of the business Admission courses:

BUSN 110	Introduction to Contemporary Business	1
ENGL 110C	English Composition	3
MATH 162M	Precalculus I	3
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3

- BUSN 110 is not required for students pursuing majors under the BSBA in Information Systems and Technology (excluding Business Analytics) or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
- Students may utilize the Grade Forgiveness Policy for the business Admission courses.
- Transfer students may complete business Admission courses (BUSN 110, ENGL 110C, MATH 162M, ACCT 201, and ECON 202S) at another accredited college or university, but are responsible for having Transfer Evaluation Services determine that the courses are acceptable to the University.

Eligibility to Enroll in Upper-Level (300/400-level) Business Courses

Only students who have officially completed Admission courses to the BSBA program will be eligible to enroll in upper-level (300/400) business courses (refer to exceptions for non-business majors). However, students who are in progress with the business Admission courses may enroll in upper-level (300/400) business courses. Note: These students will need a Program Restriction Waiver (PRW) to enroll in these courses, with the exception of FIN 323, MGMT 325, MKTG 311, and OPMT 303. These courses require a junior class standing for registration.

Enrollment in 300/400-level Business Courses by Non-Business Majors

Enrollment in 300/400-level business courses will be granted without the Admission courses for the following exceptions:

1. Students pursuing a declared minor in the Strome College of Business may enroll in 300/400-level business courses appropriate to the minor.
2. Students pursuing Upper-Division General Education Requirement Option B: Interdisciplinary Minor or Option D: Six hours of elective upper-division courses outside the student's major discipline or college.
3. Students wishing to satisfy the Impact of Technology requirement may enroll in IT 360T.
4. Students pursuing a degree program other than the Bachelor of Science in Business Administration (BSBA) that requires or accepts specific 300/400-level business courses to complete the degree may enroll in the courses appropriate to the major.
5. Non-degree-seeking students may enroll in 300/400-level business courses if they have satisfied the prerequisites for these courses.

Students in categories 1 - 5 above who do not have a declared major will need a Program Restriction Waiver (PRW) in order to enroll in any 300/400-level Strome College of Business course (including Economics courses). Forms to request a PRW are available at the Strome College of Business website.

Regulations for Continuance in the Bachelor of Science in Business Administration

In addition to the Old Dominion University continuance policies, the following policies are specific to all declared Bachelor of Science in Business Administration (BSBA) students. The Strome College of Business

makes a reasonable effort to notify undergraduate students who are not in good academic standing in the BSBA program of their academic status. Each undergraduate student who is placed on BSBA Academic Alarm or BSBA Termination (explained below) will be sent an e-mail message to that effect at the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business. Non-receipt of the e-mail messages by a student will not be considered grounds for granting exceptions or delays in enforcement of the BSBA continuance regulations.

BSBA Continuance Regulations

If a student's Grade Point Average (GPA) in their BSBA Core courses falls below a 2.0, then they will be on Academic Alarm within the Strome College of Business (SCB). This policy is very similar to the University's academic continuance policy, the main difference being that it is based on the core Business courses and impacts acceptance and continuance within the SCB.

Academic Alarm

The first semester in which a student's BSBA Core GPA drops to below a 2.0, they will be on Academic Alarm. Once considered on academic alarm within the college, taking courses within the BSBA Core is the only way to bring that GPA back up.

- If the student raises the BSBA Core GPA to above a 2.0, then they will no longer be on academic alarm.
- If the BSBA Core GPA does not reach a 2.0 but the semester average in the BSBA Core courses is a 2.0 or higher, then the student will remain on academic alarm and be able to continue within the SCB.

SCB Termination

While on academic alarm within the Strome College of Business, if the semester BSBA Core GPA falls below a 2.0, the student will be terminated from the SCB and their major coding will be changed from Business to Undecided. (Terminations will not be processed in summer semesters.)

Appeals

If you have been terminated, you may appeal the decision if you have extenuating circumstances and documentation to support your claim. To appeal, write a letter and include documentation of your circumstances to the Associate Dean of the Strome College of Business (Constant Hall, Suite 2004). There are specific details that need to be included with your appeal - for more information, please see the appeals process as described in the most recently issued catalog.

Guidelines for Filing a BSBA Termination Appeal

1. All students have the right to appeal their BSBA termination if they believe that extraordinary circumstances were the main reason for their poor academic performance. Notifications of pending BSBA termination are sent to the student's ODU email address and include information on the appeal process and deadlines. All BSBA termination appeals must be submitted electronically using the link provided in the email and will be reviewed by the SCB Termination Appeal Committee. Students are responsible for submitting their appeal by the stated deadline; late appeals will not be reviewed. Decisions of the Termination Appeal Committee may be appealed to the Associate Dean for Academic Programs in the Strome College of Business whose decision is final.
2. Appeals must be based on circumstances pertinent to the semesters in which the academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the terminated student. The appeal letter must provide sufficient detail and explanation regarding the following points because there is no face-to-face meeting with the Associate Dean for Academic Programs in the Strome College of Business. The decision of the Associate Dean is final. Students without documentation will not be allowed to appeal their termination. In order to be reviewed, an appeal letter must:

- a. Document the extraordinary circumstances such as a death in the family, medical complications or chronic conditions, personal or family emergency, overwhelming work schedules, dorm-mate conflict, or a personal relationship conflict that have adversely affected performance: i.e., a statement or letter from a physician, employer, family members, faculty, academic advisor, Counseling Services, or Educational Accessibility.
 - b. Explain how the extraordinary circumstances caused each semester of poor academic performance.
 - c. State the reasons why an official withdrawal was not requested.
 - d. Explain how the extraordinary circumstance(s) has been resolved.
 - e. Provide a plan of action to return to good BSBA academic standing.
3. Students who do not file a BSBA termination appeal or whose appeals are denied, are no longer eligible to pursue a bachelor's degree in Business Administration. Upon BSBA termination, the student's major in the Strome College of Business will be removed. (This does not affect a declared second major outside of the BSBA.) These students are advised to work with an advisor in the SCB Center for Undergraduate Advising to explore other major options, and for referrals to other advising departments for a new major declaration.
 4. BSBA-terminated students who had pre-registered for a subsequent semester lose eligibility for continued enrollment in upper-level business courses.

Applying for Readmission to the BSBA Program

After a minimum of five years has passed since a student was terminated from the BSBA program, the student may apply for readmission to the program. There must be a high probability the student will successfully complete the degree program, and approval will be at the discretion of the Strome College of Business Associate Dean.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication: COMM 101R or MKTG 200R required. Additionally, all students majoring in business administration can expect to complete several courses in which individual and/or group oral presentations will be required.

Mathematics: MATH 162M and MATH 200 required.

Information Literacy and Research: IT 150G (recommended) or any "G" course from the approved general education information literacy and research course list.

Human Behavior: Met in the Business Administration core for all majors except Economics.

Philosophy and Ethics must be satisfied by completion of either PHIL 230E or an upper-level "E" course from the approved general education ethics course list. A philosophy course designated with a P will not meet this requirement for business administration students with the exception of a "P" course taken prior to fall 2010.

Impact of Technology requirement is satisfied within each BSBA degree major except Information Systems and Technology by IT 360T. In the Information Systems and Technology majors (excluding Business Analytics), the Impact of Technology requirement is satisfied by the coursework required for the major.

Transfer students with an applicable associate's degree from a Virginia Community College or another community college that has a seamless transfer agreement with ODU, and students with a prior bachelor's degree from another university, must nevertheless have a grade of C or better in the following to be able to transfer them:

COMM 101R	Public Speaking	3
or MKTG 200R	Professional Interactions and Negotiations	
PHIL 230E	Introduction to Ethics (Or an upper-level ethics course)	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3

Upper-Division General Education

- Option A. Any University-approved minor, second degree, or second major.
- Option B. An interdisciplinary minor consisting of 12 credits, three of which can be in the major. Interdisciplinary minors are described in the University Catalog section labeled Requirements for Undergraduate Degrees, Upper-Division Requirements.
- Option C. An approved certification program, such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the Strome College of Business and not required by the major (6 credits).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Business Administration Core

ACCT 201	Principles of Financial Accounting *	3
ACCT 202	Principles of Managerial Accounting *	3

BNAL 206	Business Analytics I *	3
BNAL 306	Business Analytics II	3
ECON 201S	Principles of Macroeconomics *	3
ECON 202S	Principles of Microeconomics *	3
ECON 301	Managerial Economics	3
FIN 323	Introductory Financial Management	3
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology **	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 485W	Business Policy and Strategy (C or better) ***	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
Total Credit Hours		42

- * Not automatically waived for transfer students with an applicable associate's degree from a Virginia Community College or another acceptable community college, or for students with a prior bachelor's degree from another university. A grade of C or better must be earned to transfer these courses to Old Dominion University.
- ** Students completing a major or minor in Information Systems and Technology (excluding the Business Analytics major) do not take this course.
- *** Students majoring in Economics must complete MGMT 485W, but meet the writing intensive requirement by earning a grade of C or better either in MGMT 485W or in one of the ECON Writing Intensive courses.

Marketing Analytics and Research Major*

General Education

Complete lower-division requirements		35-41
Complete upper-division requirements (minimum of 6 credit hours)		6
BUSN 110	Introduction to Contemporary Business **	1
MATH 200	Calculus for Business and Economics	3

Business Administration Core

Complete business administration core requirements	42

Marketing Analytics and Research

MKTG 402	Consumer Behavior	3
MKTG 407	Marketing Research	3
MKTG 411	Multi-National Marketing	3
MKTG 460	Web Analytics	3
MKTG 475	Marketing Analytics	3
MKTG 490	Marketing Policy and Strategy	3
BNAL 405	Spreadsheet-Based Data Analysis for Decision Making	3

Select one of the following:	3

IT 450	Database Concepts
BNAL 415	Advanced Business Analytics/Big Data Applications
MKTG 367	Cooperative Education
MKTG 368	Marketing Internship
MKTG 369	Practicum
MKTG 496	Selected Topics in Marketing
PSYC 318W	Research Methods in Psychology

200-400 Level Free Elective	3
Free Electives	6

Total Credit Hours	120-126

- * A grade of C- or better is required in all marketing courses counted toward the major. A grade of C or better is

required in MKTG 311 as a prerequisite to upper-level MKTG courses.

** Not required for students pursuing the IT major or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.

All 300-400 level MKTG courses, except for MKTG 311, are included in the calculation of the 2.00 overall grade point average for major course work for graduation.

Additional Requirements and Information

Advanced Placement

The college accepts advanced placement credit in accordance with the rules and regulations outlined in the Academic Information section of this catalog. Students may take College-Level Examination Program (CLEP) tests to receive credit for:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
FIN 331	Legal Environment of Business	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3

Students are advised to contact the Office of Prior Learning Assessment for more information regarding CLEP and other prior learning assessment credit options. For advanced placement credit in any other business or public administration course, students are advised to contact the chair of the department offering the course. Additional information about credit awarded for qualifying scores on AP and IB subject examinations can be found on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Practical Work Experience for Business Administration Majors

Students may complement their major studies with a practical work experience, which may take the form of an internship, cooperative education experience or a class containing a real-world, hands-on project. Students must apply for internship or co-op participation through the Strome College of Business Career & Leadership Development Satellite Office. All work experiences must be approved by the faculty sponsor in the appropriate department prior to registering for credit. Students may not earn credit for previous or current work experiences. (However, academic credit for work experience may be approved in accordance with the policies for granting prior learning credit as defined in the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this catalog.) For details see the Center for Career & Leadership Development section of this catalog.

Use of Internship and Similar Hours Toward Business Administration Majors

A student may apply no more than six hours of cooperative education, student internship or practicum courses to satisfy degree requirements. Students may not use more than three hours of cooperative education, student internship or practicum courses to satisfy major elective requirements in each of the students' majors. These courses are numbered 367, 368 or 369. Additional hours of cooperative education, student internship or practicum courses, however, can be used to satisfy other requirements such as free electives or general business electives. Additional internships must each involve substantially different kinds of work experiences. Internships must be approved by the Chief Departmental Advisor of the student's major and the CAP Coordinator of the internship.

Transfer of the Associate of Science in Business Administration Towards Degree Requirements

Students transferring to the college must complete a minimum of 10 business courses offered by the college to earn the degree from Old Dominion University, in accordance with AACSB regulations. Those transfer students holding the Associate of Science in Business Administration degree from a Virginia Community College must earn the grade of "C" or better in the following courses in order to satisfy requirements found in the first two years of the BSBA degree:

COMM 101R	Public Speaking	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
BNAL 206	Business Analytics I	3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
Upper-level ethics course		

With the exception of the courses listed above, the University's lower-division General Education requirements are deemed satisfied by the accepted AS degrees. These typically include all AS degrees from the Virginia Community College System except the applied science degrees. For more information about accepted AS degrees contact the Office of Admissions. Associate degree holders, although meeting lower-level General Education requirements, must ensure that 120 credits are completed to earn the BSBA degree. A minimum of 25% of the required credit hours must be completed through Old Dominion University, at least 12 of which are upper-level courses in the major program.

The Strome College of Business does not accept courses completed at the freshman and sophomore levels at other institutions for required courses at the junior and senior level at Old Dominion University. Please see the section on CLEP credits (Prior Learning Assessment Credit Options at the Undergraduate Level) for additional information.

Grade Average Requirements for Graduation

To graduate with a Bachelor of Science in Business Administration degree, students must present a minimum of 120 hours with a minimum overall grade point average of 2.00 in all courses taken at Old Dominion University. Students must also attain a minimum overall grade point average of 2.00 in courses taken toward the major (courses included in the major grade point average calculation are listed following the description of each major's course work).

Additionally, students must attain a minimum overall grade point average of 2.00 in the BSBA Core listed below. Only courses completed at Old Dominion University will be used to compute the BSBA Core average. Students with an Information Systems and Technology major (excluding Business Analytics) are not required to take IT 360T, so the BSBA Core grade point average is computed using the remaining courses. If the BSBA Core average is below the required 2.00 minimum, students are advised to utilize the Grade Forgiveness Policy or Adjusted Resident Credit option when appropriate to improve the grade point average.

Requirements for Completing a Bachelor of Science in Business Administration

The following sections show the courses that are requirements for all business students, regardless of the chosen major: Lower-Division General Education, BSBA Core Courses, and Upper-Division General Education. Credit hours are listed after the course title. The student must also choose a major and complete the requirements listed for that major on the following pages.

Foundation Courses for Admission to the Strome College of Business

ENGL 110C	English Composition (C or better)	3
MATH 162M	Precalculus I (C or better)	3
ACCT 201	Principles of Financial Accounting (C or better)	3
ECON 202S	Principles of Microeconomics (C or better)	3
BUSN 110	Introduction to Contemporary Business *	1

* Not required for students pursuing an Information Systems and Technology major (excluding Business Analytics) or for students with an associate's degree in business administration or with a prior bachelor's degree in business administration.

See the section on Admission to the Undergraduate Program in Business Administration, General Requirements.

Business Elective

A business elective is a course that is offered by an accredited college of business, including the Strome College of Business at Old Dominion University. Public Affairs and Service (PAS) courses offered by the Strome College of Business are not considered as business courses. However, because some business courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate business elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Free Elective

In the majority of cases a free elective is any course offered by an accredited community college or university, including Old Dominion University. However, because some courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
MATH 162M	Precalculus I (C or better required)	3
Language and Culture I (May be waived; see requirement details)		0-3
Nature of Science I		4
BUSN 110	Introduction to Contemporary Business (C or better required)	1
Free Elective		3
Credit Hours		14-17

Spring

ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MATH 200	Calculus for Business and Economics	3
Language and Culture II (May be waived; see requirement details)		0-3
Nature of Science II		4
Interpreting the Past		3

Credit Hours 13-16

Sophomore

Fall

Literature	3
Oral Communication: COMM 101R required	3
Select one of the following:	3

PHIL 230E	Introduction to Ethics	
PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL/DASC 357E	Ethics and Data	
PHIL 442E	Studies in Applied Ethics	
ACCT 201	Principles of Financial Accounting (C or better required)	3
ECON 202S	Principles of Microeconomics (C or better required)	3

Credit Hours 15

Spring

Human Creativity		3
Information Literacy and Research		3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
BNAL 206	Business Analytics I	3

Credit Hours 15

Junior

Fall

MKTG 311	Marketing Principles and Problems (C or better required as a prerequisite to upper-level MKTG courses) **	3
BNAL 306	Business Analytics II	3
FIN 323	Introductory Financial Management	3
IT 360T	Principles of Information Technology	3
MGMT 325	Contemporary Organizations and Management	3

Credit Hours 15

Spring

OPMT 303	Operations Management	3
FIN 331	Legal Environment of Business	3
ECON 301	Managerial Economics	3

MKTG 402	Consumer Behavior (C- or better required)	3
MKTG 411	Multi-National Marketing (C- or better required)	3
Free Elective		3
Credit Hours		18

Senior

Fall

MGMT 485W	Business Policy and Strategy (C or better required)	3
MKTG 407	Marketing Research (C- or better required)	3
MKTG 460	Web Analytics	3
BNAL 405	Spreadsheet-Based Data Analysis for Decision Making	3
Select one of the following:		3

IT 450	Database Concepts	
BNAL 415	Advanced Business Analytics/Big Data Applications	
MKTG 367	Cooperative Education	
MKTG 368	Marketing Internship	
MKTG 369	Practicum	
MKTG 496	Selected Topics in Marketing	
PSYC 318W	Research Methods in Psychology	
Credit Hours		15

Spring

MKTG 490	Marketing Policy and Strategy (C- or better required)	3
MKTG 475	Marketing Analytics	3
200-400 Level Free Elective		3
Upper-Division General Education		3
Upper-Division General Education		3
Credit Hours		15
Total Credit Hours		120-126

** C or better required as a prerequisite to upper-level MKTG courses.

BSBA to MBA (Master of Business Administration) Linked Program

Students interested in the program should contact the MBA Program Office as early as possible to discuss their plans for early entry. Once admitted to the program, the MBA program manager will act as the student's co-advisor, along with the chief departmental advisor or chief discipline advisor in the student's undergraduate major. The MBA Program Office is located in 1026 Constant Hall. The phone number is 757-683-3585 and email is mbainfo@odu.edu.

BSBA to MPA (Master of Public Administration) Linked Program

The linked BSBA to MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking 12 credits of the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors,

but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

A potential candidate will have:

1. Completed all lower level general education requirements
2. Achieved a cumulative GPA of at least 3.0 at the end of the junior year

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog. For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Marketing-Marketing Analytics Minor

Marketing-Marketing Analytics Minor

MKTG 311	Marketing Principles and Problems *	3
MKTG 407	Marketing Research	3
MKTG 460	Web Analytics	3
MKTG 475	Marketing Analytics	3
300/400-level marketing course		3
Total Credit Hours		15

* A grade of C or better is required in MKTG 311 as a prerequisite to upper-level MKTG courses.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of prerequisite courses. In addition, a grade of C- or better is required in all marketing courses counted toward the minor. A minimum of six hours in upper-level courses in the minor must be taken through courses offered by Old Dominion University.

Bachelor of Science in Business Administration Marketing Management with a Major in Professional Sales (BSBA)

Chuan yi Tang, Chair
Michelle Carpenter, Chief Departmental Advisor

From building iconic brands to understanding why people buy what they buy, marketing is the exciting interface between companies and their customers and other stakeholders. It builds valuable relationships for companies and makes them more competitive in the marketplace. The marketing management degree program teaches students marketing, communication, and analytical knowledge and prepares students for high-demand marketing career opportunities in today's and tomorrow's global environment.

The marketing management degree program offers a general marketing major and three distinctive career-oriented majors:

1. Digital marketing major, which equips graduates with the knowledge base and skill set to leverage digital marketing platforms such as social media and search engines;
2. Marketing analytics and research major, which produces graduates for fast-growing career opportunities in the field of deriving deep customer

insight and effective marketing strategy from data; also suitable for students interested in pursuing a graduate degree in marketing or related areas;

3. Professional sales major, which prepares graduates for a successful career in business-to-business sales.

For completion of a major under marketing management, a student must have a minimum overall cumulative grade point average of 2.00 in all courses taken toward the major. In addition, a grade of C- or better is required in all marketing courses counted toward the major. A student who seeks a Bachelor of Science in Business Administration degree in one of the marketing management majors from Old Dominion University must, in addition to meeting other requirements of the University, earn a minimum of 25 percent of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) through on- or off-campus instruction. This must include a minimum of 12 credit hours of upper-level MKTG courses.

Strome College of Business (SCB) Center for Undergraduate Advising and Student Success

The mission of this office is to challenge and support students in self-exploration and, through advising, provide resources for them to develop an achievable plan for success. Our vision is for students to be aware of their academic, personal, and professional goals; empowered to pursue them; and confident in their ability to accomplish them.

Our professional advisors work with all Strome College of Business students regarding degree planning, changing majors, admissions, continuance, graduation requirements and required curricula for the majors and minors offered by the College.

Degree Requirements

Students in all of the Bachelor of Science in Business Administration degree programs must fulfill the University General Education requirements (including foreign language) as well as the Strome College of Business's core, major, and elective requirements. Students must choose at least one major area to meet requirements towards the degree.

To stay in compliance with AACSB accreditation standards, students receiving a Bachelor of Science in Business Administration from Old Dominion University must complete at least half of their business course work in residence with a minimum of four courses in their declared major. This equates to 10 business classes, thus meeting the University's residency requirement as well.

Majors in the college may not take business and public administration courses for pass/fail credit except those courses in which pass/fail is the only grading option (i.e., internships and practica).

Admission to the Undergraduate Program in Business Administration

General Requirements

Applicants for admission to the undergraduate degree program in business administration (the Bachelor of Science in Business Administration) should apply initially to the Office of Admissions of Old Dominion University. Students cannot be accepted into business administration without first being admitted to the University. Admission to the University does not guarantee admission to the Bachelor of Science in Business Administration (BSBA) program. Candidates for admission to the BSBA program should indicate on the application to the University their intention to enter the undergraduate business administration degree program.

Admission to the Bachelor's Degree Program in Business Administration:

Before Admission to the bachelor's degree program in business administration can be granted, a student must have earned a grade of C or higher in each of the business Admission courses:

BUSN 110	Introduction to Contemporary Business	1
ENGL 110C	English Composition	3
MATH 162M	Precalculus I	3
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3

- BUSN 110 is not required for students pursuing majors under the BSBA in Information Systems and Technology (excluding Business Analytics) or for any student with an associate's degree in business administration or with a prior bachelor's degree in business administration.
- Students may utilize the Grade Forgiveness Policy for the business Admission courses.
- Transfer students may complete business Admission courses (BUSN 110, ENGL 110C, MATH 162M, ACCT 201, and ECON 202S) at another accredited college or university, but are responsible for having Transfer Evaluation Services determine that the courses are acceptable to the University.

Eligibility to Enroll in Upper-Level (300/400-level) Business Courses

Only students who have officially completed Admission courses to the BSBA program will be eligible to enroll in upper-level (300/400) business courses (refer to exceptions for non-business majors). However, students who are in progress with the business Admission courses may enroll in upper-level (300/400) business courses. Note: These students will need a Program Restriction Waiver (PRW) to enroll in these courses, with the exception of FIN 323, MGMT 325, MKTG 311, and OPMT 303. These courses require a junior class standing for registration.

Enrollment in 300/400-level Business Courses by Non-Business Majors

Enrollment in 300/400-level business courses will be granted without the Admission courses for the following exceptions:

1. Students pursuing a declared minor in the Strome College of Business may enroll in 300/400-level business courses appropriate to the minor.
2. Students pursuing Upper-Division General Education Requirement Option B: Interdisciplinary Minor or Option D: Six hours of elective upper-division courses outside the student's major discipline or college.
3. Students wishing to satisfy the Impact of Technology requirement may enroll in IT 360T.
4. Students pursuing a degree program other than the Bachelor of Science in Business Administration (BSBA) that requires or accepts specific 300/400-level business courses to complete the degree may enroll in the courses appropriate to the major.
5. Non-degree-seeking students may enroll in 300/400-level business courses if they have satisfied the prerequisites for these courses.

Students in categories 1 - 5 above who do not have a declared major will need a Program Restriction Waiver (PRW) in order to enroll in any 300/400-level Strome College of Business course (including Economics courses). Forms to request a PRW are available at the Strome College of Business website.

Regulations for Continuance in the Bachelor of Science in Business Administration

In addition to the Old Dominion University continuance policies, the following policies are specific to all declared Bachelor of Science in Business Administration (BSBA) students. The Strome College of Business makes a reasonable effort to notify undergraduate students who are not in good academic standing in the BSBA program of their academic status. Each undergraduate student who is placed on BSBA Academic Alarm or BSBA Termination (explained below) will be sent an e-mail message to that effect at the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business. Non-

receipt of the e-mail messages by a student will not be considered grounds for granting exceptions or delays in enforcement of the BSBA continuance regulations.

BSBA Continuance Regulations

If a student's Grade Point Average (GPA) in their BSBA Core courses falls below a 2.0, then they will be on Academic Alarm within the Strome College of Business (SCB). This policy is very similar to the University's academic continuance policy, the main difference being that it is based on the core Business courses and impacts acceptance and continuance within the SCB.

Academic Alarm

The first semester in which a student's BSBA Core GPA drops to below a 2.0, they will be on Academic Alarm. Once considered on academic alarm within the college, taking courses within the BSBA Core is the only way to bring that GPA back up.

- If the student raises the BSBA Core GPA to above a 2.0, then they will no longer be on academic alarm.
- If the BSBA Core GPA does not reach a 2.0 but the semester average in the BSBA Core courses is a 2.0 or higher, then the student will remain on academic alarm and be able to continue within the SCB.

SCB Termination

While on academic alarm within the Strome College of Business, if the semester BSBA Core GPA falls below a 2.0, the student will be terminated from the SCB and their major coding will be changed from Business to Undecided. (Terminations will not be processed in summer semesters.)

Appeals

If you have been terminated, you may appeal the decision if you have extenuating circumstances and documentation to support your claim. To appeal, write a letter and include documentation of your circumstances to the Associate Dean of the Strome College of Business (Constant Hall, Suite 2004). There are specific details that need to be included with your appeal - for more information, please see the appeals process as described in the most recently issued catalog.

Guidelines for Filing a BSBA Termination Appeal

1. All students have the right to appeal their BSBA termination if they believe that extraordinary circumstances were the main reason for their poor academic performance. Notifications of pending BSBA termination are sent to the student's ODU email address and include information on the appeal process and deadlines. All BSBA termination appeals must be submitted electronically using the link provided in the email and will be reviewed by the SCB Termination Appeal Committee. Students are responsible for submitting their appeal by the stated deadline; late appeals will not be reviewed. Decisions of the Termination Appeal Committee may be appealed to the Associate Dean for Academic Programs in the Strome College of Business whose decision is final.
2. Appeals must be based on circumstances pertinent to the semesters in which the academic difficulty occurred that were beyond the control of the student and for which official withdrawal from the course(s) was not an option. Appeal letters must be legible and authored by the terminated student. The appeal letter must provide sufficient detail and explanation regarding the following points because there is no face-to-face meeting with the Associate Dean for Academic Programs in the Strome College of Business. The decision of the Associate Dean is final. Students without documentation will not be allowed to appeal their termination. In order to be reviewed, an appeal letter must:
 - a. Document the extraordinary circumstances such as a death in the family, medical complications or chronic conditions, personal or family emergency, overwhelming work schedules, dorm-mate conflict, or a personal relationship conflict that have adversely affected performance: i.e., a statement or letter from a physician, employer, family members, faculty, academic advisor, Counseling Services, or Educational Accessibility.

- b. Explain how the extraordinary circumstances caused each semester of poor academic performance.
 - c. State the reasons why an official withdrawal was not requested.
 - d. Explain how the extraordinary circumstance(s) has been resolved.
 - e. Provide a plan of action to return to good BSBA academic standing.
3. Students who do not file a BSBA termination appeal or whose appeals are denied, are no longer eligible to pursue a bachelor's degree in Business Administration. Upon BSBA termination, the student's major in the Strome College of Business will be removed. (This does not affect a declared second major outside of the BSBA.) These students are advised to work with an advisor in the SCB Center for Undergraduate Advising to explore other major options, and for referrals to other advising departments for a new major declaration.
 4. BSBA-terminated students who had pre-registered for a subsequent semester lose eligibility for continued enrollment in upper-level business courses.

Applying for Readmission to the BSBA Program

After a minimum of five years has passed since a student was terminated from the BSBA program, the student may apply for readmission to the program. There must be a high probability the student will successfully complete the degree program, and approval will be at the discretion of the Strome College of Business Associate Dean.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication: COMM 101R or MKTG 200R required. Additionally, all students majoring in business administration can expect to complete several courses in which individual and/or group oral presentations will be required.

Mathematics: MATH 162M and MATH 200 required.

Information Literacy and Research: IT 150G (recommended) or any "G" course from the approved general education information literacy and research course list.

Human Behavior: Met in the Business Administration core for all majors except Economics.

Philosophy and Ethics must be satisfied by completion of either PHIL 230E or an upper-level "E" course from the approved general education ethics course list. A philosophy course designated with a P will not meet this requirement for business administration students with the exception of a "P" course taken prior to fall 2010.

Impact of Technology requirement is satisfied within each BSBA degree major except Information Systems and Technology by IT 360T. In the Information Systems and Technology majors (excluding Business Analytics), the Impact of Technology requirement is satisfied by the coursework required for the major.

Transfer students with an applicable associate's degree from a Virginia Community College or another community college that has a seamless transfer agreement with ODU, and students with a prior bachelor's degree from another university, must nevertheless have a grade of C or better in the following to be able to transfer them:

COMM 101R	Public Speaking	3
or MKTG 200R	Professional Interactions and Negotiations	
PHIL 230E	Introduction to Ethics (Or an upper-level ethics course)	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3

Upper-Division General Education

- Option A. Any University-approved minor, second degree, or second major.
- Option B. An interdisciplinary minor consisting of 12 credits, three of which can be in the major. Interdisciplinary minors are described in the University Catalog section labeled Requirements for Undergraduate Degrees, Upper-Division Requirements.
- Option C. An approved certification program, such as teaching licensure.
- Option D. Two Upper-Division Courses from outside the Strome College of Business and not required by the major (6 credits).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Business Administration Core

ACCT 201	Principles of Financial Accounting *	3
ACCT 202	Principles of Managerial Accounting *	3
BNAL 206	Business Analytics I *	3
BNAL 306	Business Analytics II	3
ECON 201S	Principles of Macroeconomics *	3
ECON 202S	Principles of Microeconomics *	3
ECON 301	Managerial Economics	3

483 Marketing Management with a Major in Professional Sales (BSBA)

FIN 323	Introductory Financial Management	3
FIN 331	Legal Environment of Business	3
IT 360T	Principles of Information Technology **	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 485W	Business Policy and Strategy (C or better) ***	3
MKTG 311	Marketing Principles and Problems	3
OPMT 303	Operations Management	3
Total Credit Hours		42

- * Not automatically waived for transfer students with an applicable associate's degree from a Virginia Community College or another acceptable community college, or for students with a prior bachelor's degree from another university. A grade of C or better must be earned to transfer these courses to Old Dominion University.
- ** Students completing a major or minor in Information Systems and Technology (excluding the Business Analytics major) do not take this course.
- *** Students majoring in Economics must complete MGMT 485W, but meet the writing intensive requirement by earning a grade of C or better either in MGMT 485W or in one of the ECON Writing Intensive courses.

Professional Sales Major*

General Education

Complete lower-division requirements		35-41
Complete upper-division requirements (minimum of 6 credit hours)		6
BUSN 110	Introduction to Contemporary Business **	1
MATH 200	Calculus for Business and Economics	3

Business Administration Core

Complete business administration core requirements	42

Professional Sales

MKTG 316	Professional Selling	3
MKTG 402	Consumer Behavior	3
MKTG 404	Sales Management	3
MKTG 407	Marketing Research	3
MKTG 411	Multi-National Marketing	3
MKTG 417	Advanced Professional Selling	3
MKTG 490	Marketing Policy and Strategy	3

Select one of the following: 3

MKTG 367	Cooperative Education	
MKTG 368	Marketing Internship	
MKTG 369	Practicum	
MKTG 412	Retail Marketing	
MKTG 428	Marketing of Services	
MKTG 475	Marketing Analytics	
MKTG 496	Selected Topics in Marketing	
MGMT 452	Negotiations and Change Management	

200-400 Level Free Elective 3

Free Electives 6

Total Credit Hours 120-126

- * A grade of C- or better is required in all marketing courses counted toward the major. A grade of C or better is required in MKTG 311 as a prerequisite to upper-level MKTG courses.
- ** Not required for students pursuing the IT major or for any student with an associate's degree in business

administration or with a prior bachelor's degree in business administration.

All 300-400 level MKTG courses, except for MKTG 311, are included in the calculation of the 2.00 overall grade point average for major course work for graduation.

Additional Requirements and Information

Advanced Placement

The college accepts advanced placement credit in accordance with the rules and regulations outlined in the Academic Information section of this catalog. Students may take College-Level Examination Program (CLEP) tests to receive credit for:

ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
FIN 331	Legal Environment of Business	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3

Students are advised to contact the Office of Prior Learning Assessment for more information regarding CLEP and other prior learning assessment credit options. For advanced placement credit in any other business or public administration course, students are advised to contact the chair of the department offering the course. Additional information about credit awarded for qualifying scores on AP and IB subject examinations can be found on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Practical Work Experience for Business Administration Majors

Students may complement their major studies with a practical work experience, which may take the form of an internship, cooperative education experience or a class containing a real-world, hands-on project. Students must apply for internship or co-op participation through the Strome College of Business Career & Leadership Development Satellite Office. All work experiences must be approved by the faculty sponsor in the appropriate department prior to registering for credit. Students may not earn credit for previous or current work experiences. (However, academic credit for work experience may be approved in accordance with the policies for granting prior learning credit as defined in the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this catalog.) For details see the Center for Career & Leadership Development section of this catalog.

Use of Internship and Similar Hours Toward Business Administration Majors

A student may apply no more than six hours of cooperative education, student internship or practicum courses to satisfy degree requirements. Students may not use more than three hours of cooperative education, student internship or practicum courses to satisfy major elective requirements in each of the students' majors. These courses are numbered 367, 368 or 369. Additional hours of cooperative education, student internship or practicum courses, however, can be used to satisfy other requirements such as free electives or general business electives. Additional internships must each involve substantially different kinds of work experiences. Internships must be approved by the Chief Departmental Advisor of the student's major and the CAP Coordinator of the internship.

Transfer of the Associate of Science in Business Administration Towards Degree Requirements

Students transferring to the college must complete a minimum of 10 business courses offered by the college to earn the degree from Old Dominion University, in accordance with AACSB regulations. Those transfer students holding the Associate of Science in Business Administration degree from a Virginia Community College must earn the grade of "C" or better in the

following courses in order to satisfy requirements found in the first two years of the BSBA degree:

COMM 101R	Public Speaking	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 200	Calculus for Business and Economics	3
ACCT 201	Principles of Financial Accounting	3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
ECON 202S	Principles of Microeconomics	3
BNAL 206	Business Analytics I	3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
Upper-level ethics course		

With the exception of the courses listed above, the University's lower-division General Education requirements are deemed satisfied by the accepted AS degrees. These typically include all AS degrees from the Virginia Community College System except the applied science degrees. For more information about accepted AS degrees contact the Office of Admissions. Associate degree holders, although meeting lower-level General Education requirements, must ensure that 120 credits are completed to earn the BSBA degree. A minimum of 25% of the required credit hours must be completed through Old Dominion University, at least 12 of which are upper-level courses in the major program.

The Strome College of Business does not accept courses completed at the freshman and sophomore levels at other institutions for required courses at the junior and senior level at Old Dominion University. Please see the section on CLEP credits (Prior Learning Assessment Credit Options at the Undergraduate Level) for additional information.

Grade Average Requirements for Graduation

To graduate with a Bachelor of Science in Business Administration degree, students must present a minimum of 120 hours with a minimum overall grade point average of 2.00 in all courses taken at Old Dominion University. Students must also attain a minimum overall grade point average of 2.00 in courses taken toward the major (courses included in the major grade point average calculation are listed following the description of each major's course work).

Additionally, students must attain a minimum overall grade point average of 2.00 in the BSBA Core listed below. Only courses completed at Old Dominion University will be used to compute the BSBA Core average. Students with an Information Systems and Technology major (excluding Business Analytics) are not required to take IT 360T, so the BSBA Core grade point average is computed using the remaining courses. If the BSBA Core average is below the required 2.00 minimum, students are advised to utilize the Grade Forgiveness Policy or Adjusted Resident Credit option when appropriate to improve the grade point average.

Requirements for Completing a Bachelor of Science in Business Administration

The following sections show the courses that are requirements for all business students, regardless of the chosen major: Lower-Division General Education, BSBA Core Courses, and Upper-Division General Education. Credit hours are listed after the course title. The student must also choose a major and complete the requirements listed for that major on the following pages.

Foundation Courses for Admission to the Strome College of Business

ENGL 110C	English Composition (C or better)	3
MATH 162M	Precalculus I (C or better)	3
ACCT 201	Principles of Financial Accounting (C or better)	3

ECON 202S	Principles of Microeconomics (C or better)	3
BUSN 110	Introduction to Contemporary Business *	1

* Not required for students pursuing an Information Systems and Technology major (excluding Business Analytics) or for students with an associate's degree in business administration or with a prior bachelor's degree in business administration.

See the section on Admission to the Undergraduate Program in Business Administration, General Requirements.

Business Elective

A business elective is a course that is offered by an accredited college of business, including the Strome College of Business at Old Dominion University. Public Affairs and Service (PAS) courses offered by the Strome College of Business are not considered as business courses. However, because some business courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate business elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Free Elective

In the majority of cases a free elective is any course offered by an accredited community college or university, including Old Dominion University. However, because some courses cannot be used to satisfy the requirements of certain majors, students must refer to their specific degree program requirements to make sure that they complete appropriate elective courses. For example, ECON 200S cannot be used to satisfy an elective requirement for students majoring in business administration. Also, IT 360T cannot be used as an elective by students majoring in Information Systems and Technology. Refer to the course description section of this Catalog for full details of courses and their prerequisites.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
MATH 162M	Precalculus I (C or better required)	3
Language and Culture I (May be waived; see requirement details)		0-3
Nature of Science I		4
BUSN 110	Introduction to Contemporary Business (C or better required)	1
Free Elective		3
Credit Hours		14-17
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MATH 200	Calculus for Business and Economics	3

Language and Culture II (May be waived; see requirement details)		0-3
Nature of Science II		4
Interpreting the Past		3
Credit Hours		13-16
Sophomore		
Fall		
Literature		3
Oral Communication: COMM 101R required		3
Select one of the following:		3
PHIL 230E	Introduction to Ethics	
PHIL 303E	Business Ethics	
PHIL 344E	Environmental Ethics	
PHIL 345E	Bioethics	
PHIL 355E	Cybersecurity Ethics	
PHIL/DASC 357E	Ethics and Data	
PHIL 442E	Studies in Applied Ethics	
ACCT 201	Principles of Financial Accounting (C or better required)	3
ECON 202S	Principles of Microeconomics (C or better required)	3
Credit Hours		15
Spring		
Human Creativity		3
Information Literacy and Research		3
ACCT 202	Principles of Managerial Accounting	3
ECON 201S	Principles of Macroeconomics	3
BNAL 206	Business Analytics I	3
Credit Hours		15
Junior		
Fall		
BNAL 306	Business Analytics II	3
FIN 323	Introductory Financial Management	3
IT 360T	Principles of Information Technology	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems (C or better required as a prerequisite to upper-level MKTG courses) **	3
Credit Hours		15
Spring		
OPMT 303	Operations Management	3
FIN 331	Legal Environment of Business	3
ECON 301	Managerial Economics	3
MKTG 402	Consumer Behavior (C- or better required)	3
MKTG 411	Multi-National Marketing (C- or better required)	3
Free Elective		3
Credit Hours		18

Senior		
Fall		
MGMT 485W	Business Policy and Strategy (C or better required)	3
MKTG 316	Professional Selling	3
MKTG 407	Marketing Research (C- or better required)	3
200-400 Level Free Elective		3
Upper-Division General Education		3
Credit Hours		15
Spring		
MKTG 490	Marketing Policy and Strategy (C- or better required)	3
MKTG 404	Sales Management	3
MKTG 417	Advanced Professional Selling	3
Select one of the following:		3
MKTG 367	Cooperative Education	
MKTG 368	Marketing Internship	
MKTG 369	Practicum	
MKTG 412	Retail Marketing	
MKTG 428	Marketing of Services	
MKTG 475	Marketing Analytics	
MKTG 496	Selected Topics in Marketing	
MGMT 452	Negotiations and Change Management	
Upper-Division General Education		3
Credit Hours		15
Total Credit Hours		120-126

** C or better required as a prerequisite to upper-level MKTG courses.

BSBA to MBA (Master of Business Administration) Linked Program

Students interested in the program should contact the MBA Program Office as early as possible to discuss their plans for early entry. Once admitted to the program, the MBA program manager will act as the student's co-advisor, along with the chief departmental advisor or chief discipline advisor in the student's undergraduate major. The MBA Program Office is located in 1026 Constant Hall. The phone number is 757-683-3585 and email is mbainfo@odu.edu.

BSBA to MPA (Master of Public Administration) Linked Program

The linked BSBA to MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking 12 credits of the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission Requirements

A potential candidate will have:

1. Completed all lower level general education requirements
2. Achieved a cumulative GPA of at least 3.0 at the end of the junior year

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog. For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Marketing-Professional Sales Minor

Marketing-Professional Sales Minor

MKTG 311	Marketing Principles and Problems *	3
MKTG 316	Professional Selling	3
MKTG 404	Sales Management	3
MKTG 417	Advanced Professional Selling	3
300/400-level marketing course		3
Total Credit Hours		15

* A grade of C or better is required in MKTG 311 as a prerequisite to upper-level MKTG courses.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of prerequisite courses. In addition, a grade of C- or better is required in all marketing courses counted toward the minor. A minimum of six hours in upper-level courses in the minor must be taken through courses offered by Old Dominion University.

Military Science and Leadership (Army Reserve Officers' Training Corps)

Web Site: <http://www.goarmy.com/rotc/schools/old-dominion-university.html>

Programs

Minor Program

- Military Leadership Minor (p. 487)

Army ROTC Program

- Military Leadership (p. 486)

Army Reserve Officers' Training Corps

Brandon A. Shah, Chair

The Department of Military Science and Leadership offers courses that develop a student's ability to organize, motivate, and lead others. Although some military science graduates choose a career with the U.S. Army, many use their Army leadership and management experiences as a springboard for successful careers as entrepreneurs, corporate officers and managers, attorneys, and governmental executives. A variety of social and professional enrichment activities as well as adventure training opportunities are also available to students. Scholarships are available on a competitive basis.

The Army ROTC program is administratively located under the Director of Military Activities and is situated, for academic matters, within the Strome College of Business.

Mission

The mission of the Department of Military Science and Leadership is to commission the future officer leadership of the U.S. Army. The Old Dominion University Army ROTC program consists of structured study in the field of military science with the primary objective of developing leaders who will serve as commissioned officers in the U.S. Army Active and Reserve components. Students develop maturity, responsibility, and dependability while earning the Gold Bar of an Army Second Lieutenant.

Requirements

Army ROTC offers two different programs to all qualified university students. The traditional four-year program gives students the opportunity to take AROTC courses in each of their four years of college. The two-year program is available for any students who did not take ROTC during their first two years of college. There is no service obligation until students reach their junior year of college.

Four-Year Program

Basic Course

Military Science Level I:		
MSL 101+	Introduction to ROTC	1
or MSL 195	Independent Study of Selected Military Topics	
MSL 102+	Introduction to Leadership	1
or MSL 196	Independent Study of Selected Military Topics	
Military Science Level II:		2-6
Option 1:		
MSL 201+	Leadership Skills II	
or MSL 295	Independent Study of Selected Military Topics	
MSL 202+	Foundations of the Military Profession	
or MSL 296	Independent Study of Selected Military Topics	
Option 2:		
MSL 250+	Alternate Summer Training Program: Leaders Training Course (LTC)	

Advanced Course

Military Science Level III:		
MSL 301	Advanced Leadership Skills	3
or MSL 395	Independent Study	
MSL 302	Applied Leadership	3
or MSL 396	Independent Study	
MSL 311+	Advanced Leadership Skills III Lab	1
MSL 312+	Applied Leadership Lab	1
Military Science Level IV:		
MSL 401	Military Leadership and Management	3
or MSL 495	Independent Study	
MSL 402	Officership	3
or MSL 496	Independent Study	
MSL 411+	Senior Military Leadership and Management Laboratory	1
MSL 412+	Senior Leadership Laboratory	1

Total Credit Hours 20-24

Veterans and members of the Reserve or National Guard may be able to waive the Basic Course requirements.

Two-Year Program

MSL 250+ (Basic Camp Leader's Training Course) and the Advanced Course listed above. Attendance at Leader's Training Course (not to be confused with the Basic Training) satisfies the Basic Course requirements.

Additional Requirements

Scholarships

Students may compete for four-, three-, and two-year scholarships that pay full tuition and gradually increasing stipend and book allowance annually. Nursing scholarships are plentiful for qualified applicants.

Summer Training

Students may compete for Airborne, Air Assault, and other training during the summer. Third-year ROTC students may compete for Cadet Troop Leadership slots to various locations in the United States and overseas. All Advanced Course cadets attend the Leadership Development and Assessment Course (LDAC) before or after their senior year.

Minor Military Leadership Minor

The minor in military leadership is a high quality, interdisciplinary, multidimensional, experiential, and culturally diverse program that exposes students to, and prepares them for, real life leadership opportunities and challenges. Students explore issues of leadership, citizenship, and social change within the context of an inquiry, experiential, and competency-based instructional design. The minor is open to all students who have completed the prerequisite courses. Students who are not enrolled in the military science or naval science program will receive academic credit for the minor but will not receive credit for commissioning purposes.

Requirements

The requirements for students in the Military Science and Leadership Department are completion of:

MSL 301	Advanced Leadership Skills	3
MSL 302	Applied Leadership	3
MSL 401	Military Leadership and Management	3
MSL 402	Officership	3
Select one of the following:		3
ENMA 301	Introduction to Engineering Management	
ENMA 401	Project Management	
ENGL 435W	Management Writing	
HIST 360	American Military History	
HIST 408	War and American Society in the Twentieth Century	
MGMT 325	Contemporary Organizations and Management	
MGMT 340	Human Resource Management	
NURS 480W	Nursing in the Health Care System: Leadership	
PHIL 442E	Studies in Applied Ethics	
POLS 326W	American Foreign Policy	
POLS 327W	Politics of National Security	
POLS 350T	Technology and War	
POLS 421	International Law	
PSYC 343	Personnel Psychology	
PSYC 345	Organizational Psychology	

Total Credit Hours 15

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of 100/200-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

School of Cybersecurity

Web Site: <https://www.odu.edu/cyber> (<https://www.odu.edu/cyber/>)

Holly Handley, Dean (Interim)
Daniel Takabi, Director

The School of Cybersecurity administers a BS in Cybersecurity, a BS in Cybersecurity with a major in Cyber Operations, a BS in Cybersecurity with a major in Cyber Risk Management, an MS in Cybersecurity, and an interdisciplinary minor in cybersecurity. The School's strategic priority is to deliver exceptional academic programs for both resident and online students to cultivate the cybersecurity workforce and enhance the nation's cybersecurity talent. The School supports undergraduate and graduate students and faculty to achieve healthy and sustainable growth of the cybersecurity program. The mission of the School also includes developing high-impact, cross-disciplinary research initiatives that center on cybersecurity and conducting outreach and community engagement, being a source of cybersecurity expertise to the community, the Hampton Roads region, the Commonwealth of Virginia, and the nation.

Programs

Bachelor of Science Programs

- Cybersecurity (BS) (p. 488)
- Cybersecurity with a Major in Artificial Intelligence for Cybersecurity (p. 491)
- Cybersecurity with a Major in Cyber Operations (BS) (p. 492)
- Cybersecurity with a Major in Cyber Risk Management (BS) (p. 495)

Certificate Program

- Cyber Risk Management Certificate (p. 497)

Minor Program

- Cybersecurity Minor (p. 490)

Bachelor of Science Cybersecurity (BS)

Web Site: <https://www.odu.edu/cyber> (<https://www.odu.edu/cyber/>)

Saltuk Karahan, Undergraduate Program Director
skarahan@odu.edu (<http://catalog.odu.edu/email:skarahan@odu.edu>)

The Bachelor of Science degree in cybersecurity provides opportunities for students to integrate education and training with the application of problem-solving skills in the lab environment. Courses are drawn from the disciplines of philosophy, computer science, computer engineering, information technology, and criminal justice to examine the multi-faceted nature of cybersecurity. Students admitted to the program have a variety of credit options including portfolio review, CLEP, DANTES, and departmental exams. For more information about the cybersecurity interdisciplinary program, email cyber@odu.edu or Dr. Saltuk Karahan (skarahan@odu.edu).

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3

Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both written communication courses and in ENGL 110C before declaring major.

Mathematics: MATH 162M required. MATH 211 and MATH 212 are required as prerequisites for selected upper-division ECE and MSIM courses.

Philosophy and Ethics: can be met by PHIL 355E

Impact of Technology: met with CYSE 200T/IT 200T in the major

Human Behavior: CRJS 215S or DASC 205S/SOC 205S

Upper-Division General Education

Met in the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Cybersecurity Major

General Education

Complete lower-division requirements 35-44

Complete upper-division requirements (met in the major)

Prerequisite Courses

Students may be required to complete an additional 15-36 hours of prerequisite courses depending on which Principles and Application courses they select. 15-36

Interdisciplinary Writing Course

IDS 300W	Interdisciplinary Theory and Concepts	3

Core Courses

CYSE/IT 200T	Cybersecurity, Technology, and Society	3
CYSE 201S	Cybersecurity and the Social Sciences	3
CYSE 250	Basic Cybersecurity Programming and Networking	3
CYSE 300	Introduction to Cybersecurity	3
CYSE 301	Cybersecurity Techniques and Operations	3

CYSE/CRJS/CPD 406	Cyber Law	3
CYSE 425W	Cybersecurity Strategy and Policy (C or better required)	3
or POLS 425W	Cybersecurity Strategy and Policy	
CS 462	Cybersecurity Fundamentals	3
Principles Courses		
Select three courses from the following. The coursework allows students to study the selected cybersecurity principles of their choice aligned with their interests and career goals.		9
CRJS 310	Cybercriminology: Foundations	
CS 463	Cryptography for Cybersecurity	
CS 464	Networked Systems Security	
CYSE 495	Topics in Cybersecurity	
CYSE 416	Cyber Defense Fundamentals	
CYSE 419	Cyber Physical System Security	
CYSE 430	Introduction to Cybersecurity Risk Management	
or CYSE 431	Advanced Techniques Cybersecurity Risk Management	
ECE/MSIM 470	Foundations of Cyber Security	
IT 315	Introduction to Networking and Security *	
IT 417	Management of Information Security *	
IT 418	Enterprise Information Assurance *	
or CS 465	Information Assurance for Cybersecurity	
PHIL 355E	Cybersecurity Ethics	
Application Courses +		
Select three courses from the following. The coursework allows students to apply fundamental cybersecurity theories and techniques in their selected application domains.		9
CYSE 270	Linux System for Cybersecurity	
CYSE 280	Windows System Management and Security	
CYSE 407/CRJS 395	Digital Forensics	
CYSE 420	Applied Machine Learning in Cybersecurity	
CYSE 421	Generative AI in Cybersecurity	
CYSE 426	Cyber War	
or POLS 426	Cyber War	
CYSE 432	Cyber Risk CSF/CMMC	
or CYSE 433	Cyber Risk FedRAMP/Audit	
CYSE 450	Ethical Hacking and Penetration Testing	
CS 467	Introduction to Reverse Software Engineering	
CS 471	Operating Systems	
ECE 452	Introduction to Wireless Communication Networks	
ECE 455	Network Engineering and Design	
IT 410	Business Intelligence *	
IT 416	Network Server Configuration and Administration *	
IT 419	Enterprise Cyber Defense *	
IT 461	Implementing Internet Applications *	
RMI 412	Property & Liability Insurance Company Operations *	
or RMI 443	Enterprise Risk Management	
Capstone Courses		
CYSE 368	Cybersecurity Internship	3
IDS 493	IDS Electronic Portfolio Project	3
Electives (minimum of 19 credit hours)		

Students can take the electives from any discipline at ODU and/ or complete prerequisites for Principles and Application courses, as needed, to complete the required 120 credit hours. However, no more than 29 credits from courses in the Strome College of Business may be applied to the degree requirements, including named elective courses and general electives (ACCT, BNAL, BUSN, ECON, ENTR, FIN, INBU, IT, MGMT, MKTG, MSCM, OPMT, PAS, PORT, REST, RMI).

Total Credit Hours **120-150**

- * No more than 29 credits from courses in the Strome College of Business may be applied to the degree requirements, including named elective courses and general electives (ACCT, BNAL, ECON, FIN, IT, OPMT, MSCM, MGMT, ENTR, MKTG).
- + Other courses may be substituted with the approval of the program coordinator.

No more than two classes, or six credits, may be counted for both the major and a minor. Some minors may allow fewer credits to share.

Electives

Elective credit may be needed to meet the minimum of 120 hours required for the degree.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 162M	Precalculus I	3
Oral Communication		3
Information Literacy and Research		3
Human Behavior: CRJS 215S or DASC 205S/SOC 205S		3
Credit Hours		15
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Interpreting the Past		3
CYSE 250	Basic Cybersecurity Programming and Networking	3
Approved prerequisite or program elective		3
CYSE 201S	Cybersecurity and the Social Sciences	3
Credit Hours		15
Sophomore		
Fall		
Nature of Science I		4
CYSE 200T	Cybersecurity, Technology, and Society (Meets Impact of Technology)	3
CYSE 300	Introduction to Cybersecurity	3

Select one of the following:	3
CYSE 406 Cyber Law	
CRJS 406 Cyber Law	
CPD 406 Cyber Law	
Approved prerequisite or program elective	3
Credit Hours	16
Spring	
Nature of Science II	4
CYSE 301 Cybersecurity Techniques and Operations	3
CS 462 Cybersecurity Fundamentals	3
Principles course selection 1 of 3	3
Approved prerequisite or program elective	3
Credit Hours	16
Junior	
Fall	
IDS 300W Interdisciplinary Theory and Concepts	3
Philosophy and Ethics (Can be met by PHIL 355E)	3
Principles course selection 2 of 3	3
Application course selection 1 of 3	3
Approved prerequisite or program elective	3
Credit Hours	15
Spring	
Human Creativity	3
CYSE 425W or POLS 425W Cybersecurity Strategy and Policy (C or better required) or Cybersecurity Strategy and Policy	3
Application course selection 2 of 3	3
Approved prerequisite or program elective	3
Approved program elective	3
Credit Hours	15
Senior	
Fall	
Literature	3
Principles course selection 3 of 3	3
Application course selection 3 of 3	3
Approved program elective	3
Approved program elective	3
Credit Hours	15
Spring	
CYSE 368 Cybersecurity Internship	3
IDS 493 IDS Electronic Portfolio Project	3
Approved program elective	3
Approved program elective	3
Elective (if needed)	1
Credit Hours	13
Total Credit Hours	120

Language and Culture I & II may be met in high school and are not included in this four-year plan. Please see requirement details.

Minor Cybersecurity Minor

Saltuk Karahan, Undergraduate Program Director skarahan@odu.edu
School of Cybersecurity

This interdisciplinary minor in cybersecurity is focused on the technological, structural, social, and legal frameworks used to secure computer networks and software. The study of cybersecurity combines multiple fields including computer science, engineering, information technology, criminal justice, and philosophy, to name a few. In an effort to promote the security of computer networks, software, and cyber information, an interdisciplinary understanding about technological, legal, philosophical, and structural aspects of cybersecurity is needed. This minor will provide students from different majors the knowledge they need to prevent or respond to cyber incidents they are likely to encounter in their careers.

Requirements

Four courses chosen from: 12

CRJS 310	Cybercriminology: Foundations
CS 462	Cybersecurity Fundamentals
or ECE/MSIM 470	Foundations of Cyber Security
CS 463	Cryptography for Cybersecurity
CS 464	Networked Systems Security
CS 465	Information Assurance for Cybersecurity
CS 466	Principles and Practice of Cyber Defense
CYSE 300	Introduction to Cybersecurity
CYSE 301	Cybersecurity Techniques and Operations
CYSE 406	Cyber Law
CYSE 407	Digital Forensics
ECE 416	Cyber Defense Fundamentals
or MSIM 416	Cyber Defense Fundamentals
ECE 419	Cyber Physical System Security
or MSIM 419	Cyber Physical Systems Security
EET 405	Data Communications and Computer Networks
or EET 412	Wireless Communication Systems
IT 416	Network Server Configuration and Administration
IT 417	Management of Information Security
IT 418	Enterprise Information Assurance
IT 419	Enterprise Cyber Defense
IT 461	Implementing Internet Applications
PHIL 355E	Cybersecurity Ethics
RMI 443	Enterprise Risk Management
or RMI 412	Property & Liability Insurance Company Operations

The interdisciplinary minor in cybersecurity requires 12 credit hours of 300/400-level courses selected from at least two different disciplines with a maximum of six credits from any one discipline. For completion of the interdisciplinary minor, students must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses. At least six hours of upper-level courses must be taken through courses offered by Old Dominion University. Three credit hours may be in the major, if a major course is listed as an option for the interdisciplinary minor. As such, it will be credited toward both the major and the interdisciplinary minor.

Bachelor of Science Cybersecurity with a Major in Artificial Intelligence for Cybersecurity

Web Site: <https://www.odu.edu/cyber> (<https://www.odu.edu/cyber/>)

Saltuk Karahan, Undergraduate Program Director
skarahan@odu.edu

This major will begin effective with the Spring 2026 term.

The Artificial Intelligence for Cybersecurity (AICyber) major is an interdisciplinary undergraduate program within the School of Cybersecurity that equips students with the knowledge and skills to address emerging cybersecurity challenges using AI-driven solutions. Combining core principles of cybersecurity with machine learning, data analysis, and intelligent automation, the program prepares students to develop and deploy AI-enabled tools for threat detection, malware analysis, secure systems design, and real-time cyber defense. Designed to meet growing workforce demands in defense, critical infrastructure, finance, and technology sectors, AICyber aligns with national priorities such as the NICE Framework, NIST AI Risk Management Framework, and the DoD Cyber Strategy. The program also supports NSA-CAE initiatives by advancing AI-integrated cybersecurity education and research.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both written communication courses and in ENGL 110C before declaring major.

Mathematics: MATH 162M required.

Impact of Technology: met with CYSE 200T/IT 200T in the major

Human Behavior: CRJS 215S or DASC 205S/SOC 205S

Upper-Division General Education

Met in the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Artificial Intelligence for Cybersecurity Major

General Education

Complete lower-division requirements 38-44

Complete upper-division requirements (met in the major)

Core Courses

IDS 300W	Interdisciplinary Theory and Concepts *	3
IDS 493	IDS Electronic Portfolio Project	3
CYSE/IT 200T	Cybersecurity, Technology, and Society	3
CYSE 201S	Cybersecurity and the Social Sciences	3
CYSE 250	Basic Cybersecurity Programming and Networking	3
CYSE 300	Introduction to Cybersecurity	3
CYSE 301	Cybersecurity Techniques and Operations	3
CYSE 368 or CYSE 494	Cybersecurity Internship Entrepreneurship in Cybersecurity	3
CYSE/CRJS/CPD 406	Cyber Law	3
CYSE/POLS 425W	Cybersecurity Strategy and Policy *	3

Required AI Courses

CS 422	Introduction to Machine Learning	3
PHIL/AI 446	Artificial Intelligence (AI) Ethics and Policy	3
CYSE/AI 410	Artificial Intelligence (AI) Methods and Models	3
CYSE 420	Applied Machine Learning in Cybersecurity	3
CYSE 421	Generative AI in Cybersecurity	3

Electives

Select three of the following:		9
CS 455	Introduction to Networks and Communications	
CS 463	Cryptography for Cybersecurity	
CS 464	Networked Systems Security	
CS 469	Data Analytics for Cybersecurity	
CS 472	Network and Systems Security	
CYSE 270	Linux System for Cybersecurity	
CYSE 280	Windows System Management and Security	
CYSE 450	Ethical Hacking and Penetration Testing	

Total Credit Hours

92-98

* A grade of C or better is required in this course if it is used towards the University Writing Requirement.

No more than two classes, or six credits, may be counted for both the major and a minor. Some minors may allow fewer credits to share.

Electives

Elective credit may be needed to meet the minimum of 120 hours required for the degree. Students can take electives from any discipline at ODU as needed to complete the required 120 credit hours. However, no more than 29 credits from courses in the Strome College of Business may be applied to the degree requirements, including named elective courses and general electives (ACCT, BNAL, BUSN, ECON, ENTR, FIN, INBU, IT, MGMT, MKTG, MSCM, OPMT, PAS, PORT, REST, RMI).

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 162M	Precalculus I	3
Oral Communication		3
Information Literacy and Research		3
Human Behavior (CRJS 215S or DASC 205S/SOC 205S required)		3
Credit Hours		15
Spring		
CYSE/IT 200T	Cybersecurity, Technology, and Society	3
Interpreting the Past		3
Human Creativity		3
Literature		3
Elective		3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Philosophy and Ethics		3
Nature of Science I		4
CYSE 201S	Cybersecurity and the Social Sciences	3
CYSE 250	Basic Cybersecurity Programming and Networking	3
Credit Hours		16
Spring		
Nature of Science II		4
CYSE 300	Introduction to Cybersecurity	3
Program prerequisites or electives		7
Credit Hours		14

Junior		
Fall		
CS 422	Introduction to Machine Learning	3
CYSE/AI 410	Artificial Intelligence (AI) Methods and Models	3
Program prerequisites or electives		9
Credit Hours		15
Spring		
CYSE/POLS 425W	Cybersecurity Strategy and Policy *	3
CYSE 301	Cybersecurity Techniques and Operations	3
CYSE 420 or CYSE 421	Applied Machine Learning in Cybersecurity or Generative AI in Cybersecurity	3
Required Program electives		6
Credit Hours		15
Senior		
Fall		
CYSE 368 or CYSE 494	Cybersecurity Internship or Entrepreneurship in Cybersecurity	3
CYSE 420 or CYSE 421	Applied Machine Learning in Cybersecurity or Generative AI in Cybersecurity	3
PHIL/AI 446	Artificial Intelligence (AI) Ethics and Policy	3
IDS 300W	Interdisciplinary Theory and Concepts *	3
Elective		3
Credit Hours		15
Spring		
IDS 493	IDS Electronic Portfolio Project	3
Required Program elective		3
CYSE 406 or CRJS 406 or CPD 406	Cyber Law or Cyber Law or Cyber Law	3
Electives		6
Credit Hours		15
Total Credit Hours		120

* A grade of C or better is required in this course if it is used towards the University Writing Requirement.

Language and Culture I & II may be met in high school and are not included in this four-year plan. Please see requirement details.

Bachelor of Science
Cybersecurity with a Major in
Cyber Operations (BS)

Shobha Vatsa, Program Coordinator and Faculty Advisor (svatsa@odu.edu)

Cybersecurity with a major in Cyber Operations is an interdisciplinary major encompassing the entire scope of cyberspace and related operations that are both technical and non-technical (i.e., ethical, legal, human-centered, etc.) in nature. Cyber Operations is a complementary discipline to Cybersecurity.

Cyber Operations places a particular emphasis on technologies and techniques applicable to all operational and system levels. Coursework in Cyber Operations balances theory, practice and hands-on labs inspired by real-life scenarios. Skills and competencies emphasized are in system attack, infiltration, exploitation, defense, mitigation, and recovery.

Graduates of the Bachelor of Science degree in Cybersecurity with the Cyber Operations major will have the skills and proficiencies that are critical to intelligence, military and law enforcement organizations authorized to perform these specialized operations. Therefore, they will play a role in the enhancement of the national security posture of the nation.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both written communication courses and in ENGL 110C before declaring major.

Mathematics: MATH 211 and MATH 212 required

Philosophy and Ethics: met in the major by PHIL 355E

Impact of Technology: met in the major by CYSE 200T

Human Behavior: CRJS 215S or DASC 205S/SOC 205S required

Upper-Division General Education

Met through 300/400-level prerequisite courses required for the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.

- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Cyber Operations Major

General Education

Complete lower-division requirements 40-46

Complete upper-division requirements (met through prerequisite courses required for the major)

Prerequisites		
CS 150	Introduction to Programming with C++	4
or CS 151	Introduction to Programming with Java	
or CS 153	Introduction to Programming with Python	
CS 170	Introduction to Computer Architecture I	3
CS 250	Programming with C++ *	4
or CS 251	Programming with Java	
CS 252	Introduction to Unix for Programmers	1
CS 260	C++ for Programmers *	1
or CS 261	Java for Programmers	
CS 270	Introduction to Computer Architecture II	3
CS 381	Introduction to Discrete Structures	3
ECE 241	Fundamentals of Computer Engineering	4
ECE 304	Probability, Statistics, and Reliability	3
Core Courses		
CYSE 200T	Cybersecurity, Technology, and Society	3
CYSE 301	Cybersecurity Techniques and Operations	3
CYSE 425W	Cybersecurity Strategy and Policy	3
CYSE/CRJS 406	Cyber Law	3
Major Coursework		
CS 361	Data Structures and Algorithms	3
CS 390	Introduction to Theoretical Computer Science	3
CS 466	Principles and Practice of Cyber Defense	3
CS 467	Introduction to Reverse Software Engineering	3
CS 471	Operating Systems	3
CYSE 368	Cybersecurity Internship	3
or IDS 493	IDS Electronic Portfolio Project	
ECE 346	Microcontrollers	3
ECE 355	Introduction to Networks and Data Communications	3
ECE 416	Cyber Defense Fundamentals	3
ECE 419	Cyber Physical System Security	3
ECE 455	Network Engineering and Design	3
MSIM 470	Foundations of Cyber Security	3
PHIL 355E	Cybersecurity Ethics	3
Approved Program Elective		
Select one of the following:		3
CS 476	Systems Programming	
CYSE 407	Digital Forensics	
ECE 483	Embedded Systems	
IT 417	Management of Information Security	
Total Credit Hours		120-126

* Students who take CS 250 Programming with C++ need to select CS 261 Java for Programmers as the required lab course. Students who take CS 251 Programming with

Java need to select CS 260 C++ for Programmers as the required lab course.

No more than two classes, or six credits, may be counted for both the major and a minor. Some minors may allow fewer credits to share.

Elective credit may be needed to meet the 120 hour requirement for graduation.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 211	Calculus I	4
Oral Communication		3
Information Literacy and Research		3
Human Behavior (CRJS 215S or DASC 205S/SOC 205S required)		3
Credit Hours		16
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
CS 150 or CS 151 or CS 153	Introduction to Programming with C++ or Introduction to Programming with Java or Introduction to Programming with Python	4
CYSE 200T	Cybersecurity, Technology, and Society (meets Impact of Technology)	3
MATH 212	Calculus II	4
Credit Hours		14
Sophomore		
Fall		
Nature of Science I		4
CS 170	Introduction to Computer Architecture I	3
CS 250 or CS 251	Programming with C++ [*] or Programming with Java	4
CS 252	Introduction to Unix for Programmers	1
ECE 241	Fundamentals of Computer Engineering	4
Credit Hours		16
Spring		
Nature of Science II		4
CS 260 or CS 261	C++ for Programmers [*] or Java for Programmers	1
CS 270	Introduction to Computer Architecture II	3
CS 361	Data Structures and Algorithms	3

CYSE 406/CRJS 406		3
ECE 304	Probability, Statistics, and Reliability	3
Credit Hours		17
Junior		
Fall		
PHIL 355E	Cybersecurity Ethics (meets Philosophy and Ethics)	3
CS 466	Principles and Practice of Cyber Defense	3
CS 381	Introduction to Discrete Structures	3
ECE 355	Introduction to Networks and Data Communications	3
Interpreting the Past		3
Credit Hours		15
Spring		
CYSE 425W	Cybersecurity Strategy and Policy (C or better required)	3
CYSE 301	Cybersecurity Techniques and Operations	3
CS 390	Introduction to Theoretical Computer Science	3
CS 467	Introduction to Reverse Software Engineering	3
ECE 346	Microcontrollers	3
Credit Hours		15
Senior		
Fall		
Literature		3
CS 471	Operating Systems	3
ECE 416	Cyber Defense Fundamentals	3
MSIM 470	Foundations of Cyber Security	3
Approved Program Elective		3
Credit Hours		15
Spring		
Human Creativity		3
CYSE 368 or IDS 493	Cybersecurity Internship or IDS Electronic Portfolio Project	3
ECE 419	Cyber Physical System Security	3
ECE 455	Network Engineering and Design	3
Credit Hours		12
Total Credit Hours		120

* Students who take CS 250 Programming with C++ need to select CS 261 Java for Programmers as the required lab course. Students who take CS 251 Programming with Java need to select CS 260 C++ for Programmers as the required lab course.

Language and Culture I & II may be met in high school and are not included in this four-year plan. Please see requirement details.

Bachelor of Science Cybersecurity with a Major in Cyber Risk Management (BS)

Web Site: <https://www.odu.edu/cyber> (<https://www.odu.edu/cyber/>)

Saltuk Karahan, Undergraduate Program Director
skarahan@odu.edu

The Cybersecurity degree with a major in cyber risk management focuses on the risk management and management aspects of cybersecurity. Students are required to complete core courses in the fields of cybersecurity and information systems and technology. Building upon this foundation, students are offered elective courses in compliance methodologies, cyber risk management, insurance and information systems management.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both written communication courses and in ENGL 110C before declaring major.

Mathematics: MATH 162M required.

Impact of Technology: met with CYSE 200T/IT 200T in the major

Human Behavior: CRJS 215S or DASC 205S/SOC 205S

Upper-Division General Education

Met in the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.

- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Cyber Risk Management Major

General Education

Complete lower-division requirements 38-44

Complete upper-division requirements (met in the major)

Prerequisite Courses

IT 201	Introduction to Information Systems	3
IT 315	Introduction to Networking and Security	3

Core Courses

IDS 300W	Interdisciplinary Theory and Concepts	3
CYSE/IT 200T	Cybersecurity, Technology, and Society	3
CYSE 201S	Cybersecurity and the Social Sciences	3
CYSE 250	Basic Cybersecurity Programming and Networking	3
CYSE 300	Introduction to Cybersecurity	3
CYSE 301	Cybersecurity Techniques and Operations	3
CYSE 368 or CYSE 494	Cybersecurity Internship Entrepreneurship in Cybersecurity	3
CYSE/CRJS/CPD 406	Cyber Law	3
CYSE 425W or POLS 425W	Cybersecurity Strategy and Policy (C or better required) Cybersecurity Strategy and Policy	3
CS 462	Cybersecurity Fundamentals	3
IDS 493	IDS Electronic Portfolio Project	3

Principles Courses

Select three of the following: 9

CYSE 430	Introduction to Cybersecurity Risk Management
CYSE 431	Advanced Techniques Cybersecurity Risk Management
CYSE 432	Cyber Risk CSF/CMMC
CYSE 433	Cyber Risk FedRAMP/Audit

Select two of the following: 6

RMI 317	Principles of Risk Management and Insurance
RMI 412	Property & Liability Insurance Company Operations
IT 417	Management of Information Security
IT 418	Enterprise Information Assurance

Electives (minimum of 19 credit hours)

Students can take the electives from any discipline at ODU and/or complete prerequisites for Principles and Application courses, as needed, to complete the required 120 credit hours. However, no more than 29 credits from courses in the Strome College of Business may be applied to the degree requirements, including named elective courses and general electives (ACCT, BNAL, BUSN, ECON, ENTR, FIN, INBU, IT, MGMT, MKTG, MSCM, OPMT, PAS, PORT, REST, RMI).

Total Credit Hours 111-117

* No more than 29 credits from courses in the Strome College of Business may be applied to the degree requirements, including named elective courses and general electives (ACCT, BNAL, ECON, FIN, IT, OPMT, MSCM, MGMT, ENTR, MKTG).

+ Other courses may be substituted with the approval of the program coordinator.

No more than two classes, or six credits, may be counted for both the major and a minor. Some minors may allow fewer credits to share.

Electives

Elective credit may be needed to meet the minimum of 120 hours required for the degree.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 162M	Precalculus I	3
Oral Communication		3
Information Literacy and Research		3
Human Behavior (CRJS 215S or DASC 205S/SOC 205S required)		3
Credit Hours		15
Spring		
CYSE 200T or IT 200T	Cybersecurity, Technology, and Society (meets Impact of Technology) or Cybersecurity, Technology, and Society	3
IT 201	Introduction to Information Systems	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)		3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)		3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)		3
Credit Hours		15
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research or Writing, Rhetoric, and Research: Special Topics	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)		3
Nature of Science I		4
CYSE 201S	Cybersecurity and the Social Sciences	3
CYSE 250	Basic Cybersecurity Programming and Networking	3
Credit Hours		16
Spring		
Nature of Science II		4
CYSE 300	Introduction to Cybersecurity	3

Program prerequisites or electives		7
Credit Hours		14
Junior		
Fall		
CYSE 430 or CYSE 431 or CYSE 432 or CYSE 433	Introduction to Cybersecurity Risk Management or Advanced Techniques Cybersecurity Risk Management or Cyber Risk CSF/CMMC or Cyber Risk FedRAMP/Audit	3
IT 315	Introduction to Networking and Security	3
Program prerequisites or electives		9
Credit Hours		15
Spring		
CYSE 425W or POLS 425W	Cybersecurity Strategy and Policy (C or better required) or Cybersecurity Strategy and Policy	3
CYSE 301	Cybersecurity Techniques and Operations	3
CYSE 430 or CYSE 431 or CYSE 432 or CYSE 433	Introduction to Cybersecurity Risk Management or Advanced Techniques Cybersecurity Risk Management or Cyber Risk CSF/CMMC or Cyber Risk FedRAMP/Audit	3
Program prerequisites or electives		6
Credit Hours		15
Senior		
Fall		
CYSE 368 or CYSE 494	Cybersecurity Internship or Entrepreneurship in Cybersecurity	3
CYSE 430 or CYSE 431 or CYSE 432 or CYSE 433	Introduction to Cybersecurity Risk Management or Advanced Techniques Cybersecurity Risk Management or Cyber Risk CSF/CMMC or Cyber Risk FedRAMP/Audit	3
RMI 317 or RMI 412 or IT 417 or IT 418	Principles of Risk Management and Insurance or Property & Liability Insurance Company Operations or Management of Information Security or Enterprise Information Assurance	3
IDS 300W	Interdisciplinary Theory and Concepts	3
Elective		3
Credit Hours		15
Spring		
IDS 493	IDS Electronic Portfolio Project	3

RMI 317 or RMI 412 or IT 417 or IT 418	Principles of Risk Management and Insurance or Property & Liability Insurance Company Operations or Management of Information Security or Enterprise Information Assurance	3
CYSE 406 or CRJS 406 or CPD 406	Cyber Law or Cyber Law or Cyber Law	3
CS 462	Cybersecurity Fundamentals	3
Elective		3
Credit Hours		15
Total Credit Hours		120

Language and Culture I & II may be met in high school and are not included in this four-year plan. Please see requirement details.

Certificate Cyber Risk Management Certificate

The purpose of the undergraduate certificate in Cyber Risk Management is to educate students in cybersecurity to prevent cyber-attacks using steps zero through three of the National Institute of Standards and Technology (NIST) Risk Management Framework (RMF).

Requirements

Course requirements are as follows.

CYSE 300	Introduction to Cybersecurity	3
CYSE 430	Introduction to Cybersecurity Risk Management	3
CYSE 431	Advanced Techniques Cybersecurity Risk Management	3
CYSE 432	Cyber Risk CSF/CMMC	3
CYSE 433	Cyber Risk FedRAMP/Audit	3
Total Credit Hours		15

For completion of the certificate, students must have a minimum cumulative grade point average of 2.00 in all courses specified as a requirement for the certificate and complete a minimum of six hours in upper-level courses required for the certificate through courses offered by Old Dominion University.

School of Data Science

Holly Handley, Dean (Interim)
Frank Liu, Director

The School of Data Science is designed to organize data science academic and research activities (with degrees and certificates tailored to regional workforce needs) while leveraging research partnerships with nearby national labs (Jefferson Lab, NASA Langley, and Wallops Flight Facility) to develop a targeted scientific focus in data science. The School's objectives include developing high-impact, cross-disciplinary research initiatives that center on data science and conducting outreach and community engagement, being a sources of data science expertise to the community, the Hampton Roads region, the Commonwealth of Virginia, and the nation.

Programs

Bachelor of Science Programs

- Data Science (BS) (p. 498)
- Data Science with a Major in Data for a Human World (BS) (p. 502)

Minor Program

- Data Science Minor (p. 503)
- Humanities and Data Science Minor (p. 504)

Bachelor of Science Data Science (BS)

Web Site: <https://www.odu.edu/datascience> (<https://www.odu.edu/datascience/>)

Dr. Frank Liu, School Director (flu@odu.edu)

The increased amount of available data has escalated the demand for data science professionals. The purpose of the BS in Data Science program is to provide students with foundational knowledge in the core competency areas of data science. Students will learn to use data to identify trends and patterns, solve problems, communicate results, and recommend solutions. The program will provide opportunities for students to practice these skills across application areas from different domains (e.g., geography, business, education). Graduates of this program will have the computer science, mathematics and statistics, and data analytics knowledge, skills, and abilities to work as data professionals.

For more information about the program, please email the Undergraduate Program Director at dsupd@odu.edu.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3

Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Mathematics: Met with STAT 130M in Foundations.

Human Behavior: May not be met with DASC 205S or SOC 205S.

Philosophy and Ethics: Met with DASC 357E/PHIL 357E in the major.

Impact of Technology: Met with BDA 200T in the major.

Upper-Division General Education

Met in the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Data Science Major

General Education

Complete lower-division requirements	32-38

Upper Division General Education (met in the major)

Foundation Courses

MATH 163	Precalculus II **	3
STAT 130M	Elementary Statistics	3
Select one of the following programming options:		
DASC 157 & DASC 257	Introduction to Data Science Programming and Data Science Programming	
CS 153 & DASC 255	Introduction to Programming with Python and Data Processing with Python	
CS 153 & CS 251	Introduction to Programming with Python and Programming with Java	

Core Requirements

BDA 200T	Elements of Data Science	3
DASC/SOC 205S	Data, Technology, Society	3
DASC 300	Foundations of Data Science	3
DASC/PHIL 357E	Ethics and Data	3
DASC 434	Data Curation and Management	3
IT 360T	Principles of Information Technology	3
IT 450	Database Concepts	3
STAT 310	Introductory Data Analysis	3
DASC 436W	Data Science Capstone Project *	3

Complete an area of specialization (27-30 credits) 27-30

Total Credit Hours 100-109

* Writing Intensive: C or better required.

**

MATH 162M may be needed as a prerequisite.
Recommend taking as an elective if needed.

No more than two classes, or six credits, may be counted for both the major and a minor. Some minors may allow fewer credits to share.

Data Science Areas of Specialization

Students in the Bachelor of Science in Data Science degree program must focus their studies in one of the specialized areas listed below.

The Artificial Intelligence and Machine Learning area requires completion of the following:

Required Courses

MATH 211	Calculus I	4
MATH 212	Calculus II	4
MATH 316	Introductory Linear Algebra	3
CS 252	Introduction to Unix for Programmers	1
CS 422	Introduction to Machine Learning	3
Select five of the following approved area electives:		15
BDA 431	Modern Statistical Methods for Big Data Analytics	
BDA 432	Introduction to Optimization in Data Science	
CS 361	Data Structures and Algorithms	
CS 432	Web Science	
CS 469	Data Analytics for Cybersecurity	
CS 480	Introduction to Artificial Intelligence	
CYSE 420	Applied Machine Learning in Cybersecurity	
DASC 324	Introduction to Data Visualization	
DASC 424	Data Storytelling	
ECE 407	Introduction to Game Development	
GEOG 402	Geographic Information Systems	
IT 452	Cloud Database	
IT 453	Advanced Database Concepts	
STAT 331	Theory of Probability	
STAT 405	Introduction to Data Handling	
STAT 437	Applied Regression and Time Series Analysis	

Total Credit Hours 30

The Data Visualization area requires completion of the following:

Required Courses

COMM 260	Understanding Media	3
COMM 303	Introduction to Strategic Communications	3
DASC 324	Introduction to Data Visualization	3
DASC 424	Data Storytelling	3
IT 150G	Basic Information Literacy and Research	3
IT 325	Web Site and Web Page Design	3
Select four of the following approved area electives:		12
BNAL 206	Business Analytics I	
BNAL 306	Business Analytics II	
BNAL 403	Data Visualization and Exploration	
COMM 402	Communicating Data	
CRJS 344	Social Science and Crime Mapping	
CS 361	Data Structures and Algorithms	
CS 432	Web Science	
DASC 312	The Art of Data Visualization	
ECE 406	Computer Graphics and Visualization	
ECE 407	Introduction to Game Development	
ENGL 307T	Digital Writing	
or ENGL 334W Technical Writing		

GAME 201T	Introduction to Game Studies
GAME 340	Visual Design and Digital Graphics for Games
GAME 440	Advanced Visual Design and Digital Graphics for Games
GEOG 300	Maps and Geographic Information
or GEOG 402	Geographic Information Systems
IT 452	Cloud Database
IT 453	Advanced Database Concepts

Total Credit Hours 30

The Geospatial Analytics area requires completion of the following:

Required courses

GEOG 102T	Digital Earth: Geospatial Technology and Society	3
GEOG 402	Geographic Information Systems	3
GEOG 404	Digital Techniques for Remote Sensing	3
GEOG 425	Internet Geographic Information Systems	3
GEOG 432	Advanced GIS	3
GEOG 462	Advanced Spatial Analysis	3
Select three of the following approved area electives:		9
CRJS 344	Social Science and Crime Mapping	
CS 361	Data Structures and Algorithms	
CS 422	Introduction to Machine Learning	
CS 432	Web Science	
CS 480	Introduction to Artificial Intelligence	
DASC 324	Introduction to Data Visualization	
DASC 424	Data Storytelling	
GEOG 300	Maps and Geographic Information	
GEOG 463	GIS Programming	
IT 452	Cloud Database	
IT 453	Advanced Database Concepts	

Electives

Elective credit may be needed to meet the minimum of 120 hours required for the degree.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Specialization Area: Artificial Intelligence and Machine Learning

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
Oral Communication		3
Information Literacy and Research		3
DASC/SOC 205S	Data, Technology, Society	3
General Elective (or MATH 162M)		3
Credit Hours		15

Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Interpreting the Past		3
Human Behavior (may not use DASC 205S or SOC 205S)		3
MATH 163	Precalculus II	3
BDA 200T	Elements of Data Science	3
Credit Hours		15
Sophomore		
Fall		
Nature of Science I		4
DASC 157 or CS 153	Introduction to Data Science Programming or Introduction to Programming with Python	4
STAT 130M	Elementary Statistics	3
CS 252	Introduction to Unix for Programmers	1
Language & Culture I (if needed) or General Elective		3
Credit Hours		15
Spring		
Nature of Science II		4
DASC 255 or DASC 257 or CS 251	Data Processing with Python or Data Science Programming or Programming with Java	4
MATH 211	Calculus I	4
STAT 310	Introductory Data Analysis	3
Credit Hours		15
Junior		
Fall		
DASC 300	Foundations of Data Science	3
IT 360T	Principles of Information Technology	3
MATH 212	Calculus II	4
Language & Culture II (if needed) or General Elective		3
Approved Area Elective		3
Credit Hours		16
Spring		
DASC/PHIL 357E	Ethics and Data	3
IT 450	Database Concepts	3
MATH 316	Introductory Linear Algebra	3
General Elective		3
Approved Area Elective		3
Credit Hours		15
Senior		
Fall		
Literature		3
CS 422	Introduction to Machine Learning	3
DASC 434	Data Curation and Management	3

Approved Area Electives		6
Credit Hours		15
Spring		
Human Creativity		3
DASC 436W	Data Science Capstone Project (C or better required)	3
Approved Area Elective		3
General Electives		5
Credit Hours		14
Total Credit Hours		120

Specialization Area: Data Visualization

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
Oral Communication		3
Information Literacy and Research		3
DASC/SOC 205S	Data, Technology, Society	3
General Elective (or MATH 162M)		3
Credit Hours		15
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Interpreting the Past		3
Human Behavior (may not use DASC 205S or SOC 205S)		3
MATH 163	Precalculus II	3
BDA 200T	Elements of Data Science	3
Credit Hours		15
Sophomore		
Fall		
Nature of Science I		4
STAT 130M	Elementary Statistics	3
DASC 157 or CS 153	Introduction to Data Science Programming or Introduction to Programming with Python	4
Language & Culture I (if needed) or General Elective		3
Credit Hours		14
Spring		
DASC 255 or DASC 257 or CS 251	Data Processing with Python or Data Science Programming or Programming with Java	4
IT 150G	Basic Information Literacy and Research	3
DASC 300	Foundations of Data Science	3
COMM 260	Understanding Media	3
Language & Culture II (if needed) or General Elective		3
Credit Hours		16

Junior		
Fall		
Nature of Science II		4
IT 360T	Principles of Information Technology	3
DASC 324	Introduction to Data Visualization	3
COMM 303	Introduction to Strategic Communications	3
Approved Area Elective		3
Credit Hours		16
Spring		
DASC/PHIL 357E	Ethics and Data	3
IT 450	Database Concepts	3
DASC 424	Data Storytelling	3
IT 325	Web Site and Web Page Design	3
STAT 310	Introductory Data Analysis	3
Credit Hours		15
Senior		
Fall		
Literature		3
DASC 434	Data Curation and Management	3
Approved Area Electives		6
General Elective		3
Credit Hours		15
Spring		
Human Creativity		3
DASC 436W	Data Science Capstone Project (C or better required)	3
Approved Area Elective		3
General Electives		5
Credit Hours		14
Total Credit Hours		120

Specialization Area: Geospatial Analytics

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
Oral Communication		3
Information Literacy and Research		3
DASC/SOC 205S	Data, Technology, Society	3
General Elective (or MATH 162M)		3
Credit Hours		15
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Interpreting the Past		3
Human Behavior (may not use DASC 205S or SOC 205S)		3

MATH 163	Precalculus II	3
BDA 200T	Elements of Data Science	3
Credit Hours		15
Sophomore		
Fall		
Nature of Science I		4
STAT 130M	Elementary Statistics	3
DASC 157 or CS 153	Introduction to Data Science Programming or Introduction to Programming with Python	4
GEOG 102T	Digital Earth: Geospatial Technology and Society	3
General Elective		1
Credit Hours		15
Spring		
Nature of Science II		4
DASC 255 or DASC 257 or CS 251	Data Processing with Python or Data Science Programming or Programming with Java	4
STAT 310	Introductory Data Analysis	3
Approved Area Elective		3
General Elective		1
Credit Hours		15
Junior		
Fall		
DASC 300	Foundations of Data Science	3
IT 360T	Principles of Information Technology	3
GEOG 402	Geographic Information Systems	3
GEOG 404	Digital Techniques for Remote Sensing	3
Language & Culture I (if needed) or General Elective		3
Credit Hours		15
Spring		
DASC/PHIL 357E	Ethics and Data	3
IT 450	Database Concepts	3
GEOG 425	Internet Geographic Information Systems	3
Approved Area Elective		3
Language & Culture II (if needed) or General Elective		3
Credit Hours		15
Senior		
Fall		
Literature		3
DASC 434	Data Curation and Management	3
GEOG 432	Advanced GIS	3
GEOG 462	Advanced Spatial Analysis	3
General Elective		3
Credit Hours		15
Spring		
Human Creativity		3

DASC 436W	Data Science Capstone Project (C or better required)	3
Approved Area Elective		3
General Electives		6
Credit Hours		15
Total Credit Hours		120

Bachelor of Science Data Science with a Major in Data for a Human World (BS)

Web Site: <https://www.odu.edu/datascience> (<https://www.odu.edu/datascience/>)

Dr. Frank Liu, School Director (flu@odu.edu)

The increased amount of available data has escalated the demand for data science professionals. Data Science is a field of scientific methods, processes, and systems to extract knowledge or insights from a variety of data sources. The Major in Data for a Human World provides coursework allowing students to explore diverse pathways in Data Science, including intersections with the Humanities, Geography, Computer Science, Mathematics and the Visual Arts. The major creates an interdisciplinary understanding of Data Science by developing critical thinking and problem-solving skills from other perspectives and apply writing, communication, and creativity skills to applications in Data Science.

For more information about the program contact Dr. Teresa Kouri Kissel (tkouri@odu.edu), Associate Professor of Philosophy & Religious Studies.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Mathematics: Met with STAT 130M in Foundations.

Human Behavior: May not be met with DASC 205S or SOC 205S.

Philosophy and Ethics: Met with DASC 357E/PHIL 357E in the major.

Impact of Technology: Met with BDA 200T in the major.

Upper-Division General Education

Met in the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Data for a Human World Major

General Education

Complete lower-division requirements 32-38

Upper Division General Education (met in the major)

Foundation Courses

MATH 163	Precalculus II **	3
STAT 130M	Elementary Statistics	3

Select one of the following programming options: 8

DASC 157 & DASC 257	Introduction to Data Science Programming and Data Science Programming	
CS 153 & DASC 255	Introduction to Programming with Python and Data Processing with Python	
CS 153 & CS 251	Introduction to Programming with Python and Programming with Java	

Core Requirements

BDA 200T	Elements of Data Science	3
DASC/SOC 205S	Data, Technology, Society	3
DASC 300	Foundations of Data Science	3
DASC/PHIL 357E	Ethics and Data	3
DASC 434	Data Curation and Management	3
IT 360T	Principles of Information Technology	3
IT 450	Database Concepts	3
STAT 310	Introductory Data Analysis	3
DASC 436W	Data Science Capstone Project *	3

Major Electives

Select three of the following: 9

COMM 402	Communicating Data	
ENGL 370	English Linguistics	
HIST 396	Topics in History ***	
IDS 301	Data and Humanities Research	
PHIL 447	Philosophy of Information	
SOC 309	Population and Society	
WGS 495	Topics in Women's, Gender, and Sexuality Studies ***	

Select six of the following: 18

COMM 303	Introduction to Strategic Communications	
COMM 408	Health Communication	
CRJS 344	Social Science and Crime Mapping	
ENGL 334W	Technical Writing	
GEOG 300	Maps and Geographic Information	
GEOG 402	Geographic Information Systems	

IDS 300W	Interdisciplinary Theory and Concepts	
QUST/WGS 302W	Dimensions of Diversity: Intersectionality Among Women	
PHIL/AI 446	Artificial Intelligence (AI) Ethics and Policy	
SOC 337	Social Research Methods	
WGS 470	Feminist Research Methods	
Total Credit Hours		100-106

- * Writing Intensive: C or better required.
- ** MATH 162M may be needed as a prerequisite. Recommend taking as an elective if needed.
- *** Coordinator approval required (Topics course).

No more than two classes, or six credits, may be counted for both the major and a minor. Some minors may allow fewer credits to share.

Electives

Elective credit may be needed to meet the minimum of 120 hours required for the degree.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
Oral Communication		3
Information Literacy and Research		3
DASC/SOC 205S	Data, Technology, Society	3
General Elective (or MATH 162M)		3
Credit Hours		15
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Interpreting the Past		3
Human Behavior (may not use DASC 205S or SOC 205S)		3
MATH 163	Precalculus II	3
BDA 200T	Elements of Data Science	3
Credit Hours		15
Sophomore		
Fall		
Nature of Science I		4
DASC 157 or CS 153	Introduction to Data Science Programming or Introduction to Programming with Python	4
STAT 130M	Elementary Statistics	3
Language & Culture I (if needed) or General Elective		3
General Elective		2
Credit Hours		16

Spring		
Nature of Science II		4
DASC 255 or DASC 257 or CS 251	Data Processing with Python or Data Science Programming or Programming with Java	4
STAT 310	Introductory Data Analysis	3
Language & Culture II (if needed) or General Elective		3
Credit Hours		14

Junior		
Fall		
DASC 300	Foundations of Data Science	3
IT 360T	Principles of Information Technology	3
Approved Major Electives		9
Credit Hours		15

Spring		
DASC/PHIL 357E	Ethics and Data	3
IT 450	Database Concepts	3
General Elective		3
Approved Major Electives		6
Credit Hours		15

Senior		
Fall		
Literature		3
DASC 434	Data Curation and Management	3
Approved Major Electives		6
General Elective		3
Credit Hours		15

Spring		
Human Creativity		3
DASC 436W	Data Science Capstone Project (C or better required)	3
Approved Major Electives		6
General Elective		3
Credit Hours		15
Total Credit Hours		120

Minor

Data Science Minor

This interdisciplinary minor in data science is focused on the analytical and ethical principles of data collection, data analysis, and the application of data in various domains. An interdisciplinary foundation is used to demonstrate the connections between phenomena studied by scientists and the impact of scientific data analysis on businesses and societies. The program includes coursework focusing on the principles of data analysis as well as coursework selected by students to apply those principles to topical domains.

Requirements

Required Courses		
DASC 300	Foundations of Data Science	3
DASC 357E	Ethics and Data	3
<i>Select two of the following:</i>		6-8
BDA 401	Programming Languages for Data Science	

BDA 411	Introduction to Machine Learning
BIOL 451	Bioinformatics and Genomics I
BIOL 454	Research in Pathogen Biology I: Laboratory Investigation
BIOL 455	Research in Pathogen Biology II: Analysis
BNAL 306	Business Analytics II
CYSE 420	Applied Machine Learning in Cybersecurity
CS 422	Introduction to Machine Learning
CS 432	Web Science
CS 480	Introduction to Artificial Intelligence
CRJS 344	Social Science and Crime Mapping
CRJS/SOC 436	Capstone Research Project
ECE 407	Introduction to Game Development
ECON 311	Analytical Tools for Economists
ECON 400	From Correlation to Causation: Applied Causal Inference
ENVH 448	Epidemiology and Biostatistics
EXSC 420	Research Methods in Exercise Science
GAME 440	Advanced Visual Design and Digital Graphics for Games
GEOG 402	Geographic Information Systems
GEOG 425	Internet Geographic Information Systems
HPE 406	Tests and Measurement in Physical Education and Health
OEAS 451W	Data Collection and Analysis in Oceanography
POLS 418	Quantitative Methods
PUBH 445	Health Services Research Methods
PUBH 461	Managerial Epidemiology
SEPS 420	Fashion Research
STAT 310	Introductory Data Analysis
STEM 382	Industrial Design

Total Credit Hours **12-14**

For completion of a minor, a student must have a minimum grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Three credit hours in the interdisciplinary minor may be in the major if a major course is listed as an option for the interdisciplinary minor. As such, it will be credited toward both the major and the interdisciplinary minor. Interdisciplinary minors require twelve credit hours of 300/400-level courses selected from at least two different disciplines with a maximum of six credits from any one discipline. Course substitutions may be approved by the interdisciplinary minor coordinator.

Minor

Humanities and Data Science

Minor

The Humanities and Data Science interdisciplinary minor provides the opportunity to expose Humanities majors to Data Science concepts, increasing their opportunity to participate in Data Science related fields.

Requirements

DASC 300	Foundations of Data Science	3
DASC/PHIL 357E	Ethics and Data	3
Select two of the following:		6

COMM 303	Introduction to Strategic Communications
COMM 408	Health Communication
COMM 402	Communicating Data
ENGL 334W	Technical Writing
ENGL 370	English Linguistics
GEOG 300	Maps and Geographic Information
HIST 396	Topics in History (3 credits) *
IDS 300W	Interdisciplinary Theory and Concepts
IDS 301	Data and Humanities Research
PHIL/AI 446	Artificial Intelligence (AI) Ethics and Policy
PHIL 447	Philosophy of Information
SOC 309	Population and Society
SOC 337	Social Research Methods
WGS/QUST 302W	Dimensions of Diversity: Intersectionality Among Women
WGS 470	Feminist Research Methods
WGS 495	Topics in Women's, Gender, and Sexuality Studies *

* Minor coordinator approval required.

For completion of a minor, a student must have a minimum grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Three credit hours in the interdisciplinary minor may be in the major if a major course is listed as an option for the interdisciplinary minor. As such, it will be credited toward both the major and the interdisciplinary minor. Interdisciplinary minors require twelve credit hours of 300/400-level courses selected from at least two different disciplines with a maximum of six credits from any one discipline. Course substitutions may be approved by the interdisciplinary minor coordinator.

Darden College of Education and Professional Studies

Web Site: <http://www.odu.edu/education> (<http://www.odu.edu/education/>)

Tammi Dice, Dean

Maggie Barber, Associate Dean, Academic Programs and Assessment

Petros Katsioloudis, Associate Dean, Faculty Affairs and Research

Jennifer Simmons, Assistant Dean, Student Affairs and Engagement

The Darden College of Education and Professional Studies is comprised of the following departments: Counseling and Human Services; Educational Leadership and Workforce Development; Human Movement Studies and Special Education; Science, Technology, Engineering and Mathematics (STEM) Education and Professional Studies; and Teaching and Learning.

Mission

To advance our communities through research, teaching and service activities that reflect our commitment to excellence, innovation and transformation.

Vision

The Darden College of Education and Professional Studies is dedicated to continually improving the lives of our communities - those groups of people linked by diverse needs, affiliation, or purpose - through culturally-affirming research, teaching, and service. The College will be a premier leader in preparing individuals for professions in education, industry, service and clinical environments.

Departments

- Counseling and Human Services (p. 506)
- Educational Leadership and Workforce Development (p. 513)
- Human Movement Studies and Special Education (p. 529)
- Science, Technology, Engineering, and Mathematics (STEM) Education and Professional Studies (p. 554)
- Teaching & Learning (p. 554)

Programs

Bachelor of Science Programs

- Career and Technical Education with a Major in Marketing Education (BS) (p. 514)
- Career and Technical Education with a Major in Technology Education (BS) (p. 517)
- Early Childhood Education (BS) (p. 557)
- Elementary Education (BS) (p. 560)
- Human Services (BS) (p. 506)
- Occupational and Technical Studies with a Major in Fashion Merchandising (BS) (p. 521)
- Occupational and Technical Studies with a Major in Industrial Technology (BS) (p. 523)
- Occupational and Technical Studies with a Major in Training Specialist (BS) (p. 525)
- Park, Recreation and Tourism Studies with a Major in Park and Recreation Management (BS) (p. 529)
- Park, Recreation and Tourism Studies with a Major in Tourism and Hospitality Management (BS) (p. 532)
- Physical Education with a Major in Coaching and Physical Activity Leadership (BS) (p. 534)
- Physical Education with a Major in PreK-12 Health and Physical Education (BS) (p. 537)
- Special Education with a Major in Early Intervention/Early Childhood Special Education (Birth-5) (BS) (p. 541)
- Special Education with a Major in Special Education Adapted Curriculum K-12 (BS) (p. 544)

- Special Education with a Major in Special Education General Curriculum K-12 (BS) (p. 548)
- Sport Management (BS) (p. 551)

Minor Programs

- Addiction Prevention and Treatment Minor (p. 513)
- Coaching Education Minor (p. 540)
- Fashion Merchandising Minor (p. 523)
- Health Education Minor (p. 540)
- Human Services Minor (p. 513)
- Impact of Technology Minor (p. 520)
- Marketing Education Minor (p. 520)
- Park, Recreation and Tourism Management Minor (p. 534)
- Physical Education Minor (p. 540)
- Special Education Minor (p. 551)
- Sport Management Minor (p. 554)
- Training and Development Minor (p. 528)

Certificate Programs

- Addiction Prevention and Treatment Certificate (p. 513)
- Industrial Training Certificate (p. 528)

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Centers and Institutes

Career and Advising Resource Center

<https://www.odu.edu/eps/advising/undergraduate> (<https://www.odu.edu/eps/advising/undergraduate/>)

Rob Batchelder, Director of Advising
1107 Education Building (757) 683-4789

The Career and Advising Resource Center (CARC) provides career and academic advising services for students in the Darden College of Education and Professional Studies. Students who visit CARC are encouraged to plan for their academic program and investigate career opportunities through exploration and engagement with an academic advisor. CARC provides students access to university resources including the Center for Career & Leadership Development and Student Enrollment, Engagement & Services. CARC advisors believe in a collaborative partnership to maximize the potential of each student, and are available to answer any questions as students discover their academic and career plans.

Office of Clinical Experiences

<https://www.odu.edu/oce> (<https://www.odu.edu/oce/>)

Jennessa Libby-Reynolds, Director
1107 Education Building (757) 683-3348

The Office of Clinical Experiences is committed to effectively and efficiently supporting all students in the Darden College of Education and Professional Studies who engage in field experiences. The services provided assist in preparing students for their professions in education, industry, service and clinical environments.

Counseling and Human Services

Web Site: <http://www.odu.edu/chs> (<http://www.odu.edu/chs/>)

Mark Refhuss, Chair

The Department of Counseling and Human Services offers one undergraduate program, the Bachelor of Science in human services. On the graduate level, the department offers the Master of Science in Education in counseling, an advanced Education Specialist degree in counseling, and a counseling emphasis in the PhD in Education program. Once admitted to the human services program, students must consult their advisors regarding program requirements and selection of courses.

Programs

Bachelor of Science Program

- Human Services (BS) (p. 506)

Minor Programs

- Addiction Prevention and Treatment Minor (p. 513)
- Human Services Minor (p. 513)

Certificate Program

- Addiction Prevention and Treatment Certificate (p. 513)

Bachelor of Science Human Services (BS)

Kristy Carlisle, Undergraduate Program Director
Chaniece Winfield, Online Program Coordinator

The program leading to the Bachelor of Science in human services prepares students for entry-level positions in a wide variety of community service settings. Students in the program learn the roles and functions of the human service profession; characteristics of human growth and development; personal, social, and environmental factors affecting individual development; characteristics of human service agencies; theories and skills of human services; and how ethical issues, legal issues, and

multicultural issues affect the work of the human service profession. Graduates are prepared to assist clients in coping successfully with developmental tasks of normal growth and in solving problems caused by personal, social, and environmental stress. Graduates may be employed in a wide variety of settings including mental health, disability services, substance abuse, aging/gerontology, domestic violence, child and youth services, correction/criminal justice, health care, recreation/fitness, and vocational rehabilitation.

Admission

Students must have a grade point average of 2.00 or above and have successfully completed ENGL 110C and ENGL 211C or ENGL 231C. A grade of C or better must be earned in ENGL 110C and ENGL 211C or ENGL 231C to meet the undergraduate writing program requirement.

Requirements

All human services majors must satisfy the Bachelor of Science in human services core requirements, major requirements, minor requirements, any applicable electives, and General Education requirements as listed below.

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication Skills: Grade of C or better required in both courses

Mathematical Skills: STAT 130M preferred.

Human Behavior: SOC 201S (C or better) required.

Oral Communication: Satisfied by HMSV 339 in the major.

Upper-Division General Education

Select one option from the following:

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department) or Second Major or Second Degree
- Option B. Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Education and Professional Studies and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Human Services Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6

Human Services

HMSV 339	Interpersonal Relations	3
HMSV 341	Introduction to Human Services	3
HMSV 343	Human Services Methods	3
HMSV 344	Career Development and Appraisal	3
HMSV 346	Diversity Issues in Human Services	3
HMSV 368	Case Management & Crisis Techniques through Field Observation	3
HMSV 440W	Program Development, Implementation, and Funding	3
HMSV 444	Psycho-educational Groups	3
HMSV 449	Crisis Intervention, Prevention and Ethics	3
HMSV 491	Family Guidance	3
HMSV 468	Internship in Human Services	12
Select one of the following:		3
HMSV 447	Introduction to Substance Abuse *	
HMSV 448	Interventions and Advocacy with Children	
Select one of the following:		3
HMSV 452	Substance Abuse Treatment and Research *	
HMSV 494	Entrepreneurship in Human Services and Non-Profit Fundraising *	

Total Credit Hours	92-98

* For students pursuing credentialing as a CSAC or CADC following graduation, HMSV 447 must be taken as the HMSV elective. Additionally, HMSV 452 must be selected as part of the required curriculum instead of HMSV 494. Please see the section below on Substance Abuse Course Sequence for additional information.

Electives

Elective credit will be needed to meet the minimum of 120 hours required for the degree.

Additional Requirements and Information

A one-semester, unpaid internship (HMSV 468) is required after all other General Education courses, core courses, major courses, and minor courses are completed. Students are not to take any other courses when enrolled in the internship. Requirements for the internship include a minimum cumulative GPA of 2.0 overall and in the major and minor. Students must

earn a grade of C (2.00) or better in all HMSV courses before taking the internship.

Students' prior coursework will be evaluated by an advisor at the time of admission to the program. Following admission, students must obtain permission from an authorized faculty advisor before registering. Students should obtain a curriculum sheet from the Human Services website http://education.odu.edu/chs/academics/human_services/ or from their academic advisor to assist in making course selections. Students must adhere to all course prerequisites and corequisites as stated in the course descriptions and on the curriculum sheets.

Human Services Double Major Options

Human services majors can elect to double major in the areas listed below. Combining interest areas between two majors allows more versatility for students' future through enhanced opportunities to pursue graduate school and strengthening employability. In addition, several of these double major opportunities include specialized certificates to further demonstrate students' commitment and leadership in their field of choice.

Human Services and Sociology

The Department of Counseling and Human Services and the Department of Sociology and Criminal Justice have created an opportunity for undergraduate students to major in both human services and sociology. Both majors can be earned within the 120 credit hours required for an undergraduate degree. Within this double major, students have an opportunity to pursue a certificate in addiction prevention and treatment. Students who select the addiction prevention and treatment option will graduate with a certificate in addiction prevention and treatment.

Human Services and Criminal Justice

The Department of Counseling and Human Services and the Department of Sociology and Criminal Justice have created an opportunity for undergraduate students to major in both human services and criminal justice. Both majors can be earned within the 120 credit hours required for an undergraduate degree. Within this double major, students have an opportunity to pursue a certificate in addiction prevention and treatment. Students who select the addiction prevention and treatment option will graduate with a certificate in addiction prevention and treatment.

Human Services and Interdisciplinary Studies - Leadership

The Department of Counseling and Human Services and the Department of Interdisciplinary Studies have created an opportunity for undergraduate students to major in both human services and interdisciplinary studies-leadership. Both majors can be earned within the 120 credit hours required for an undergraduate degree. Within this double major, students will be exposed to a number of fields of study to enhance their knowledge and skills in the area of leadership, professional writing, and technology, while engaging in human services coursework. In addition, students may pursue two specialized certificates within the double major – addiction prevention and treatment and professional leadership.

Students interested in these double major options should contact the Human Services Director for more information, HMSVupd@odu.edu.

Departmental Honors

Students may earn the designation of departmental honors on their diplomas by completing the minimum University standards for honors designation in addition to the human services program standards. Specifically, the standards are:

1. Minimum cumulative GPA of 3.25.
2. Minimum major GPA of 3.5.
3. Completion of at least two 300-400 level courses designated by the department to be honors courses.

4. Completion of at least 60 credit hours at Old Dominion University, 54 of which must be in grade-point graded courses.
5. Completion of a scholarly experience such as a research project with a human services faculty mentor. HMSV 397 Independent Study: Guided Research in Human Services can be taken as an elective course and will qualify as a scholarly experience. Students enrolled in this course may conduct individual or group projects focused on research, literature review, or methodology development. All work is conducted under the supervision and evaluation of a program faculty member. Please contact Dr. Kristy Carlisle, kcarlisl@odu.edu, for more information regarding this course.

Contact the program director, Dr. Kristy Carlisle kcarlisl@odu.edu for more information about this opportunity.

Substance Abuse Course Sequence

For those wishing to pursue credentialing as a Certified Substance Abuse Counselor (CSAC) or Certified Alcohol and Drug Counselor (CADC), the following must be completed: all HMSV degree requirements (core requirements, major requirements, minor requirements, any applicable electives, and General Education requirements) with the selection of HMSV 447 and HMSV 452 as required human services electives. Additionally, HMSV 468 (Internship) is recommended to be in a substance abuse treatment setting.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Human Services

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (C or better required)	3
SOC 201S	Introduction to Sociology (C or better required)	3
Mathematics (STAT 130M preferred)		3
Interpreting the Past		3
Elective or Foreign Language (if required)		3
Credit Hours		15
Second Semester		
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
Impact of Technology		3
Philosophy and Ethics		3
Information Literacy and Research		3
Elective or Foreign Language (if required)		3
Credit Hours		15
Sophomore		
First Semester		
Nature of Science		4
Literature		3
Elective		3

HMSV 339	Interpersonal Relations (C or better required)	3
HMSV 341	Introduction to Human Services (C or better required)	3
Credit Hours		16
Second Semester		
Nature of Science		4
Human Creativity		3
Elective		3
Elective		3
HMSV 343	Human Services Methods (C or better required)	3
Credit Hours		16
Junior		
First Semester		
Minor or Upper-Division General Education		3
Minor or Elective		3
HMSV 344	Career Development and Appraisal (C or better required)	3
HMSV 346	Diversity Issues in Human Services (C or better required)	3
HMSV 447 or HMSV 448	Introduction to Substance Abuse (C or better required) or Interventions and Advocacy with Children	3
Credit Hours		15
Second Semester		
Minor or Upper-Division General Education		3
Minor or Elective		3
HMSV 440W	Program Development, Implementation, and Funding (C or better required)	3
HMSV 444	Psycho-educational Groups (C or better required)	3
HMSV 452 or HMSV 494	Substance Abuse Treatment and Research (C or better required) or Entrepreneurship in Human Services and Non-Profit Fundraising	3
Credit Hours		15
Senior		
First Semester		
Minor or Elective		3
Elective		3
Elective		1
HMSV 368	Case Management & Crisis Techniques through Field Observation (C or better required)	3
HMSV 449	Crisis Intervention, Prevention and Ethics (C or better required)	3
HMSV 491	Family Guidance (C or better required)	3
Credit Hours		16

Second Semester		
HMSV 468	Internship in Human Services (C or better required)	12
Credit Hours		12
Total Credit Hours		120

Double Major - Human Services & Criminal Justice - Addiction Prevention and Treatment Certificate

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (C or better required)	3
SOC 201S	Introduction to Sociology (C or better required)	3
Mathematics (STAT 130M required)		3
Interpreting the Past		3
Foreign Language (if required)		0-3
Credit Hours		12-15

Second Semester		
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
Impact of Technology		3
Philosophy and Ethics		3
Information Literacy and Research		3
Foreign Language (if required)		0-3
Credit Hours		12-15

Sophomore		
First Semester		
Nature of Science		4
Literature		3
HMSV 339	Interpersonal Relations (C or better required)	3
HMSV 341	Introduction to Human Services (C or better required)	3
CRJS 215S	Introduction to Criminology	3
Credit Hours		16

Second Semester		
Nature of Science		4
Human Creativity		3
CRJS 262	Law and the Criminal Justice System	3
CRJS 222	The Criminal Justice System	3
HMSV 343	Human Services Methods (C or better required)	3
Credit Hours		16

Junior		
First Semester		
300-/400-Level CRJS Elective		3
SOC 337	Social Research Methods	3
HMSV 344	Career Development and Appraisal (C or better required)	3

HMSV 346 or SOC 320	Diversity Issues in Human Services (C or better required) or Social Inequality	3
HMSV 447 or HMSV 448	Introduction to Substance Abuse (C or better required) or Interventions and Advocacy with Children	3
Elective (if needed to reach 120 hours)		1
Credit Hours		16

Second Semester		
300-/400-Level CRJS Electives		6
CRJS 426W	Criminological Theory	3
HMSV 440W	Program Development, Implementation, and Funding (C or better required)	3
HMSV 444	Psycho-educational Groups (C or better required)	3
Select one of the following:		3
HMSV 452	Substance Abuse Treatment and Research	
HMSV 494	Entrepreneurship in Human Services and Non-Profit Fundraising	
SOC 494	Entrepreneurship in Sociology/ Criminal Justice	
Credit Hours		18

Senior		
First Semester		
CRJS 436	Capstone Research Project	3
HMSV 368	Case Management & Crisis Techniques through Field Observation (C or better required)	3
HMSV 449	Crisis Intervention, Prevention and Ethics (C or better required)	3
300-/400-Level CRJS Electives		9
Credit Hours		18

Second Semester		
HMSV 468	Internship in Human Services (C or better required)	12
Credit Hours		12
Total Credit Hours		120-126

Double Major - Human Services & Interdisciplinary Studies, Leadership Major

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (C or better required)	3
SOC 201S	Introduction to Sociology (C or better required)	3
Mathematics (STAT 130M preferred)		3
Interpreting the Past		3
Elective or Foreign Language (if required)		3
Credit Hours		15

Second Semester		
Select one of the following: (C or better required)		3

ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
Impact of Technology (may be met in the double major with IDS 307T/ENGL 307T or with Leadership Elective IT 360T)		3
Philosophy and Ethics (may be met with the Ethical Leadership course option PHIL 303E)		3
Information Literacy and Research		3
Elective or Foreign Language (if required)		3
Credit Hours		15

Sophomore

First Semester

Nature of Science		4
Literature		3
HMSV 339	Interpersonal Relations (C or better required)	3
HMSV 341	Introduction to Human Services (C or better required)	3
Select one of the following:		3

IDS/ENGL 307T	Digital Writing	
IDS 493	IDS Electronic Portfolio Project	
IDS 368	Internship in Interdisciplinary Studies	
Credit Hours		16

Second Semester

Nature of Science		4
Human Creativity		3
Leadership Elective		3
HMSV 343	Human Services Methods (C or better required)	3
IDS 300W	Interdisciplinary Theory and Concepts (C or better required)	3
Credit Hours		16

Junior

First Semester

Ethical Leadership Course		3
Legal Issues Course		3
HMSV 344	Career Development and Appraisal (C or better required)	3
HMSV 346	Diversity Issues in Human Services (C or better required)	3
HMSV 447 or HMSV 448	Introduction to Substance Abuse (C or better required) or Interventions and Advocacy with Children	3
Credit Hours		15

Second Semester

Communication Skills & Leadership Course		3
HMSV 440W	Program Development, Implementation, and Funding (C or better required)	3
HMSV 444	Psycho-educational Groups (C or better required)	3
Leadership Elective		3

HMSV 494 or IDS 494 or HMSV 452	Entrepreneurship in Human Services and Non-Profit Fundraising or Entrepreneurship in Interdisciplinary Studies or Substance Abuse Treatment and Research	3
Credit Hours		15

Senior

First Semester

HMSV 368	Case Management & Crisis Techniques through Field Observation (C or better required)	3
HMSV 449	Crisis Intervention, Prevention and Ethics (C or better required)	3
HMSV 491	Family Guidance (C or better required)	3
Legal Issues Course		3
Leadership Elective		3
Elective		1
Credit Hours		16

Second Semester

HMSV 468	Internship in Human Services (C or better required)	12
Credit Hours		12
Total Credit Hours		120

Double Major - Human Services & Sociology - Addiction Prevention and Treatment Certificate

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (C or better required)	3
SOC 201S	Introduction to Sociology (C or better required)	3
Mathematics (STAT 130M required)		3
Interpreting the Past		3
Foreign Language (if required)		0-3
Credit Hours		12-15

Second Semester

Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
Impact of Technology		3
Philosophy and Ethics		3
Information Literacy and Research		3
Foreign Language (if required)		0-3
Credit Hours		12-15

Sophomore

First Semester

Nature of Science		4
Literature		3
SOC 337	Social Research Methods	3

HMSV 339	Interpersonal Relations (C or better required)	3
HMSV 341	Introduction to Human Services (C or better required)	3
Credit Hours		16
Second Semester		
Nature of Science		4
Human Creativity		3
300-/400-Level SOC Electives		6
HMSV 343	Human Services Methods (C or better required)	3
Credit Hours		16
Junior		
First Semester		
300-/400-Level SOC Elective		3
HMSV 344	Career Development and Appraisal (C or better required)	3
HMSV 346	Diversity Issues in Human Services (C or better required)	3
HMSV 447	Introduction to Substance Abuse (C or better required)	3
SOC 409W	Sociological Theory	3
Elective (if needed to reach 120 hours)		3
Credit Hours		18
Second Semester		
HMSV 440W	Program Development, Implementation, and Funding (C or better required)	3
HMSV 444	Psycho-educational Groups (C or better required)	3
HMSV 494 or SOC 494	Entrepreneurship in Human Services and Non-Profit Fundraising or Entrepreneurship in Sociology/Criminal Justice	3
300-/400-Level SOC Electives		6
Elective (if needed to reach 120 hours)		1
Credit Hours		16
Senior		
First Semester		
SOC 436	Capstone Research Project	3
HMSV 368	Case Management & Crisis Techniques through Field Observation (C or better required)	3
HMSV 449	Crisis Intervention, Prevention and Ethics (C or better required)	3
HMSV 491	Family Guidance (C or better required)	3
300-/400-Level SOC Elective		3
HMSV 452	Substance Abuse Treatment and Research	3
Credit Hours		18

Second Semester		
HMSV 468	Internship in Human Services (C or better required)	12
Credit Hours		12
Total Credit Hours		120-126

Double Major - Human Services & Sociology, Social Welfare Major

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (C or better required)	3
SOC 201S	Introduction to Sociology (C or better required)	3
Mathematics (STAT 130M required)		3
Interpreting the Past		3
Foreign Language (if required)		0-3
Credit Hours		12-15

Second Semester		
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
Impact of Technology		3
Philosophy and Ethics		3
Information Literacy and Research		3
Foreign Language (if required)		0-3
Credit Hours		12-15

Sophomore		
First Semester		
Nature of Science		4
Literature		3
SOC 337	Social Research Methods	3
HMSV 339	Interpersonal Relations (C or better required)	3
HMSV 341	Introduction to Human Services (C or better required)	3
Credit Hours		16

Second Semester		
Nature of Science		4
Human Creativity		3
HMSV 343	Human Services Methods (C or better required)	3
SOC 320	Social Inequality	3
SOC 325	Social Welfare	3
Credit Hours		16

Junior		
First Semester		
HMSV 344	Career Development and Appraisal (C or better required)	3
SOC 409W	Sociological Theory	3
HMSV 346	Diversity Issues in Human Services (C or better required)	3

HMSV 448	Interventions and Advocacy with Children	3
300-/400-Level SOC Elective		3
Elective (if needed to reach 120 hours)		3
Credit Hours		18
Second Semester		
SOC 323	Sociology of Minority Families	3
SOC 402	Sociology of Child Welfare	3
HMSV 440W	Program Development, Implementation, and Funding (C or better required)	3
HMSV 494 or SOC 494	Entrepreneurship in Human Services and Non-Profit Fundraising or Entrepreneurship in Sociology/Criminal Justice	3
HMSV 444	Psycho-educational Groups (C or better required)	3
Elective (if needed to reach 120 hours)		1
Credit Hours		16
Senior		
First Semester		
SOC 436	Capstone Research Project	3
HMSV 447	Introduction to Substance Abuse (C or better required)	3
HMSV 449	Crisis Intervention, Prevention and Ethics (C or better required)	3
HMSV 491	Family Guidance (C or better required)	3
SOC 426	Minority Group Relations	3
300-/400-Level SOC Elective		3
Credit Hours		18
Second Semester		
HMSV 468	Internship in Human Services (C or better required)	12
Credit Hours		12
Total Credit Hours		120-126

BS Human Services to MSED Counseling Linked Program

There is a linked program available to qualified students under existing university policy to link the Bachelor of Science with a major in Human Services (p. 506) undergraduate program with the Master of Science in Education (Counseling with a Concentration in Clinical Mental Health Counseling) (<http://catalog.odu.edu/graduate/education/counseling-human-services/counseling-clinical-mental-health-msed/>) or Master of Science in Education (Counseling with a Concentration in School Counseling) (<http://catalog.odu.edu/graduate/education/counseling-human-services/counseling-school-msed/>) graduate program. See program director for additional details.

Advanced students in the human services major with excellent academic achievement may apply to take up to 4 courses (12 credit hours) in the counseling M.S.Ed. program. If interested in pursuing the full M.S.Ed. degree, students may complete their bachelor's degree and master's degree in 180 credit hours or approximately 6 full years.

Admissions

Admission to the linked program requires the following:

1. Completion of at least 60 credit hours and attainment of Junior status.
2. Declaration of Human Services as the academic major.
3. Completion of 9 credits hours in the Human Services program at ODU (HMSV 341, HMSV 339, and HMSV 343).
4. A minimum GPA of 3.3, which must be maintained.

Application

Students who meet the above minimum criteria should contact the graduate program director of the counseling program. Once admitted into the linked program, students may take:

1. COUN 601 Principles of Professional Counseling and Ethics
2. COUN 633 Counseling and Psychotherapy Techniques
3. COUN 650 Theories of Counseling and Psychotherapy
4. COUN 655 Social and Cultural Issues in Counseling

Counseling graduate courses completed with a B or better count towards the following requirements up to 12 credit hours:

- HMSV 346 Diversity Issues in Human Services;
- and either HMSV 491 Family Guidance or HMSV 344 Career Development and Appraisal;
- and either HMSV 448 Interventions and Advocacy with Children and HMSV 494 Entrepreneurship in Human Services and Non-Profit Fundraising **OR** HMSV 447 Introduction to Substance Abuse and HMSV 452 Substance Abuse Treatment and Research.

Note: Students must take courses based on their respective campus designation (either online or on-campus)

Full admission to the M.S.Ed.

Upon attaining senior status, students in the linked program complete their application to the M.S.Ed. program with two letters of recommendation and an essay on their goals for entering the M.S.Ed. in Counseling. Students must maintain their degree GPA of 3.3 and earn at least a B in the graduate classes to be eligible for admission to the M.S.Ed.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the

undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor

Human Services Minor

Requirements

Area I Courses

HMSV 339	Interpersonal Relations	3
HMSV 341	Introduction to Human Services	3
HMSV 343	Human Services Methods	3
HMSV 346	Diversity Issues in Human Services	3

Area II Courses

Select one of the following:		3
HMSV 344	Career Development and Appraisal	
HMSV 447	Introduction to Substance Abuse	
HMSV 448	Interventions and Advocacy with Children	
HMSV 449	Crisis Intervention, Prevention and Ethics	
HMSV 491	Family Guidance	

Total Credit Hours 15

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Minor

Addiction Prevention and Treatment Minor

The Addiction Prevention and Treatment minor complements many academic programs and majors by providing knowledge and experience in the 12 core competency areas identified by the Substance Abuse and Mental Health Services Administration [SAMSHA] as vital to knowledge, skills and attitudes required for professional practice in addiction services. In addition to fulfilling core competency areas required for addiction services, courses in this minor may meet the didactic education requirements for addiction credentialing, such as the Certified Substance Abuse Counselor* (CSAC) credential in Virginia.

*Students are strongly encouraged to contact their respective state board regarding didactic requirements for specific credentials.

Requirements

HMSV 341	Introduction to Human Services	3
HMSV 343	Human Services Methods	3
HMSV 368	Case Management & Crisis Techniques through Field Observation	3
HMSV 444	Psycho-educational Groups	3
HMSV 447	Introduction to Substance Abuse	3
HMSV 452	Substance Abuse Treatment and Research	3

Total Credit Hours 18

For completion of a minor, an undergraduate student must have a minimum grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Certificate

Addiction Prevention and Treatment Certificate

The certificate program consists of six courses in the human services program for a total of 18 credit hours. Students transferring from other institutions are required to have a transcript analysis to ensure that the appropriate prerequisite requirements are met. Students' prior coursework will be evaluated by an advisor at the time of admission to the certificate program.

Requirements

Requirements		
HMSV 341	Introduction to Human Services	3
HMSV 343	Human Services Methods	3
HMSV 368	Case Management & Crisis Techniques through Field Observation	3
HMSV 447	Introduction to Substance Abuse	3
HMSV 449	Crisis Intervention, Prevention and Ethics	3
HMSV 452	Substance Abuse Treatment and Research	3

Total Credit Hours 18

For completion of the certificate, students must have a minimum cumulative grade point average of 2.00 overall in all courses taken toward the certificate program, a grade of C or better in all prerequisite courses and courses applied to the certificate, and complete a minimum of six hours in upper-level courses required for the certificate through courses offered by Old Dominion University. Transfer courses require approval of the certificate coordinator. Non-Degree seeking students must have an Associate Degree or higher, with a minimum cumulative grade point average of 2.00 overall.

Educational Leadership and Workforce Development

Mickey Kosloski, Chair and Program Director for Marketing Education
Sharon Davis, Program Director for Fashion Merchandising
Basim Matrood, Program Director for Industrial Technology
Phil Reed, Program Director for Technology Education
Cindy Tomovic, Program Director for Training Specialist

The department offers undergraduate courses SEPS 400 and SEPS 408 often taken as part of bachelor's programs in teacher preparation. The department also offers the following general education courses: STEM 110T, STEM 251G, SEPS 223A, and SEPS 203S.

After earning an undergraduate degree, students may be interested in the master's and education specialist degree programs offered in PreK-12 Educational Leadership and Supervision and Higher Education. The department also offers PhD degrees in workforce and organizational development, educational leadership, community college leadership, and higher education leadership. Several licensure/endorsement/certificate areas are available for graduate students. Please refer to the the Graduate Catalog for information on these programs. (<http://catalog.odu.edu/graduate/>)

Bachelor of Science Programs

- Career and Technical Education with a Major in Marketing Education (BS) (p. 514)
- Career and Technical Education with a Major in Technology Education (BS) (p. 517)
- Occupational and Technical Studies with a Major in Fashion Merchandising (BS) (p. 521)

- Occupational and Technical Studies with a Major in Industrial Technology (BS) (p. 523)
- Occupational and Technical Studies with a Major in Training Specialist (BS) (p. 525)

Minor Programs

- Fashion Merchandising Minor (p. 523)
- Impact of Technology Minor (p. 520)
- Marketing Education Minor (p. 520)
- Training and Development Minor (p. 528)

Certificate Program

- Industrial Training Certificate (p. 528)

Bachelor of Science Career and Technical Education with a Major in Marketing Education (BS)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication Skills: Grade of C or better required in both courses

Information Literacy and Research is satisfied by STEM 251G in the major

Human Behavior: PSYC 203S

Impact of Technology is satisfied by STEM 370T in the major

Upper-Division General Education

Satisfied in the major.

Requirements for Graduation

Students in marketing education and technology education licensure programs must have:

1. Minimum of 120 credit hours.
2. Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.

3. A 2.75 grade point average overall, in the major, and in the core.
4. Earned a passing grade in student teaching.
5. Completed ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better.
6. Completed the senior assessment.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Due to changing University requirements, national accreditation standards, and Commonwealth licensure regulations, the programs in the Darden College of Education and Professional Studies are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students should obtain current program information from their advisors.

Career and Technical Education Core

FOUN 301	Learning and Development	3
FOUN 302	Assessment of Learning	3
or SEPS 450	Assessment, Evaluation and Improvement	
SEPS 408	Advanced Classroom Issues and Practices in Career and Technical Education	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
STEM 370T	* Technology and Society (Writing Intensive)	3
TLED 326	Socio-Cultural Perspectives in Education	3
TLED 426	Introduction to Literacy, Linguistics and Practice in the Classroom	3
Total Credit Hours		21

* Grade of C or better required

Marketing Education Major

This major is designed to prepare students to teach marketing and related subjects in the secondary schools. It is an approved program for meeting licensure requirements to teach marketing education in Virginia.

General Education

Complete lower-division requirements 35-41

Complete upper-division requirements (met in the major)

Career and Technical Education Core

Complete the career and technical education core requirements 21

Marketing Education

ECON 200S	Basic Economics	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3
MKTG 402	Consumer Behavior	3
SEPS 100	Sales Techniques	3
SEPS 102	Advertising and Promotion	3
SEPS 297	Observation and Participation	1
SEPS 400	Instructional Systems Development	3
SEPS 401	Foundations of Career and Technical Education	3
SEPS 402	Instructional Methods in Occupational Studies	3
SEPS 405	Directed Work Experience	4
SEPS 415	Advanced Merchandising	3
SEPS 485	Student Teaching	12

STEM 251G	Computer Literacy: Communication and Information	3
STEM 351	Communication Technology	3
Electives		
Select elective courses		5
Total Credit Hours		114-120

Elective credit may be needed to meet the minimum of 120 credits required for the degree.

Additional Requirements and Information

Admission

For the most current information on the prescribed Virginia Board of Education admission assessment, visit the Office of Clinical Experiences website, <https://www.odu.edu/oce> (<https://www.odu.edu/oce/>).

Prescribed Virginia Board of Education Assessment for Admission to an Approved Teacher Education Program

Old Dominion University students seeking admission to an approved teacher education program must satisfy the Virginia Board of Education required assessment for admission into an approved teacher education program.

Students must have an interview with the program leader. Students must be admitted into the approved marketing education or technology education teacher preparation program prior to enrolling in SEPS 408.

For the most current information on the prescribed Virginia Board of Education admission assessment, visit the Virginia Department of Education at <https://www.doe.virginia.gov/>.

Continuance

Students in marketing education and technology education licensure programs must:

1. Satisfy University requirements.
2. Maintain a cumulative GPA of 2.75, a major GPA of 2.75 and a core GPA of 2.75 with no earned grade less than C- in all courses taken in the major and in the core.
3. Successfully complete SEPS 297.
4. Take and pass the appropriate PRAXIS Subject Assessment (Technology and Engineering Education – Content Knowledge, 5053 or Marketing Education – Content Knowledge, 5561) prior to or while enrolled in the Instructional Strategies course SEPS 408. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <https://www.odu.edu/oce/teacher-education/placement/background-checks> (<https://www.odu.edu/oce/teacher-education/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Assessments Required for Teacher Education Programs and Licensure

In order to obtain a Virginia teaching license, all teacher education students must attain passing scores on the appropriate teacher licensure exams. All students will take and attain a passing score on the appropriate Praxis Subject Area Assessment (Technology and Engineering Education – Content Knowledge, 5053 with a score of 162 or Marketing Education –

Content Knowledge, 5561 with a score of 147) in order to be eligible for student teaching and licensure. Score reports of all examinations must be on file in the Office of Clinical Experiences in the Education Building. To review more information on the Virginia Board of Education Prescribed Assessments, visit the Office of Clinical Experiences website, <https://www.odu.edu/oce> (<https://www.odu.edu/oce/>).

Licensure/Endorsement Programs

Licensure Program in Marketing Teacher Education

The licensure program in marketing teacher education is designed to prepare a person who has a business-related baccalaureate degree to be a marketing education teacher-coordinator. Participants who successfully complete this program will qualify to apply for a Virginia teaching license to teach marketing education.

Admission

Prior to entering this program students must hold a business-oriented baccalaureate degree in which 30 hours of marketing-related courses have been completed including at least three semester hours each of courses covering the marketing process, economics, personnel, the sales process, operations and organization, and promotion. Students must also have completed a rigorous general education program as outlined by the Commonwealth in its Licensure Regulations for Teachers. They must be interviewed and accepted by the marketing education program leader. Finally, students must attain or exceed the minimum score required by Virginia on the Praxis I examination. The Praxis I exam must be passed prior to admittance into teacher education and taking SEPS 408/SEPS 508.

Exit

Students must:

1. Complete the following courses:		
SEPS 297	Observation and Participation	1
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
TLED 408	Reading and Writing in Content Areas	3
SEPS 400/500	Instructional Systems Development	3
SEPS 401/501	Foundations of Career and Technical Education	3
SEPS 408/508	Advanced Classroom Issues and Practices in Career and Technical Education	3
SEPS 450/550	Assessment, Evaluation and Improvement	3
SEPS 485	Student Teaching	12
Total Credit Hours		31

2. Earn a 2.75 cumulative grade point average if licensure is at the undergraduate level and a 3.00 cumulative grade point average if licensure is at the graduate level; and
3. Document at least 4000 clock hours of marketing-related work experience completed within the past five years or complete SEPS 405.

Passing scores on the Praxis Subject Assessment, Marketing Education Content Knowledge are required before teacher internship. Passing scores must be attached to the teacher internship application.

Twelve hours of 500/600 level courses may be applied toward the Master of Science in occupational and technical studies, career and technical education teaching concentration.

Endorsement Program in Industrial Cooperative Training

The endorsement program in industrial cooperative training is designed to prepare a licensed teacher to be endorsed to teach industrial cooperative training in the public schools.

Admission

Prior to entering this program students must have or qualify for a Virginia Collegiate Professional or Postgraduate Professional License. Secondly, they must be interviewed and accepted by the program coordinator.

Exit

Students must:

1. Complete the following courses:
- | | | |
|---------------------------|---|-----------|
| SEPS 400/500 | Instructional Systems Development | 3 |
| SEPS 401/501 | Foundations of Career and Technical Education | 3 |
| SEPS 402/502 | Instructional Methods in Occupational Studies | 3 |
| SEPS 408/508 | Advanced Classroom Issues and Practices in Career and Technical Education | 3 |
| SEPS 450/550 | Assessment, Evaluation and Improvement | 3 |
| Total Credit Hours | | 15 |
2. Earn a 2.75 cumulative grade point average if licensure is at the undergraduate level and a 3.00 cumulative grade point average if licensure is at the graduate level; and
3. Document at least 4000 clock hours of acceptable employment in a trade, technical, or industrial education subject area completed within the past five years or complete SEPS 405.

Twelve hours of 500/600 level courses may be applied toward the Master of Science in occupational and technical studies, career and technical education teaching concentration.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
Mathematical Skills		3
Nature of Science I		4
SEPS 100 or SEPS 102	Sales Techniques or Advertising and Promotion	3
Human Creativity		3
Credit Hours		16
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Oral Communication (COMM 101R preferred)		3
SEPS 100 or SEPS 102	Sales Techniques or Advertising and Promotion	3
PSYC 203S	Lifespan Development (meets Human Behavior)	3
Nature of Science II		4
Credit Hours		16
Sophomore		
Fall		
STEM 251G	Computer Literacy: Communication and Information	3
FOUN 301		3

SEPS 297	Observation and Participation	1
Interpreting the Past		3
Philosophy and Ethics		3
Elective or Language and Culture (if required)		3
Credit Hours		16
Spring		
TLED 326	Socio-Cultural Perspectives in Education	3
STEM 351	Communication Technology	3
ECON 200S	Basic Economics	3
Literature		3
Elective or Language and Culture (if required)		3
Credit Hours		15
Junior		
Fall		
MKTG 311	Marketing Principles and Problems	3
SEPS 401	Foundations of Career and Technical Education	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
SEPS 415	Advanced Merchandising	3
STEM 370T	Technology and Society (writing intensive; C or better required)	3
Credit Hours		15
Spring		
SEPS 400	Instructional Systems Development	3
MKTG 402	Consumer Behavior	3
TLED 426	Introduction to Literacy, Linguistics and Practice in the Classroom	3
MGMT 325	Contemporary Organizations and Management	3
Credit Hours		12
Summer		
SEPS 405	Directed Work Experience	4
Credit Hours		4
Senior		
Fall		
SEPS 402	Instructional Methods in Occupational Studies	3
FOUN 302 or SEPS 450	Assessment of Learning or Assessment, Evaluation and Improvement	3
SEPS 408	Advanced Classroom Issues and Practices in Career and Technical Education	3
Electives		5
Credit Hours		14
Spring		
SEPS 485	Student Teaching	12
Credit Hours		12
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Career and Technical Education with a Major in Technology Education (BS)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3

Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication Skills: Grade of C or better required in both courses

Information Literacy and Research is satisfied by STEM 251G in the major

Human Behavior: PSYC 203S

Impact of Technology is satisfied by STEM 370T in the major

Upper-Division General Education

Satisfied in the major.

Requirements for Graduation

Students in marketing education and technology education licensure programs must have:

1. Minimum of 120 credit hours.
2. Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
3. A 2.75 grade point average overall, in the major, and in the core.
4. Earned a passing grade in student teaching.
5. Completed ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better.
6. Completed the senior assessment.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Due to changing University requirements, national accreditation standards, and Commonwealth licensure regulations, the programs in the Darden College of Education and Professional Studies are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students should obtain current program information from their advisors.

Career and Technical Education Core

FOUN 301	Learning and Development	3
FOUN 302	Assessment of Learning	3
or SEPS 450	Assessment, Evaluation and Improvement	
STEM 370T	Technology and Society (Writing Intensive)	3
	*	
TLED 326	Socio-Cultural Perspectives in Education	3
TLED 426	Introduction to Literacy, Linguistics and Practice in the Classroom	3

Total Credit Hours 15

* Grade of C or better required

Technology Education Major

This major is designed to prepare students to teach technology education subjects in middle schools and high schools. It is an approved program for

meeting licensure requirements to teach technology education in Virginia. Requirements are as follows.

General Education

Complete lower-division requirements	35-41

Complete upper-division requirements (met in the major)	

Career and Technical Education Core

Complete the career and technical education core requirements	15

Technology Education

SEPS 195	Topics (Design & Visualization)	3
SEPS 297	Observation and Participation	1
SEPS 400	Instructional Systems Development	3
SEPS 401	Foundations of Career and Technical Education	3
SEPS 402	Instructional Methods in Occupational Studies	3
SEPS 408	Advanced Classroom Issues and Practices in Career and Technical Education	3
SEPS 485	Student Teaching	12
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
STEM 110T	Technology and Your World	3
STEM 221	Industrial Materials	3
STEM 231	Materials and Processes Technology	3
STEM 241	Energy Systems: Basic Electricity	3
STEM 242	Technological Systems Control	3
STEM 251G	Computer Literacy: Communication and Information	3
STEM 351	Communication Technology	3
STEM 382	Industrial Design	3

Electives

Select elective courses	9

Total Credit Hours	114-120

Elective credit may be needed to meet the minimum of 120 credits required for the degree.

Additional Requirements and Information

Admission

For the most current information on the prescribed Virginia Board of Education admission assessment, visit the Office of Clinical Experiences website, <https://www.odu.edu/occe> (<https://www.odu.edu/occe/>).

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Continuance

Students in marketing education and technology education licensure programs must:

1. Satisfy University requirements.
2. Maintain a cumulative GPA of 2.75, a major GPA of 2.75 and a core GPA of 2.75 with no earned grade less than C- in all courses taken in the major and in the core.
3. Successfully complete SEPS 297.

4. Take and pass the appropriate PRAXIS Subject Assessment (Technology and Engineering Education – Content Knowledge, 5053 or Marketing Education – Content Knowledge, 5561) prior to or while enrolled in the Instructional Strategies course SEPS 408. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <https://www.odu.edu/occe/teacher-education/placement/background-checks> (<https://www.odu.edu/occe/teacher-education/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Assessments Required for Teacher Education Programs and Licensure

In order to obtain a Virginia teaching license, all teacher education students must attain passing scores on the appropriate teacher licensure exams. All students will take and attain a passing score on the appropriate Praxis Subject Area Assessment (Technology and Engineering Education – Content Knowledge, 5053 with a score of 162 or Marketing Education – Content Knowledge, 5561 with a score of 147) in order to be eligible for student teaching and licensure. Score reports of all examinations must be on file in the Office of Clinical Experiences in the Education Building. To review more information on the Virginia Board of Education Prescribed Assessments, visit the Office of Clinical Experiences website, <https://www.odu.edu/occe> (<https://www.odu.edu/occe/>).

Licensure/Endorsement Programs

Licensure Program in Marketing Teacher Education

The licensure program in marketing teacher education is designed to prepare a person who has a business-related baccalaureate degree to be a marketing education teacher-coordinator. Participants who successfully complete this program will qualify to apply for a Virginia teaching license to teach marketing education.

Admission

Prior to entering this program students must hold a business-oriented baccalaureate degree in which 30 hours of marketing-related courses have been completed including at least three semester hours each of courses covering the marketing process, economics, personnel, the sales process, operations and organization, and promotion. Students must also have completed a rigorous general education program as outlined by the Commonwealth in its Licensure Regulations for Teachers. They must be interviewed and accepted by the marketing education program leader. Finally, students must attain or exceed the minimum score required by Virginia on the Praxis I examination. The Praxis I exam must be passed prior to admittance into teacher education and taking SEPS 408/SEPS 508.

Exit

Students must:

1. Complete the following courses:

SEPS 297	Observation and Participation	1
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
TLED 408	Reading and Writing in Content Areas	3
SEPS 400/500	Instructional Systems Development	3
SEPS 401/501	Foundations of Career and Technical Education	3

SEPS 408/508	Advanced Classroom Issues and Practices in Career and Technical Education	3
SEPS 450/550	Assessment, Evaluation and Improvement	3
SEPS 485	Student Teaching	12
Total Credit Hours		31

- Earn a 2.75 cumulative grade point average if licensure is at the undergraduate level and a 3.00 cumulative grade point average if licensure is at the graduate level; and
- Document at least 4000 clock hours of marketing-related work experience completed within the past five years or complete SEPS 405.

Passing scores on the Praxis Subject Assessment, Marketing Education Content Knowledge are required before teacher internship. Passing scores must be attached to the teacher internship application.

Twelve hours of 500/600 level courses may be applied toward the Master of Science in occupational and technical studies, career and technical education teaching concentration.

Endorsement Program in Industrial Cooperative Training

The endorsement program in industrial cooperative training is designed to prepare a licensed teacher to be endorsed to teach industrial cooperative training in the public schools.

Admission

Prior to entering this program students must have or qualify for a Virginia Collegiate Professional or Postgraduate Professional License. Secondly, they must be interviewed and accepted by the program coordinator.

Exit

Students must:

- Complete the following courses:

SEPS 400/500	Instructional Systems Development	3
SEPS 401/501	Foundations of Career and Technical Education	3
SEPS 402/502	Instructional Methods in Occupational Studies	3
SEPS 408/508	Advanced Classroom Issues and Practices in Career and Technical Education	3
SEPS 450/550	Assessment, Evaluation and Improvement	3
Total Credit Hours		15

- Earn a 2.75 cumulative grade point average if licensure is at the undergraduate level and a 3.00 cumulative grade point average if licensure is at the graduate level; and
- Document at least 4000 clock hours of acceptable employment in a trade, technical, or industrial education subject area completed within the past five years or complete SEPS 405.

Twelve hours of 500/600 level courses may be applied toward the Master of Science in occupational and technical studies, career and technical education teaching concentration.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
Mathematical Skills		3

Oral Communication		3
STEM 110T	Technology and Your World	3
Nature of Science I		4
Credit Hours		16
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Interpreting the Past		3
Nature of Science II		4
PSYC 203S	Lifespan Development (meets Human Behavior)	3
SEPS 195	Topics (Design & Visualization)	3
Credit Hours		16
Sophomore		
Fall		
Literature		3
STEM 251G	Computer Literacy: Communication and Information	3
Elective or Language and Culture (may be waived)		3
FOUN 301	Learning and Development	3
SEPS 297	Observation and Participation	1
Philosophy and Ethics		3
Credit Hours		16
Spring		
TLED 326	Socio-Cultural Perspectives in Education	3
Elective or Language and Culture (may be waived)		3
STEM 351	Communication Technology	3
Human Creativity		3
STEM 382	Industrial Design	3
Credit Hours		15
Junior		
Fall		
STEM 231	Materials and Processes Technology	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
STEM 241	Energy Systems: Basic Electricity	3
STEM 370T	Technology and Society (writing intensive; C or better required)	3
SEPS 401	Foundations of Career and Technical Education	3
Credit Hours		15
Spring		
STEM 221	Industrial Materials	3
SEPS 400	Instructional Systems Development	3
STEM 242	Technological Systems Control	3
TLED 426	Introduction to Literacy, Linguistics and Practice in the Classroom	3

Elective		3
Credit Hours		15
Senior		
Fall		
SEPS 402	Instructional Methods in Occupational Studies	3
Elective		6
SEPS 408	Advanced Classroom Issues and Practices in Career and Technical Education	3
FOUN 302 or SEPS 450	Assessment of Learning or Assessment, Evaluation and Improvement	3
Credit Hours		15
Spring		
SEPS 485	Student Teaching	12
Credit Hours		12
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Marketing Education Minor

The minor in marketing education is offered by the department to students majoring in disciplines other than marketing education and technology education.

Requirements

SEPS 401	Foundations of Career and Technical Education	3
SEPS 402	Instructional Methods in Occupational Studies	3
SEPS 408	Advanced Classroom Issues and Practices in Career and Technical Education	3
SEPS 450	Assessment, Evaluation and Improvement	3
STEM 351	Communication Technology	3
Total Credit Hours		15

Students must pass the Praxis I examination prior to enrolling in SEPS 408. Students must have a minimum overall cumulative grade point average of 2.75 in all courses specified as a requirement for the minor exclusive of 100- and 200-level courses and prerequisite courses. Six hours of the 300/400-level courses must be taken through courses offered by Old Dominion University. All courses may be applied toward the licensure requirements to teach marketing education in Virginia.

Minor Impact of Technology Minor

Philip A. Reed, Department of Educational Leadership and Workforce Development, Coordinator

This interdisciplinary minor develops a broader understanding of technology and its impact on individuals, societies, and the environment. It provides the social context and the historical and philosophical backgrounds needed by informed students to evaluate technology and its impacts. The minor equips students with skills to make better personal decisions about technology and more appropriate choices for their futures.

Requirements

Course options are as follows:

COMM 340	Media and Popular Culture	3
COMM 372T	Introduction to New Media Technologies	3
COMM 400W	Intercultural Communication	3
COMM 401	Communication Theory	3
COMM 448	Global Media Industries	3
CS 300T	Computers in Society	3
CS 312	Internet Concepts	3
ECON 402	Transportation Economics	3
ECON 454W	Economic Development	3
ENGL 380	Introduction to Journalism	3
ENGL 382	Reporting News for Television and Digital Media	3
ENVH 301	Principles of Environmental Health Science	3
ENVH 402W	Environmental and Occupational Health Administration and Law	3
GEOG 305	World Resources	3
GEOG 306T	Hazards: Natural and Technological	3
HIST 304T	History of Medicine, Disease, and Health Technology	3
HIST 389T	Technology and Civilization	3
HIST 386T/SCI 302T	The Evolution of Modern Science	3
IT 360T	Principles of Information Technology	3

MUSC 335T	Music Technology Survey	3
OPMT 303	Operations Management	3
PHIL 355E	Cybersecurity Ethics	3
PHIL 383T	Philosophy of Technology	3
POLS 350T	Technology and War	3
STEM 370T	Technology and Society	3
STEM 382	Industrial Design	3
WGS 390T	Women, Gender, and Technology Worldwide	3

The interdisciplinary minor in the Impact of Technology requires 12 credit hours of 300/400-level courses selected from at least two different disciplines with a maximum of six credits from any one discipline. For completion of the interdisciplinary minor, students must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses. At least six hours of upper-level courses must be taken through courses offered by Old Dominion University. Three credit hours may be in the major, if a major course is listed as an option for the interdisciplinary minor. As such, it will be credited toward both the major and the interdisciplinary minor.

Bachelor of Science Occupational and Technical Studies with a Major in Fashion Merchandising (BS)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses

Information Literacy and Research: STEM 251G required

Human Creativity cannot be met by SEPS 223A

Human Behavior: ECON 200S required

Impact of Technology: satisfied by STEM 370T in the major

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department) or second degree or second major
- Option B. Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Education and Professional Studies and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Fashion Merchandising Major

This major is designed to prepare students to enter the fashion industry to become buyers, fashion coordinators, and merchandise managers. Requirements are as follows:

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6

Fashion Merchandising

ACCT 201	Principles of Financial Accounting	3
SEPS 100	Sales Techniques	3
SEPS 102	Advertising and Promotion	3
SEPS 203S	Dress, Culture and Society	3
SEPS 208	Retail Merchandising and Buying	3
SEPS 220	The Fashion Industry	3
SEPS 234	Survey of Dress and Costume	3
SEPS 302	Workforce Supervision Management	3
SEPS 355	Fashion Consumer Behavior	3
STEM 365	Safety and OSHA Certification	3
SEPS 405	Directed Work Experience (summer only)	4
SEPS 415	Advanced Merchandising	3
SEPS 422	Fashion Product Development	3
SEPS 427	Fashion Marketing (fall)	3
SEPS 435	International Retailing	3
SEPS 456	E-Commerce and Social Media in Fashion	3
SEPS 480	Senior Project: Merchandise Retailing (Prerequisite SEPS 415)	3
SEPS 481	Career and Professional Development	3
STEM 370T	*Technology and Society (Writing Intensive)	3

Select six of the following or other advisor-approved electives: 18

SEPS 223A	Visual Merchandising and Display
STEM 321	Manufacturing Technology
SEPS 367	Cooperative Education (requires employment)

STEM 382	Industrial Design	
SEPS 400	Instructional Systems Development	
SEPS 409	Fashion Forecasting Market Trip	
SEPS 410	The Foreign Fashion Market Trip	
SEPS 420	Fashion Research	
SEPS 424	Fashion, Textiles, and Construction Analysis	
SEPS 440	Fashion Global Sourcing/Supply Chain Management	
SEPS 495	Topics in Occupational Education	
Total Credit Hours		120-126

Elective credit may be needed to meet the minimum of 120 credits required for the degree.

* Grade of C or better required

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
Oral Communication		3
Mathematics		3
SEPS 100	Sales Techniques	3
SEPS 102	Advertising and Promotion	3
Credit Hours		15
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Interpreting the Past		3
STEM 251G	Computer Literacy: Communication and Information	3
SEPS 220	The Fashion Industry	3
SEPS 234	Survey of Dress and Costume	3
Credit Hours		15
Sophomore		
Fall		
Nature of Science I		4
Literature		3
SEPS 203S	Dress, Culture and Society	3
SEPS 208	Retail Merchandising and Buying	3
SEPS 355	Fashion Consumer Behavior	3
Credit Hours		16
Spring		
Nature of Science II		4
Human Creativity (cannot be met by SEPS 223A)		3

ACCT 201	Principles of Financial Accounting	3
ECON 200S	Basic Economics	3
Philosophy and Ethics		3
Credit Hours		16
Summer		
Foreign Language (if required; may be waived)		0-3
Credit Hours		0-3
Junior		
Fall		
SEPS 427	Fashion Marketing (fall only)	3
SEPS 435	International Retailing	3
Fashion Electives		6
Minor or Upper-Division General Education		3
Credit Hours		15
Spring		
SEPS 302	Workforce Supervision Management	3
SEPS 415	Advanced Merchandising	3
STEM 370T	Technology and Society (writing intensive; C or better required)	3
Fashion Electives		6
Credit Hours		15
Summer		
Foreign Language (if required; may be waived)		0-3
SEPS 405	Directed Work Experience	4
Credit Hours		4-7
Senior		
Fall		
SEPS 422	Fashion Product Development	3
SEPS 456	E-Commerce and Social Media in Fashion	3
Fashion Elective		3
Minor or Upper-Division General Education		3
Credit Hours		12
Spring		
SEPS 480	Senior Project: Merchandise Retailing	3
SEPS 481	Career and Professional Development	3
Fashion Elective		3
STEM 365	Safety and OSHA Certification	3
Credit Hours		12
Total Credit Hours		120-126

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-

entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Fashion Merchandising Minor

The department offers a minor in fashion merchandising for students majoring in disciplines other than occupational and technical studies majors.

Requirements

Requirements for the minor are completion of 12 credit hours from among the following courses:

Select four of the following:	12
SEPS 302	Workforce Supervision Management
SEPS 367	Cooperative Education
SEPS 405	Directed Work Experience
SEPS 409	Fashion Forecasting Market Trip
SEPS 410	The Foreign Fashion Market Trip
SEPS 415	Advanced Merchandising
SEPS 422	Fashion Product Development
SEPS 424	Fashion, Textiles, and Construction Analysis
SEPS 431	Web-Based Organization for Fashion
SEPS 435	International Retailing
or SEPS 440	Fashion Global Sourcing/Supply Chain Management
SEPS 495	Topics in Occupational Education *
SEPS 496	Topics in Career and Technical Education *
Total Credit Hours	12

* Prior approval required

SEPS 208 or SEPS 220 are prerequisites for the minor and are not included in the calculation of the grade point average for the minor. Students must have a minimum overall cumulative grade point average of 2.00 in all

courses specified as a requirement for the minor exclusive of 100- and 200-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor through courses offered by Old Dominion University.

Bachelor of Science Occupational and Technical Studies with a Major in Industrial Technology (BS)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses

Oral Communication: met in the major by HMSV 339

Mathematics: MATH 101M or MATH 102M or MATH 103M and STAT 130M required

Information Literacy and Research: STEM 251G required

Human Creativity cannot be met by SEPS 223A

Human Behavior: PSYC 201S required; cannot be met by SEPS 203S

Impact of Technology: satisfied by STEM 370T in the major

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department) or second degree or second major
- Option B. Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Education and Professional Studies and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Industrial Technology Major

This major is designed to prepare students to enter industry as supervisors, technical managers, or trainers. The major is also available through ODUGlobal. Additional industrial technology areas are available for transfer students. On approval of the program leader, select technical content areas from the community college can satisfy the 30 hours of technical content for this major. Requirements are as follows:

General Education		
Complete lower-division requirements		38-44
Complete upper-division requirements (minimum of 6 credit hours)		6
Industrial Technology		
Technical Content-General:		
SEPS 195	Topics (Design & Visualization)	3
STEM 221	Industrial Materials	3
STEM 231	Materials and Processes Technology	3
STEM 241	Energy Systems: Basic Electricity	3
STEM 242	Technological Systems Control	3
STEM 320	Manufacturing and Construction Technology	3
STEM 351	Communication Technology	3
STEM 382	Industrial Design	3
SEPS 395	Topics in Occupational Education (Design for Production)	3
STEM 495	Topics (Building, Design, and Development)	3
Supervision:		
HMSV 339	Interpersonal Relations	3
SEPS 302	Workforce Supervision Management	3
SEPS 400	Instructional Systems Development	3
SEPS 402	Instructional Methods in Occupational Studies	3
SEPS 405	Directed Work Experience (Internship)	4
SEPS 481	Career and Professional Development	3
STEM 365	Safety and OSHA Certification	3
STEM 370T	Technology and Society (Writing Intensive)	3
Business Cognate:		
ACCT 201	Principles of Financial Accounting	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 330 or MGMT 340	Organizational Behavior Human Resource Management	3
MKTG 311	Marketing Principles and Problems	3
Approved Business Electives - 2 courses		6
Electives		
Elective credit		3
Total Credit Hours		120-126

* Grade of C or better required

Electives

Elective credit may be needed to meet the minimum of 120 credits required for the degree. Additional credits may be needed if a minor is pursued.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
MATH 101M or MATH 102M or MATH 103M	An Introduction to Mathematics for Critical Thinking or College Algebra or College Algebra with Supplemental Instruction	3
Interpreting the Past		3
Elective or Foreign Language (if required)		0-3
STEM 251G	Computer Literacy: Communication and Information	3
Credit Hours		12-15
Spring		
Literature		3
Human Creativity (cannot be met by SEPS 223A)		3
PSYC 201S	Introduction to Psychology	3
Elective or Foreign Language (if required)		0-3
SEPS 195	Topics (Design & Visualization)	3
Credit Hours		12-15
Sophomore		
Fall		
Nature of Science I		4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
ACCT 201	Principles of Financial Accounting	3
STEM 231	Materials and Processes Technology	3
STEM 241	Energy Systems: Basic Electricity	3
Credit Hours		16
Spring		
Nature of Science II		4
Philosophy and Ethics		3
STAT 130M	Elementary Statistics	3
STEM 221	Industrial Materials	3
STEM 242	Technological Systems Control	3
Credit Hours		16

Junior		
Fall		
MKTG 311	Marketing Principles and Problems	3
MGMT 325	Contemporary Organizations and Management	3
SEPS 302	Workforce Supervision Management	3
STEM 320	Manufacturing and Construction Technology	3
STEM 351	Communication Technology	3
Credit Hours		15
Spring		
HMSV 339	Interpersonal Relations	3
MGMT 330 or MGMT 340	Organizational Behavior or Human Resource Management	3
STEM 382	Industrial Design	3
Minor or Upper-Division General Education		3
SEPS 395	Topics in Occupational Education (Design for Production)	3
Credit Hours		15
Summer		
SEPS 405	Directed Work Experience (internship)	4
Credit Hours		4
Senior		
Fall		
STEM 370T	Technology and Society (writing intensive; C or better required)	3
SEPS 400	Instructional Systems Development	3
STEM 365	Safety and OSHA Certification	3
Elective		3
Approved Business Elective		3
Credit Hours		15
Spring		
SEPS 402	Instructional Methods in Occupational Studies	3
Approved Business Elective		3
Minor or Upper-Division General Education		3
STEM 495	Topics (Building, Design, and Development)	3
SEPS 481	Career and Professional Development	3
Credit Hours		15
Total Credit Hours		120-126

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits

toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Occupational and Technical Studies with a Major in Training Specialist (BS)

Unlock your potential in the \$350 billion global training and development industry with the Training Specialist major! Gain the expertise necessary to become a training and organizational development specialist by creating value-added training solutions that drive talent development and enhance organizational performance. Develop skills in training and development program design, delivery, and evaluation; creative problem-solving, leadership, communications technology, and management. Explore and enhance your career opportunities in business, industry, healthcare, government, the military, and higher education. A minor in Training and Development and a certificate in Industrial Training are also available. Join us and launch your career today!

Career Highlights

- 12% projected job growth far exceeds the 5% national average; \$65,000 starting; \$125,000 with five years of experience (Bureau of Labor Statistics Occupational Handbook, 2024)
- Careers include corporate trainer, training and development specialists, instructional designer, talent development and recruiter, and human resources specialists, consultant, training and development manager, and chief learning officer.

Major Highlights

- An accelerated plan of study is available. Complete the Bachelor of Science degree in 1.3 years as a 60+ hour transfer student.
- Complete the major at your own pace, full-time or part-time.

- Self-paced and instructor-led courses
- Built-in OSHA certification
- A.S. and A.A.S community college credits accepted
- Transfer friendly (prior course work likely meets elective requirements)
- Military friendly (JST, CLEP, and DSST credits accepted)
- Air University Associate to Baccalaureate Cooperative (AU-ABC) partner
- U.S. Armed Forces Military Pathways
- Courses based on cutting-edge research conducted by ATD, SHRM, AHRD
- Developing employ-based educational programs

Graduation Qualifications

To graduate, students need to earn at least a 2.0 GPA overall and in their major. In addition to meeting other requirements of the University, students must earn a minimum of 25 percent of the total number of credits required for the degree (for example, 30 credits in a 120-credit degree program) through on- or off-campus instruction.

Accelerated Plan-of-Study Based on a Transfer of 60+ Hours

Please see the Degree Program Guide area for additional information.

- 60 hours remaining (120 hours total required for degree completion)
- 34 hours STEM/SEPS courses
- 6 hours Upper Division General Education
- 20 hours of a combination of remaining required courses and electives
- 4 semesters to completion (3 academic semesters plus 1 summer term)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses

Oral Communication: met in the major by HMSV 339

Information Literacy and Research: STEM 251G required

Human Creativity cannot be met by SEPS 223A

Human Behavior: ECON 200S required; cannot be met by SEPS 203S

Impact of Technology: satisfied by STEM 370T in the major

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department) or second degree or second major
- Option B. Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Education and Professional Studies and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Training Specialist Major

This major is designed to prepare students as training specialists who design, develop, and present training in business and industry. The major is also available through ODUGlobal. On approval of the program leader, select business-related technical content areas from the community college can satisfy 30 hours of technical content for this major. Requirements are as follows:

General Education

Complete lower-division requirements	35-41
Complete upper-division requirements (minimum of 6 credit hours)	6

Technical Content Courses

ACCT 201	Principles of Financial Accounting	3
HMSV 339	Interpersonal Relations	3
MGMT 325	Contemporary Organizations and Management	3
MGMT 330 or MGMT 340	Organizational Behavior Human Resource Management	3
MKTG 311	Marketing Principles and Problems	3
PSYC 201S	Introduction to Psychology	3
PSYC 303	Industrial/Organizational Psychology	3
SEPS 302	Workforce Supervision Management	3
SEPS 389	Education and Training of Adults	3
SEPS 400	Instructional Systems Development	3
SEPS 402	Instructional Methods in Occupational Studies	3
SEPS 405	Directed Work Experience	4
SEPS 450	Assessment, Evaluation and Improvement	3
SEPS 481	Career and Professional Development	3
STEM 350 or STEM 351	Communication Technology Processes Communication Technology	3
STEM 365	Safety and OSHA Certification	3
STEM 370T	Technology and Society (Writing Intensive)	3

Electives

Training Electives **	21

Elective Credit	6
Total Credit Hours	120-126
* Grade of C or better required ** Consult the departmental advisor for a list of approved courses used to meet this requirement.	

Elective credit may be needed to meet the minimum of 120 credits required for the degree.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Training Specialist Major

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
Mathematics		3
Elective or Foreign Language (if required)		3
STEM 251G	Computer Literacy: Communication and Information	3
PSYC 201S	Introduction to Psychology	3
Credit Hours		15
Spring		
Literature		3
Elective or Foreign Language (if required)		3
Human Creativity (cannot be met by SEPS 223A)		3
Philosophy and Ethics		3
ECON 200S	Basic Economics	3
Credit Hours		15
Sophomore		
Fall		
Nature of Science I		4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research or Writing, Rhetoric, and Research: Special Topics	3
Interpreting the Past		3
ACCT 201	Principles of Financial Accounting	3
Training Elective		3
Credit Hours		16
Spring		
Nature of Science II		4
Training Elective		3
Training Elective		3
Training Elective		3
Credit Hours		13

Junior		
Fall		
MKTG 311	Marketing Principles and Problems	3
MGMT 330 or MGMT 340	Organizational Behavior or Human Resource Management	3
SEPS 302	Workforce Supervision Management	3
MGMT 325	Contemporary Organizations and Management	3
HMSV 339	Interpersonal Relations	3
Credit Hours		15
Spring		
SEPS 389	Education and Training of Adults	3
SEPS 400	Instructional Systems Development	3
SEPS 450	Assessment, Evaluation and Improvement	3
STEM 351 or STEM 350	Communication Technology or Communication Technology Processes	3
PSYC 303	Industrial/Organizational Psychology	3
Credit Hours		15
Summer		
SEPS 405	Directed Work Experience	4
Credit Hours		4
Senior		
Fall		
SEPS 402	Instructional Methods in Occupational Studies	3
STEM 365	Safety and OSHA Certification	3
STEM 370T	Technology and Society (writing intensive; C or better required)	3
Training Elective		3
Upper-Division General Education		3
Credit Hours		15
Spring		
SEPS 481	Career and Professional Development	3
Upper-Division General Education		3
Training Elective		3
Training Elective		3
Credit Hours		12
Total Credit Hours		120

Training Specialist Major Accelerated Guide*

Course	Title	Credit Hours
First Year		
Fall		
1st 8 Weeks		9
STEM 251G	Computer Literacy: Communication and Information	

SEPS 302	Workforce Supervision Management	
SEPS 400	Instructional Systems Development	
2nd 8 Weeks		9
STEM 370T	Technology and Society	
SEPS 402	Instructional Methods in Occupational Studies	
Other required course or elective		
Credit Hours		18
Spring		
1st 8 Weeks		9
STEM 351	Communication Technology	
SEPS 481	Career and Professional Development	
Other required course or elective		
2nd 8 Weeks		9
SEPS 389	Education and Training of Adults	
Upper Division General Education I		
Other required course or elective		
Credit Hours		18
Summer		
STEM 365	Safety and OSHA Certification	3
SEPS 405	Directed Work Experience **	4
Other required course or elective		3
Other required course or elective		3
Credit Hours		13
Second Year		
Fall		
1st 8 Weeks		9
SEPS 450	Assessment, Evaluation and Improvement	
Upper Division General Education II		
Other required course or elective		
2nd 8 Weeks		2-3
Other required course or elective (if needed)		
Credit Hours		11-12
Total Credit Hours		60-61

* Permission required to take over 18 hours per semester. This plan assumes at least 60 credits have been transferred in to Old Dominion University.

** SEPS 405 is a 4-hour course that is offered in a 12-week Session 1 format. Courses taken in Winter Term and Maymester do not count toward Summer hours.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-

entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Training and Development Minor

The minor in training and development is offered by the department for students majoring in disciplines other than occupational and technical studies.

Requirements

The minor requires 15 hours of course work as follows:

SEPS 389	Education and Training of Adults	3
SEPS 400	Instructional Systems Development	3
SEPS 402	Instructional Methods in Occupational Studies	3
SEPS 450	Assessment, Evaluation and Improvement	3
STEM 351	Communication Technology	3
Total Credit Hours		15

Students must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of 100- and 200-level courses and prerequisite courses and six hours of the 300/400-level courses must be taken through courses offered by Old Dominion University.

Certificate Industrial Training Certificate

This program is designed especially for military and civilian instructors and trainers. It is directed to those individuals who possess technical skills in the military, industry, career and technical centers, or community colleges. An overall grade point average of 2.0 or above in all courses specified as a requirement for the certificate is required for the award of the certificate. Students must complete a minimum of six hours in upper-level courses

required for the certificate through courses offered by Old Dominion University.

Requirements

This certificate requires successful completion of the following 21 credit hours (seven courses).

SEPS 302	Workforce Supervision Management	3
SEPS 400	Instructional Systems Development	3
SEPS 402	Instructional Methods in Occupational Studies	3
STEM 351	Communication Technology	3
STEM 370T	Technology and Society	3
PSYC 303	Industrial/Organizational Psychology	3
HMSV 339	Interpersonal Relations	3
Total Credit Hours		21

Human Movement Studies and Special Education

Web Site: <http://www.odu.edu/hms> (<http://www.odu.edu/hms/>)

Xihe Zhu, Chair
Jonna Bobzien, Assistant Chair

The Department of Human Movement Studies and Special Education offers programs leading to a Bachelor of Science (BS) degree in four areas. These include a BS in Physical Education with majors in PreK-12 Health and Physical Education and Coaching and Physical Activity Leadership, a BS in Park, Recreation and Tourism Studies with majors in Tourism and Hospitality Management and Park and Recreation Management, a BS in Special Education with various majors, and a BS in Sport Management.

In addition to these BS degrees and majors, our department offers minors in Coaching Education, Health Education, Park, Recreation, and Tourism Management, Physical Education, Special Education, and Sport Management.

Due to changing University requirements, national accreditation standards, and Commonwealth licensure regulations, the programs in the Darden College of Education and Professional Studies are under constant revision. Any changes resulting from these factors supersede the program requirements described in the catalog. Students should obtain current program information from their advisors and the Darden College of Education and Professional Studies website at <http://www.odu.edu/education>. (<http://education.odu.edu/>)

Programs

Bachelor of Science Programs

- Park, Recreation and Tourism Studies with a Major in Park and Recreation Management (BS) (p. 529)
- Park, Recreation and Tourism Studies with a Major in Tourism and Hospitality Management (BS) (p. 532)
- Physical Education with a Major in Coaching and Physical Activity Leadership (BS) (p. 534)
- Physical Education with a Major in PreK-12 Health and Physical Education (BS) (p. 537)
- Special Education with a Major in Early Intervention/Early Childhood Special Education (Birth-5) (BS) (p. 541)
- Special Education with a Major in Special Education Adapted Curriculum K-12 (BS) (p. 544)
- Special Education with a Major in Special Education General Curriculum K-12 (BS) (p. 548)
- Sport Management (BS) (p. 551)

Minor Programs

- Coaching Education Minor (p. 540)
- Health Education Minor (p. 540)
- Park, Recreation and Tourism Management Minor (p. 534)
- Physical Education Minor (p. 540)
- Special Education Minor (p. 551)
- Sport Management Minor (p. 554)

Bachelor of Science Park, Recreation and Tourism Studies with a Major in Park and Recreation Management (BS)

Ling Ling, PhD, Undergraduate Program Director
2014 Student Recreation Center
(757) 683-4881

This program is designed to prepare students to enter the professional field of park and recreation management.

Students must have a 2.00 GPA and 12 credit hours at Old Dominion University to be declared under the Park, Recreation and Tourism Studies program.

A minimum of 120 credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University, is required for Park and Recreation Management majors.

Advanced Placement

Departmental examinations for advanced placement are available for selected courses in the undergraduate programs. Please contact the department chair for further details. Refer also to the Policy on Prior Learning Assessment Credit Options at the Undergraduate Level in this Catalog.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication Skills: Grade of C or better required in both courses.

Mathematics: STAT 130M required

Upper-Division General Education

- Option A: Disciplinary Minor (a minimum of 12 hours determined by the department) or Second Major or Second Degree
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C: An approved Certification Program such as teaching licensure
- Option D: Six hours of elective upper-division courses from outside the College of Education and Professional Studies and not required by the student's major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Core Courses for Park, Recreation and Tourism Studies*

PRTS 210S	Leisure and Human Behavior	3
PRTS 475	Sustainable Management in Parks, Recreation, and Tourism	3
PRTS 482W	Evaluation in Parks, Recreation, and Tourism	3
ACCT 201	Principles of Financial Accounting	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3
PRTS 366	Internship Seminar	1
PRTS 368	Internship	9
Total Credit Hours		28

* A grade of C or better is required in PRTS 482W. A grade of C- or higher is required in all other core courses.

Park and Recreation Management Major

General Education

Complete lower-division requirements	41-47
Complete upper-division requirements (minimum of 6 credit hours)	6

Park, Recreation and Tourism Studies Core

Complete the Park, Recreation and Tourism Studies Core Requirements	28

Park and Recreation Management

PAS 300	Foundations of Public Service	3
PRTS 251	Introduction to Park and Recreation Management *	3
PRTS 302	Facilitating the Recreation Experience	3
PRTS 404	Recreation Resource Management	3

PRTS 405	Outdoor Recreation	3
PRTS 433	Camp Administration	3
Total Credit Hours		93-99

* Grade of C- or better required.

Recommended Minors

It is recommended that students select a minor in Business Administration, Communication, Sustainability & Conservation Leadership, Geography, Management, Marketing, Psychology, or Public Service (12-15 credit hours) to reach the 120 credits required for graduation.

Electives

Elective credit may be needed to meet the minimum of 120 credit hours required for the degree.

Additional Requirements and Information

Admission

Students must:

1. Have an overall grade point average of 2.00 and 12 credit hours at Old Dominion University.
2. Have a meeting with faculty to complete required paperwork.
3. Pass a background check for courses where students will have contact with youth.

Continuance

Students must:

1. Maintain an overall grade point average of 2.00.
2. Maintain a grade point average of 2.00 in the major.
3. Earn a grade of C or higher in PRTS 482W and a grade of C- or higher in the remaining PRTS core courses.
4. Earn a Grade of C- or higher in PRTS 251 or PRTS 271.
5. Complete ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better.
6. Complete all PRTS core and major courses prior to completing PRTS 368, Internship.

Exit

Students must:

1. Have an overall grade point average of 2.00.
2. Have a grade point average of 2.00 in the major.
3. Complete ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better.
4. Complete an internship.
5. Satisfy all course requirements.
6. Take the University Senior Assessment.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (C or better required)	3
Oral Communication		3
Information Literacy and Research		3

STAT 130M	Elementary Statistics	3
Elective or Foreign Language (if required)		3
Credit Hours		15
Second Semester		
Literature		3
Interpreting the Past		3
Human Creativity		3
Human Behavior		3
Elective or Foreign Language (if required)		3
Credit Hours		15
Sophomore		
First Semester		
ACCT 201	Principles of Financial Accounting (C- or better required)	3
PRTS 210S	Leisure and Human Behavior	3
PRTS 251	Introduction to Park and Recreation Management (C- or better required)	3
Nature of Science I		4
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
Credit Hours		16
Second Semester		
PAS 300	Foundations of Public Service	3
Elective		3
Nature of Science II		4
Philosophy and Ethics		3
Impact of Technology		3
Credit Hours		16
Junior		
First Semester		
MKTG 311	Marketing Principles and Problems (C- or better required)	3
MGMT 325	Contemporary Organizations and Management (C- or better required)	3
PRTS 404	Recreation Resource Management	3
PRTS 475	Sustainable Management in Parks, Recreation, and Tourism (C- or better required)	3
Elective		3
Credit Hours		15
Second Semester		
PRTS 302	Facilitating the Recreation Experience	3
PRTS 405	Outdoor Recreation	3
PRTS 433	Camp Administration	3
Minor Course or Elective		3
Minor Course or Elective		3
Credit Hours		15

Senior

First Semester

PRTS 366	Internship Seminar (C- or better required)	1
PRTS 482W	Evaluation in Parks, Recreation, and Tourism (C or better required)	3
Minor Course or Elective		3
Minor Course or Elective		3
Minor Course or Elective		3
Elective		3
Credit Hours		16

Second Semester

PRTS 368	Internship (C- or better required)	9
Elective		3
Credit Hours		12
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Park, Recreation and Tourism Studies with a Major in Tourism and Hospitality Management (BS)

Ling Ling, PhD, Undergraduate Program Director
2014 Student Recreation Center
(757) 683-4881

This program is designed to prepare students to enter the professional field of tourism, hospitality, and event management.

Students must have a 2.00 GPA and 12 credit hours at Old Dominion University to be declared under the Park, Recreation and Tourism Studies program.

A minimum of 120 credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University, is required for Tourism and Hospitality Management majors.

Advanced Placement

Departmental examinations for advanced placement are available for selected courses in the undergraduate programs. Please contact the department chair for further details. Refer also to the Policy on Prior Learning Assessment Credit Options at the Undergraduate Level in this Catalog.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication Skills: Grade of C or better required in both courses.

Mathematics: STAT 130M required

Upper-Division General Education

- Option A: Disciplinary Minor (a minimum of 12 hours determined by the department) or Second Major or Second Degree
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)

- Option C: An approved Certification Program such as teaching licensure
- Option D: Six hours of elective upper-division courses from outside the College of Education and Professional Studies and not required by the student's major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Core Courses for Park, Recreation and Tourism Studies*

PRTS 210S	Leisure and Human Behavior	3
PRTS 475	Sustainable Management in Parks, Recreation, and Tourism	3
PRTS 482W	Evaluation in Parks, Recreation, and Tourism	3
ACCT 201	Principles of Financial Accounting	3
MGMT 325	Contemporary Organizations and Management	3
MKTG 311	Marketing Principles and Problems	3
PRTS 366	Internship Seminar	1
PRTS 368	Internship	9
Total Credit Hours		28

* A grade of C or better is required in PRTS 482W. A grade of C- or higher is required in all other core courses.

Tourism and Hospitality Management Major

General Education

Complete lower-division requirements	41-47
Complete upper-division requirements (minimum of 6 credit hours)	6

Park, Recreation and Tourism Studies Core

Park, Recreation and Tourism Studies Core Requirements	28

Tourism and Hospitality Management

ACCT 202	Principles of Managerial Accounting	3
or ECON 202S	Principles of Microeconomics	
PRTS 271	Introduction to Tourism & Hospitality Management *	3
PRTS 350	Lodging Operations	3
PRTS 441	Marketing of Hospitality Services	3
PRTS 461	Hospitality Leadership and Management	3
PRTS 465	Hospitality Revenue Management	3
PRTS 491	Festival, Meeting, and Event Management	3
Total Credit Hours		96-102

* Grade of C- or better required.

Recommended Minors

It is recommended that students select a minor in Business Administration, Communication, Management, or Marketing (12-15 credit hours) to reach the 120 credits required for graduation.

Electives

Elective credit may be needed to meet the minimum of 120 credit hours required for the degree.

Additional Requirements and Information

Admission

Students must:

- 1. Have an overall grade point average of 2.00 and 12 credit hours at Old Dominion University.
- 2. Have a meeting with faculty to complete required paperwork.
- 3. Pass a background check for courses where students will have contact with youth.

Continuance

Students must:

- 1. Maintain an overall grade point average of 2.00.
- 2. Maintain a grade point average of 2.00 in the major.
- 3. Earn a grade of C or higher in PRTS 482W and a grade of C- or higher in the remaining PRTS core courses.
- 4. Earn a Grade of C- or higher in PRTS 251 or PRTS 271.
- 5. Complete ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better.
- 6. Complete all PRTS core and major courses prior to completing PRTS 368, Internship.

Exit

Students must:

- 1. Have an overall grade point average of 2.00.
- 2. Have a grade point average of 2.00 in the major.
- 3. Complete ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better.
- 4. Complete an internship.
- 5. Satisfy all course requirements.
- 6. Take the University Senior Assessment.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
Oral Communication		3
STAT 130M	Elementary Statistics	3
Information Literacy and Research		3
Elective or Foreign Language (if required)		3
Credit Hours		15
Spring		
Literature		3
Interpreting the Past		3

Human Creativity		3
Human Behavior		3
Elective or Foreign Language (if required)		3
Credit Hours		15
Sophomore		
Fall		
ACCT 201	Principles of Financial Accounting (C- or better required)	3
PRTS 271	Introduction to Tourism & Hospitality Management (C- or better required)	3
Nature of Science I		4
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
Philosophy and Ethics		3
Credit Hours		16
Spring		
ACCT 202 or ECON 202S	Principles of Managerial Accounting or Principles of Microeconomics	3
Nature of Science II		4
Impact of Technology		3
Elective		3
Elective		3
Credit Hours		16
Junior		
Fall		
PRTS 210S	Leisure and Human Behavior	3
MKTG 311	Marketing Principles and Problems (C- or better required)	3
MGMT 325	Contemporary Organizations and Management (C- or better required)	3
PRTS 441	Marketing of Hospitality Services	3
PRTS 475	Sustainable Management in Parks, Recreation, and Tourism (C- or better required)	3
Credit Hours		15
Spring		
PRTS 461	Hospitality Leadership and Management	3
PRTS 465	Hospitality Revenue Management	3
PRTS 491	Festival, Meeting, and Event Management	3
Minor Course or Elective		3
Minor Course or Elective		3
Credit Hours		15
Senior		
Fall		
PRTS 350	Lodging Operations	3

PRTS 366	Internship Seminar (C- or better required)	1
PRTS 482W	Evaluation in Parks, Recreation, and Tourism (C or better required)	3
Minor Course or Elective		3
Minor Course or Elective		3
Elective		3
Credit Hours		16
Spring		
PRTS 368	Internship (C- or better required)	9
Elective		3
Credit Hours		12
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Park, Recreation and Tourism Management Minor

Requirements

PRTS 251* or PRTS 271* is a prerequisite for the minor and is not included in the calculation of the grade point average for the minor. Requirements for the minor are:

Select four from the following:		12
PRTS 302	Facilitating the Recreation Experience	
PRTS 350	Lodging Operations	
PRTS 404	Recreation Resource Management	
PRTS 405	Outdoor Recreation	
PRTS 433	Camp Administration	
PRTS 441	Marketing of Hospitality Services	
PRTS 461	Hospitality Leadership and Management	
PRTS 465	Hospitality Revenue Management	
PRTS 491	Festival, Meeting, and Event Management	
Total Credit Hours		12

* Grade of C- or better required.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of 100- and 200-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Bachelor of Science Physical Education with a Major in Coaching and Physical Activity Leadership (BS)

This program is designed to promote competencies involved in teaching, coaching, and leadership in sport and physical activity settings.

Katelyn Makovec, Undergraduate Program Director
2030 Student Recreation Center
757-683-3355
ksmith@odu.edu

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3

Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication Skills: Grade of C or better required in both courses

Oral Communication: COMM 101R required

Mathematics: Select

from MATH 101M, MATH 102M, MATH 103M, MATH 162M, or STAT 130M.

The Nature of

Science: BIOL 117N/BIOL 118N and BIOL 121N/BIOL 122N recommended

Impact of Technology: Satisfied by TLED 430W in the major.

Upper-Division General Education

Satisfied by the required minor in Coaching Education included in the program.

Requirements for Graduation

1. All program requirements
2. ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better
3. A minimum cumulative 2.0 GPA in the major area and in the professional education core, with no grade less than a C- in the major.
4. Completion of the Senior Assessment
5. Successful completion of the Coaching Internship
6. Completion of a minimum of 120 credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University.

All HPE, EXSC, SMGT, and TLED courses and BIOL 240 or BIOL 250 will be used to calculate the major content grade point average. Grade point averages must be 2.0 for continuance and graduation. Additional elective hours may be needed to make 120 total hours.

Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the programs in the Darden College of Education and Professional Studies are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog.

Coaching in Physical Activity and Leadership Major*

General Education

Complete lower-division requirements 38-44

Complete upper-division requirements (met in the major)

Coaching and Physical Education Leadership

BIOL 240	Fundamentals of Anatomy and Physiology I	4
or BIOL 250	Human Anatomy and Physiology I	
TLED 430W	PK-12 Instructional Technology	3
HPE 200	Foundations of Education, Physical Education and Health	3
HPE 218	Aquatics and Outdoor Education	2
HPE 220	Teaching of Team Sports	3
HPE 222	Teaching Individual Sports and Dance	3
HPE 300	Teaching Elementary Physical Education	3
HPE 301W	Methods and Materials in Teaching Physical Education	3

HPE 317	Human Growth & Motor Development	3
HPE 318	Motor Learning	3
HPE 324	Teaching Injury Care for Sports	3
HPE 400	Management Skills for Teaching Health and Physical Education	3
HPE 404	Adapted Physical Education	4
HPE 406	Tests and Measurement in Physical Education and Health	3
HPE 409	Physiology of Exercise	3
or EXSC 309	Fundamentals of Exercise Physiology	
HPE 415	Principles of Coaching Management	3
or SMGT 415	Principles of Coaching Management	
HPE 430	Nutrition and Fitness Education	3
HPE 456	Sports Psychology	3
or SMGT 456	Sport Psychology	
HPE 368	Coaching Internship	6
SMGT 315	Sport Media and Public Relations	3
SMGT 331	Fiscal Planning and Management in Sport and Recreation	3
SMGT 414	Sport Marketing	3
SMGT 432	Sport Facility and Event Management	3
Total Credit Hours		111-117

* Grade of C or better required in HPE 301W; grade of C- or better required in all other courses.

All HPE, EXSC, SMGT, and TLED courses and BIOL 240 or BIOL 250 will be used to calculate the major content grade point average. Grade point averages must be 2.00 to graduate.

Additional elective hours may be needed to reach 120 total credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <https://ww1.odu.edu/oce/placement/background-checks> (<https://ww1.odu.edu/oce/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint SP-24 form, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3

Nature of Science (BIOL 117N/BIOL 118N recommended)		4
Information Literacy and Research		3
Human Creativity		3
COMM 101R	Public Speaking	3
Credit Hours		16
Spring		
Select one of the following: (C or better required)		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
Literature		3
Nature of Science (BIOL 121N/BIOL 122N recommended)		4
Select one of the following:		3
MATH 101M	An Introduction to Mathematics for Critical Thinking	
MATH 102M	College Algebra	
MATH 103M	College Algebra with Supplemental Instruction	
MATH 162M	Precalculus I	
STAT 130M	Elementary Statistics	
Interpreting the Past		3
Credit Hours		16
Summer		
Elective or Foreign Language (if required)		3
Credit Hours		3
Sophomore		
Fall		
Philosophy and Ethics		3
HPE 200	Foundations of Education, Physical Education and Health (C- or better required)	3
HPE 218	Aquatics and Outdoor Education (C- or better required)	2
HPE 220	Teaching of Team Sports (C- or better required)	3
BIOL 240 or BIOL 250	Fundamentals of Anatomy and Physiology I (C- or better required) or Human Anatomy and Physiology I	4
Credit Hours		15
Spring		
HPE 222	Teaching Individual Sports and Dance (C- or better required)	3
Human Behavior		3
HPE 300	Teaching Elementary Physical Education (C- or better required)	3
HPE 301W	Methods and Materials in Teaching Physical Education (C or better required)	3
SMGT 315	Sport Media and Public Relations (C- or better required)	3
Credit Hours		15

Summer		
Elective or Foreign Language (if required)		3
Credit Hours		3
Junior		
Fall		
HPE 415 or SMGT 415	Principles of Coaching Management (C- or better required) or Principles of Coaching Management	3
HPE 317	Human Growth & Motor Development (C- or better required)	3
HPE 400	Management Skills for Teaching Health and Physical Education (C- or better required)	3
HPE 409 or EXSC 309	Physiology of Exercise (C- or better required) or Fundamentals of Exercise Physiology	3
Credit Hours		12
Spring		
HPE 318	Motor Learning (C- or better required)	3
HPE 324	Teaching Injury Care for Sports (C- or better required)	3
SMGT 331	Fiscal Planning and Management in Sport and Recreation (C- or better required)	3
HPE 456 or SMGT 456	Sports Psychology (C- or better required) or Sport Psychology	3
TLED 430W	PK-12 Instructional Technology (C- or better required)	3
Credit Hours		15
Senior		
Fall		
HPE 404	Adapted Physical Education (C- or better required)	4
HPE 406	Tests and Measurement in Physical Education and Health (C- or better required)	3
HPE 430	Nutrition and Fitness Education (C- or better required)	3
SMGT 414	Sport Marketing (C- or better required)	3
SMGT 432	Sport Facility and Event Management (C- or better required)	3
Credit Hours		16
Spring		
HPE 368	Coaching Internship (C- or better required)	6
Electives as needed		3-6
Credit Hours		9-12
Total Credit Hours		120-123

Master of Science in Education Programs

- Physical Education with a Concentration in Adapted Physical Education (MSEd) (<http://catalog.odu.edu/graduate/education/human-movement-studies-special-education/physical-education-adapted-msed/#text>)
- Physical Education with a Concentration in Coaching (MSEd) (<http://catalog.odu.edu/graduate/education/human-movement-studies-special-education/physical-education-coaching-msed/>)
- Physical Education with a Concentration in Curriculum & Instruction (MSEd) (<http://catalog.odu.edu/graduate/education/human-movement-studies-special-education/physical-education-health-sport-pedagogy-msed/>)
- Physical Education with a Concentration in Initial Virginia Licensure in Health and Physical Education (MSEd) (<http://catalog.odu.edu/graduate/education/human-movement-studies-special-education/physical-education-initial-virginia-licensure-health-msed/>)

Admission and Entrance Requirements

Applicants for the MSEd in Physical Education are required to submit credentials for consideration through the Office of Graduate Admissions at Old Dominion University. Students applying for admission with regular status must have:

- A completed online application via www.odu.edu/admission/graduate (<http://www.odu.edu/admission/graduate/>)
- A baccalaureate degree from a regionally-accredited institution or an equivalent degree from a foreign institution
- 2.8 cumulative GPA or higher (on a 4.0 scale) *
- 3.0 GPA or higher in the undergraduate major *
- A combined GRE score of 291 or higher (verbal and quantitative sections) *
- Personal essay (no more than two pages) addressing motivations to apply to program, career interests, and ability to complete graduate level work
- Three letters of recommendation (from former professors or employers)
- Current copy of résumé
- Transcripts from all prior postsecondary institutions
- Test of English as a Foreign Language (TOEFL) score of 550 on the paper-based test (or 79-80 on the iBT) for non-native English speakers

* Students who have a low GPA or a low GRE score may be considered for admission with provisional status.

* The program admissions committee will consider GRE waiver requests for high potential candidates by considering application elements that demonstrate the ability to take on the rigor of graduate level studies. A request for a waiver does not guarantee that a waiver will be granted.

Bachelor of Science Physical Education with a Major in PreK-12 Health and Physical Education (BS)

Katelyn Makovec, Undergraduate Program Director
2030 Student Recreation Center
757 683-3355
ksmith@odu.edu

This program is designed to promote competencies involved in the teaching of health and physical education in pre-kindergarten through grade 12.

Advanced Placement

Departmental examinations for advanced placement are available for selected courses in the undergraduate programs. Please contact the department chair for further details. Refer also to the Policy on Prior

Learning Assessment Credit Options at the Undergraduate Level in this Catalog.

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication Skills: Grade of C or better required in both courses

Oral Communication: COMM 101R required

Mathematics: Select from MATH 101M, MATH 102M, MATH 103M, MATH 162M, or STAT 130M.

Human Behavior: PSYC 201S, PSYC 203S, or HMS 200S required.

The Nature of Science: BIOL 117N/BIOL 118N and BIOL 121N/BIOL 122N recommended

Impact of Technology: Satisfied by TLED 430W in the major.

Upper-Division General Education

Satisfied by the required minor in health education included in the program (Option A) and completion of professional education courses (Option C).

Requirements for Graduation

Requirements for graduation include completion of:

- All program requirements
- ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better
- A minimum cumulative 2.75 GPA in the major area and in the professional education core, with no grade less than a C- in the major/content and in the professional education core
- Completion of the Senior Assessment
- Successful completion of the Teacher Candidate Internship
- Completion of a minimum of 120 credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University.

All HPE courses, EXSC courses, and BIOL 240 or BIOL 250 will be used to calculate the major content grade point average. HPE and TLED courses will be used to calculate the professional education grade point average. Both major content and professional education grade point averages must be 2.75 for admission into the approved teacher education program and for continuance and graduation. Additional elective hours may be needed to make 120 total hours.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the programs in the Darden College of Education and Professional Studies are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information from their advisors and from the Office of Clinical Experiences website, <http://www.odu.edu/oce> (<http://www.odu.edu/tes/>).

Health and Physical Education Major*

General Education

Complete lower-division requirements 38-44

Complete upper-division requirements (met in the major)

Health and Physical Education

BIOL 240	Fundamentals of Anatomy and Physiology I	4
or BIOL 250	Human Anatomy and Physiology I	
EXSC 322	Anatomical Kinesiology	3
TLED 408	Reading and Writing in Content Areas	3
TLED 430W	PK-12 Instructional Technology	3
HPE 200	Foundations of Education, Physical Education and Health	3
HPE 218	Aquatics and Outdoor Education	2
HPE 220	Teaching of Team Sports	3
HPE 222	Teaching Individual Sports and Dance	3
HPE 300	Teaching Elementary Physical Education	3
HPE 301W	Methods and Materials in Teaching Physical Education	3
HPE 317	Human Growth & Motor Development	3
HPE 318	Motor Learning	3
HPE 324	Teaching Injury Care for Sports	3
HPE 400	Management Skills for Teaching Health and Physical Education	3
HPE 402	Methods and Materials in Health Education	3
HPE 404	Adapted Physical Education	4
HPE 406	Tests and Measurement in Physical Education and Health	3
HPE 409	Physiology of Exercise	3
or EXSC 309	Fundamentals of Exercise Physiology	
HPE 430	Nutrition and Fitness Education	3
HPE 469	Practicum Experience and Instructional Planning in Health and Physical Education	3
HPE 480	Teacher Candidate Seminar	1
HPE 485	Teacher Candidate Internship	12

Total Credit Hours 112-118

* Grade of C or better required in HPE 301W; grade of C- or better required in all other courses.

All HPE courses, EXSC courses, and BIOL 240 or BIOL 250 will be used to calculate the major content grade point average. HPE and TLED courses will be used to calculate the professional education grade point average. Both major content and professional education grade point averages must be 2.75 to graduate.

Additional elective hours may be needed to reach 120 total credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University.

Driver Education Endorsement

HPE 308	Driver Education Foundations of Traffic Safety	3
HPE 309	Principles and Methodologies of Classroom and In-Car Instruction	3

Additional Requirements and Information

Prescribed Virginia Board of Education Assessment for Admission to an Approved Teacher Education Program

Old Dominion University students seeking admission to an approved teacher education program must satisfy the Virginia Board of Education required assessment for admission into an approved teacher education program.

For the most current information on the prescribed Virginia Board of Education admission assessments, please visit the Virginia Department of Education at <https://www.doe.virginia.gov/>.

Admission to the Undergraduate Teacher Education Program

All students must apply for and be admitted into the approved PreK-12 Health and Physical Education major as a requirement of continuance and graduation. Admittance to the program requires that the students:

1. Are a declared BS in physical education with a major in PreK-12 Health and Physical Education and a health education minor.
2. Have a cumulative GPA of 2.75.
3. Have a major /content GPA of 2.75 - HPE 301W must be passed with a grade of C or higher, and all other Health and Physical education courses must be passed with a grade of C- or higher.
4. Have a professional education GPA of 2.75 – all professional education courses must be passed with a grade of C- or higher.
5. Submit an application for admission that is approved by the program and the Darden College of Education and Professional Studies.

Although students may enroll in a limited number of education courses, students must be admitted into the approved PreK-12 Health and Physical Education major prior to enrolling in any instructional strategies practicum education course (HPE 469).

Continuance

Students must:

1. Maintain a cumulative GPA of 2.75, a major/content GPA of 2.75, and a professional education GPA of 2.75.
2. HPE 301W must be passed with a grade of C or higher, and all other health and physical education courses must be passed with a grade of C- or higher. The remaining courses required for the major and in the professional education core must be completed with a grade of C- or higher for continuance.
3. Students must take and pass the Praxis Subject Assessment, Health and Physical Education content knowledge (test code 5857) prior to or while enrolled in the student teaching seminar course. A passing score of 160 is required.

All assessments must be passed prior to the prescribes deadlines posted. Test results will be submitted to the Office of Clinical Experiences.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <https://ww1.odu.edu/oce/placement/background-checks> (<https://ww1.odu.edu/oce/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint SP-24 form, a child protective service/ social service review, and a Virginia State Police sex offender registry

review. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
Nature of Science (BIOL 117N/BIOL 118N recommended)		4
Information Literacy and Research		3
Human Creativity		3
COMM 101R	Public Speaking	3
Credit Hours		16
Spring		
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
Literature		3
Nature of Science (BIOL 121N/BIOL 122N recommended)		4
Select one of the following:		3
MATH 101M	An Introduction to Mathematics for Critical Thinking	
MATH 102M		College Algebra
MATH 103M		College Algebra with Supplemental Instruction
MATH 162M		Precalculus I
STAT 130M		Elementary Statistics
Interpreting the Past		3
Credit Hours		16
Summer		
Elective or Foreign Language (if required)		3
Credit Hours		3
Sophomore		
Fall		
Philosophy and Ethics		3
HPE 200	Foundations of Education, Physical Education and Health	3
HPE 218	Aquatics and Outdoor Education (C- or better required)	2
HPE 220	Teaching of Team Sports (C- or better required)	3

BIOL 240 or BIOL 250	Fundamentals of Anatomy and Physiology I (C- or better required) or Human Anatomy and Physiology I	4
Credit Hours		15
Spring		
PSYC 201S or PSYC 203S or HMS 200S	Introduction to Psychology or Lifespan Development or Personal Health and Wellness	3
HPE 222	Teaching Individual Sports and Dance (C- or better required)	3
HPE 300	Teaching Elementary Physical Education (C- or better required)	3
HPE 301W	Methods and Materials in Teaching Physical Education (C or better required)	3
Elective		2
Credit Hours		14
Summer		
Elective or Foreign Language (if required)		3
Credit Hours		3
Junior		
Fall		
EXSC 322	Anatomical Kinesiology (C- or better required)	3
HPE 317	Human Growth & Motor Development (C- or better required)	3
HPE 400	Management Skills for Teaching Health and Physical Education (C- or better required)	3
HPE 409 or EXSC 309	Physiology of Exercise (C- or better) or Fundamentals of Exercise Physiology	3
Credit Hours		12
Spring		
HPE 318	Motor Learning (C- or better required)	3
HPE 324	Teaching Injury Care for Sports (C- or better required)	3
HPE 402	Methods and Materials in Health Education (C- or better required)	3
TLED 408	Reading and Writing in Content Areas (C- or better required)	3
TLED 430W	PK-12 Instructional Technology (C- for better)	3
Credit Hours		15
Senior		
Fall		
HPE 404	Adapted Physical Education (C- or better required)	4
HPE 406	Tests and Measurement in Physical Education and Health (C- or better required)	3
HPE 430	Nutrition and Fitness Education (C- or better required)	3

HPE 469	Practicum Experience and Instructional Planning in Health and Physical Education (C- or better required)	3
HPE 480	Teacher Candidate Seminar (C- or better required)	1
Credit Hours		14
Spring		
HPE 485	Teacher Candidate Internship (C- or better required)	12
Credit Hours		12
Total Credit Hours		120

Master of Science in Education Programs

There is a linked program available to qualified students under existing university policy to link the Bachelor of Science (Physical Education with a Major in PreK-12 Health and Physical Education) (p. 537) undergraduate program with the Master of Science in Education (Physical Education with a Concentration in Adapted Physical Education) (<http://catalog.odu.edu/graduate/education/human-movement-studies-special-education/physical-education-adapted-msed/>) or Master of Science in Education (Physical Education with a Concentration in Coaching) (<http://catalog.odu.edu/graduate/education/human-movement-studies-special-education/physical-education-coaching-msed/>) or Master of Science in Education (Physical Education with a Concentration in Curriculum & Instruction) (<http://catalog.odu.edu/graduate/education/human-movement-studies-special-education/physical-education-health-sport-pedagogy-msed/>) graduate program. See program director for additional details.

Admission and Entrance Requirements

Applicants for the MSED in Physical Education are required to submit credentials for consideration through the Office of Graduate Admissions at Old Dominion University. Students applying for admission with regular status must have:

- A completed online application via www.odu.edu/admission/graduate (<http://www.odu.edu/admission/graduate/>)
- A baccalaureate degree from a regionally-accredited institution or an equivalent degree from a foreign institution
- 2.8 cumulative GPA or higher (on a 4.0 scale) *
- 3.0 GPA or higher in the undergraduate major *
- A combined GRE score of 291 or higher (verbal and quantitative sections) *
- Personal essay (no more than two pages) addressing motivations to apply to program, career interests, and ability to complete graduate level work
- Three letters of recommendation (from former professors or employers)
- Current copy of résumé
- Transcripts from all prior postsecondary institutions
- Test of English as a Foreign Language (TOEFL) score of 550 on the paper-based test (or 79-80 on the iBT) for non-native English speakers

* Students who have a low GPA or a low GRE score may be considered for admission with provisional status.

* The program admissions committee will consider GRE waiver requests for high potential candidates by considering application elements that demonstrate the ability to take on the rigor of graduate level studies. A request for a waiver does not guarantee that a waiver will be granted.

Minor Coaching Education Minor

Requirements

BIOL 240 or BIOL 250 and HPE 324 are prerequisites for the minor and are not included in the calculation of the grade point average for the minor. Requirements for the minor are:

HPE 409	Physiology of Exercise	3
or EXSC 309	Fundamentals of Exercise Physiology	
HPE 415	Principles of Coaching Management	3
or SMGT 415	Principles of Coaching Management	
HPE 456	Sports Psychology	3
or SMGT 456	Sport Psychology	
HPE 368	Coaching Internship	6
Total Credit Hours		15

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of 100- and 200-level courses and prerequisite courses (2.75 for teacher licensure with no less than C- earned in all core courses) and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University. To obtain a Virginia teaching license, all teacher education and licensure only students must attain a passing score on the appropriate Praxis II specialty area test.

Minor Health Education Minor

Requirements

BIOL 240 or BIOL 250 and HPE 200 are prerequisites for the minor and are not included in the calculation of the grade point average for the minor. Requirements for the minor are:

HPE 317	Human Growth & Motor Development	3
HPE 324	Teaching Injury Care for Sports	3
HPE 402	Methods and Materials in Health Education	3
HPE 430	Nutrition and Fitness Education	3
Total Credit Hours		12

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of 100- and 200-level courses and prerequisite courses (2.75 for teacher licensure with no less than C- earned in all core courses) and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University. To obtain a Virginia teaching license, all teacher education and licensure only students must attain a passing score on the appropriate Praxis II specialty area test.

Minor Physical Education Minor

Requirements

HPE 200 is a prerequisite for the minor and is not included in the calculation of the grade point average for the minor. Requirements for the minor are:

HPE 300	Teaching Elementary Physical Education	3
HPE 317	Human Growth & Motor Development	3
HPE 400	Management Skills for Teaching Health and Physical Education	3

HPE 430	Nutrition and Fitness Education	3
Total Credit Hours		12

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of 100- and 200-level courses and prerequisite courses (2.75 for teacher licensure with no less than C- earned in all core courses) and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University. To obtain a Virginia teaching license, all teacher education and licensure only students must attain a passing score on the appropriate Praxis II specialty area test.

Bachelor of Science Special Education with a Major in Early Intervention/Early Childhood Special Education (Birth-5) (BS)

Lisa Morin, Ph.D., Undergraduate Program Director

The BS in special education draws courses from across the University to prepare teacher candidates interested in teaching special education. Course work spans the disciplines of English literature and composition; history; fine and performing arts; mathematics; natural sciences; social sciences; human growth and development; and educational foundations, technology, assessment, theory, and methods. The broad curriculum, along with the admittance, continuance, and graduation requirements, prepares teacher candidates for endorsement in early childhood special education for the Commonwealth of Virginia.

Major coursework is available in both online and face-to-face formats. Additional information is posted on the departmental website or available in hard copy from the department.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Courses in Written Communication, Literature, Human Creativity, Interpreting the Past, Human Behavior, Mathematics, and the Nature of Science are departmental requirements for all teacher candidates and are not met by the associate degree.

Language and Culture: See Requirements for Undergraduate Degrees section of this Catalog for requirement. If language needed, Spanish preferred.

Information Literacy and Research: met in the major with LIBS 110G (<https://catalog.odu.edu/search/?P=LIBS%20110G>) or STEM 251G (<https://catalog.odu.edu/search/?P=STEM%20251G>)

Human Behavior: PSYC 203S (<https://catalog.odu.edu/search/?P=PSYC%20203S>) required

Impact of Technology: met in the major with STEM 370T (<https://catalog.odu.edu/search/?P=STEM%20370T>)

Interpreting the Past: HIST 104H (<https://catalog.odu.edu/search/?P=HIST%20104H>) required

Nature of Science: Select one from BIOL 105N, BIOL 106N, BIOL 110N/BIOL 111N, BIOL 112N/BIOL 113N, or BIOL 121N/BIOL 122N and one from OEAS 110N, OEAS 111N, ASTP 103N, ASTP 104N, or OEAS 250N.

Upper-Division General Education

Satisfied in the major.

Requirements for Graduation

To graduate, teacher candidates must:

1. Minimum of 120 credit hours.
2. Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
3. Complete all program requirements.
4. Earn a grade of no less than C- in all departmental requirements (C in ENGL 110C and ENGL 211C), major courses, and core courses.
5. Have a minimum cumulative grade point average of 2.75 and 2.75 major and core GPA.
6. Pass the writing intensive (W) course in the major with a grade of C or higher.
7. Obtain certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools.
8. Complete the Senior Assessment Survey.
9. Submit a professional portfolio according to Darden College of Education and Professional Studies and program requirements.

Due to changing University requirements, national accreditation standards, and Commonwealth of Virginia licensure regulations, the programs in the Darden College of Education and Professional Studies are under constant revision. Any changes resulting from these factors supersede the program requirements described in this catalog. Students should obtain current program information from their advisors and the Darden College of Education and Professional Studies website at <https://www.odu.edu/eps> (<https://www.odu.edu/eps/>).

Special Education Core

FOUN 301	Learning and Development	3
FOUN 302	Assessment of Learning	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics ⁺	3
SPED 411	Classroom and Behavioral Management Techniques for Students with Diverse Needs	3
SPED 417	Collaboration and Transitions	3
STEM 370T	Technology and Society (writing intensive; C or better required) ^{**}	3
TLED 326	Socio-Cultural Perspectives in Education	3

TLED 426	Introduction to Literacy, Linguistics and Practice in the Classroom	3
Total Hours		24

+ LiveText is required for all Special Education majors and minors upon registration for SPED 400.

** Meets Impact of Technology and writing intensive requirement.

Early Intervention/Early Childhood Special Education (Birth-5) Major

General Education

Complete lower-division requirements	35-47
Complete upper-division requirements	

Special Education Core

Complete special education core	24

Early Intervention/Early Childhood Special Education (Birth-5) Major

LIBS 110G or STEM 251G	Information Literacy for the Digital Age ** Computer Literacy: Communication and Information	3
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
SPED 404	Characteristics and Medical Aspects of Disabling Conditions	3
TLED 320	Perspectives on the Young Child and the Family	3
TLED 338	Integrated Methods & Curriculum in Early Childhood Ed: Birth-Pre-K	4
SPED 415	Instructional Design II: Curricular Procedures and Individualized Education Planning ***	3
SPED 440	Assistive Technology for Diverse Students	3
SPED 441	Teaching Students with Severe Physical and Sensorimotor Disabilities ***	3
SPED 469	Communication/Language Development/ Intervention for Students with Significant Disabilities	3
SPED 460	Teaching Preschoolers With Diverse Abilities ***	3
SPED 461	Developmental Assessment of Young Children with Diverse Abilities	3
SPED 467	Family-Centered Practices in Early Childhood Intervention ***	3
SPED 486	Teacher Candidate Internship for Special Endorsement *****	12
Early Intervention/Early Childhood Special Education (Birth-5) Major Total Credit Hours		49
Total Credit Hours		114-120
(Additional Credits to reach 120 can be earned as a minor or through electives)		

** Meets the Information Literacy and Research requirement.
*** Admission to the undergraduate special education teacher preparation program and completion of a background clearance check is required prior to registration for SPED 415, SPED 441, SPED 460, SPED 467, and SPED 486. SPED 415, SPED 441, SPED 460, and SPED 467 each include a 45-hour practicum requirement. Students enrolled in SPED 415 must request an elementary school placement, students enrolled in SPED 460 and SPED 467 must request an early intervention or early childhood special education placement, and students in enrolled in SPED 441 may request any Prek-12 setting. In

SPED 486, teacher candidates will teach 7-weeks at the early intervention (Birth-3) level and 7-weeks at the early childhood special education (3-5) level. A passing score on the Special Education exit exam is required prior to SPED 486.

++ A passing score on the Special Education exit exam is required prior to SPED 486.

Note: All students must earn a minimum of 120 credit hours for the baccalaureate degree, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University.

Additional Requirements and Information

Declaration of Major

To declare the major, teacher candidates must have a C or better in ENGL 110C and meet with an advisor in the Darden College of Education and Professional Studies.

Virginia Board of Education Prescribed Assessments for Admission to an Approved Teacher Education Program

Old Dominion University students seeking admission to an approved teacher education program must satisfy the Virginia Board of Education required assessment for admission into an approved teacher education program.

For the most current information on the prescribed Virginia Board of Education admission assessment, visit the Virginia Department of Education at <https://www.doe.virginia.gov/>.

Admission to Undergraduate Teacher Education Program

All teacher candidates must be admitted to the special education program as a requirement of continuance and graduation. Admittance to the special education program requires that the teacher candidate:

1. Be a declared BS in special education student.
2. Have a cumulative GPA of 2.75.
3. Have a 2.75 GPA in major and core courses.
4. Have no grade below a C- in any course required in the program.
5. Submit an application for admittance that is approved by the program and the Darden College of Education and Professional Studies.

Additionally, teacher candidates should be admitted to the special education program by the end of their 60th credit hour. Transfer students with 60 or more credits should be admitted to the special education program by the end of their second semester enrolled at the University.

Continuance

Teacher candidates must:

1. Maintain a cumulative grade point average of 2.75 and a 2.75 major and core GPA.
2. Earn a grade no less than C- in all departmental requirements, major courses, and core courses.
3. Successfully complete a background clearance check.

Background Clearance Requirement: Old Dominion University requires a background clearance check of candidates interested in professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. The process to complete the ODU clearance background check is located at: <https://www.odu.edu/clinical-experiences/placement/background-checks> (<https://www.odu.edu/clinical-experiences/placement/background-checks/>). The ODU clearance process includes the FBI fingerprint SP-24 form, the child protective service/ social service check, and the sexual offender registry check. Candidates interested in professional education programs are advised to complete this clearance process immediately upon entry since the clearance process takes a

minimum of eight weeks to complete. Please contact the Office of Clinical Experiences at 757-683-3348 with any questions.

Teacher candidates who fail to meet program requirements for two consecutive semesters will be encouraged to consider other academic and professional goals.

Additionally, passing scores on the Special Education exit exam is a required prerequisite to enrollment in SPED 486. Special Education exit examination scores will be submitted to the Office of Clinical Experiences by the Undergraduate Program Director. All teacher candidates must consult with an academic advisor every semester to review their academic progress.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (C or better required)	3
Mathematics (C- or better required)		3
PSYC 203S	Lifespan Development (C- or better required)	3
HIST 104H	Interpreting the American Past (C- or better required)	3
Elective or Language and Culture (may be waived; if needed SPAN 101F preferred)		3
Credit Hours		15
Second Semester		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Oral Communication		3
Human Creativity (C- or better required)		3
LIBS 110G or STEM 251G	Information Literacy for the Digital Age (C- or better required) or Computer Literacy: Communication and Information	3
Elective or Language and Culture (may be waived; if needed SPAN 102F preferred)		3
Credit Hours		15
Sophomore		
First Semester		
FOUN 301	Learning and Development (C- or better required)	3
Literature (C- or better required)		3
Philosophy & Ethics		3
Nature of Science I (C- or better required)		4
Select one of the following:		
BIOL 105N	Biology for Nonscience Majors I	
BIOL 106N	Biology for Nonscience Majors II	
BIOL 110N	Environmental Science for Non-Majors (must also take BIOL 111N)	

BIOL 112N	Environment and Humanity (must also take BIOL 113N)	
BIOL 121N	General Biology I (must also take BIOL 122N)	
Elective		3
Credit Hours		16
Second Semester		
STEM 370T	Technology and Society (writing intensive; C or better required)	3
FOUN 302	Assessment of Learning (C- or better required)	3
TLED 320	Perspectives on the Young Child and the Family (C- or better required)	3
TLED 326	Socio-Cultural Perspectives in Education (C- or better required)	3
Nature of Science II (C- or better required)		4
Select one of the following:		
OEAS 110N	Earth Science	
OEAS 111N	Physical Geology	
ASTP 103N	Introductory Astronomy of the Solar System	
ASTP 104N	Introductory Astronomy of Galaxies and Cosmology	
OEAS 250N	Natural Hazards and Disasters	
Credit Hours		16
Junior		
First Semester		
TLED 426	Introduction to Literacy, Linguistics and Practice in the Classroom (C- or better required)	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics (C- or better required)	3
SPED 440	Assistive Technology for Diverse Students (C- or better required)	3
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence (C- or better required)	3
SPED 411	Classroom and Behavioral Management Techniques for Students with Diverse Needs (C- or better required)	3
Credit Hours		15
Second Semester		
SPED 417	Collaboration and Transitions (C- or better required)	3
SPED 404	Characteristics and Medical Aspects of Disabling Conditions (C- or better required)	3
SPED 469	Communication/Language Development/Intervention for Students with Significant Disabilities (C- or better required)	3

SPED 441	Teaching Students with Severe Physical and Sensorimotor Disabilities (C- or better required)	3
SPED 461	Developmental Assessment of Young Children with Diverse Abilities (C- or better required)	3
Credit Hours		15
Senior		
First Semester		
TLED 338	Integrated Methods & Curriculum in Early Childhood Ed: Birth-Pre-K (C- or better required)	4
SPED 415	Instructional Design II: Curricular Procedures and Individualized Education Planning (C- or better required)	3
SPED 460	Teaching Preschoolers With Diverse Abilities (C- or better required)	3
SPED 467	Family-Centered Practices in Early Childhood Intervention (C- or better required)	3
Elective		3
Credit Hours		16
Second Semester		
SPED 486	Teacher Candidate Internship for Special Endorsement	12
Credit Hours		12
Total Credit Hours		120

Master's Degree Options

There is a linked program available to qualified students under existing university policy to link the Bachelor of Science (Special Education with a Major in Early Intervention/Early Childhood Special Education Birth-5) (p. 541) undergraduate program with the Master of Science in Education (Special Education with a Concentration in K-12 Licensure-Adapted Curriculum-K-12) (<http://catalog.odu.edu/graduate/education/human-movement-studies-special-education/special-education-k-12-licensure-adapted-curriculum-msed/>) or Master of Science in Education (Special Education with a Concentration in K-12 Licensure-General Curriculum-K-12) (<http://catalog.odu.edu/graduate/education/human-movement-studies-special-education/special-education-k-12-licensure-general-curriculum-msed/>) graduate program. See program director for additional details.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Special Education with a Major in Special Education Adapted Curriculum K-12 (BS)

Lisa Morin, Ph.D., Undergraduate Program Director

The BS in special education draws courses from across the University to prepare teacher candidates interested in teaching special education. Course work spans the disciplines of English literature and composition; history; fine and performing arts; mathematics; natural sciences; social sciences; human growth and development; and educational foundations, technology, assessment, theory, and methods. The broad curriculum, along with the admittance, continuance, and graduation requirements described below, prepares teacher candidates for licensure endorsement for special education adapted curriculum K-12 for the Commonwealth of Virginia.

Major coursework is available in online formats. Additional information is posted on the departmental website or available in hard copy from the department.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3

Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Courses in Written Communication, Literature, Human Creativity, Interpreting the Past, Human Behavior, Mathematics, and the Nature of Science are departmental requirements for all teacher candidates and are not met by the associate degree.

Language and Culture: See Requirements for Undergraduate Degrees section of this Catalog for requirement. If language needed, Spanish preferred.

Information Literacy and Research: met in the major with LIBS 110G or STEM 251G

Human Behavior: PSYC 203S required

Impact of Technology: met in the major with STEM 370T

Interpreting the Past: HIST 104H required

Nature of Science: Select one from BIOL 105N, BIOL 106N, BIOL 110N/BIOL 111N, BIOL 112N/BIOL 113N, or BIOL 121N/BIOL 122N and one from OEAS 110N, OEAS 111N, ASTP 103N, ASTP 104N, or OEAS 250N.

Upper-Division General Education

Satisfied in the major.

Requirements for Graduation

To graduate, teacher candidates must:

1. Minimum of 120 credit hours.
2. Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
3. Complete all program requirements.
4. Earn a grade of no less than C- in all departmental requirements (C in ENGL 110C and ENGL 211C), major courses, and core courses.
5. Have a minimum cumulative grade point average of 2.75 and 2.75 major and core GPA.
6. Pass the writing intensive (W) course in the major with a grade of C or higher.
7. Obtain certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools.
8. Complete the Senior Assessment Survey.
9. Submit a professional portfolio according to Darden College of Education and Professional Studies and program requirements.

Due to changing University requirements, national accreditation standards, and Commonwealth of Virginia licensure regulations, the programs in the Darden College of Education and Professional Studies are under constant revision. Any changes resulting from these factors supersede the program requirements described in this catalog. Students should obtain current program information from their advisors and the Darden College of Education and Professional Studies website at <https://www.odu.edu/eps> (<https://www.odu.edu/eps/>).

Special Education Core

FOUN 301	Learning and Development	3
FOUN 302	Assessment of Learning	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics ⁺	3

SPED 411	Classroom and Behavioral Management Techniques for Students with Diverse Needs	3
SPED 417	Collaboration and Transitions	3
STEM 370T	Technology and Society (writing intensive; C or better required) ^{**}	3
TLED 326	Socio-Cultural Perspectives in Education	3
TLED 426	Introduction to Literacy, Linguistics and Practice in the Classroom	3
Total Hours		24

⁺ LiveText is required for all Special Education majors and minors upon registration for SPED 400.

^{**} Meets Impact of Technology and writing intensive requirement.

Special Education Adapted Curriculum K-12 Major

General Education

Complete lower-division requirements 35-47

Complete upper-division requirements (met in the major)

Special Education Core

Complete special education core 24

Special Education Adapted Curriculum K-12 Major

LIBS 110G	Information Literacy for the Digital Age ^{**}	3
or STEM 251G	Computer Literacy: Communication and Information	
SPED 402	Instructional Design I: Learner Characteristics and Assessment	3
SPED 404	Characteristics and Medical Aspects of Disabling Conditions	3
SPED 415	Instructional Design II: Curricular Procedures and Individualized Education Planning ^{***}	3
SPED 418	Instructional Strategies to Meet Diverse Learning Needs in Math	3
SPED 428	Instructional Strategies for Students Accessing the Adapted Curriculum ^{***}	3
SPED 440	Assistive Technology for Diverse Students ^{***}	3
SPED 441	Teaching Students with Severe Physical and Sensorimotor Disabilities ^{***}	3
SPED 469	Communication/Language Development/ Intervention for Students with Significant Disabilities	3
SPED 486	Teacher Candidate Internship for Special Endorsement ^{***++}	12

Total Credit Hours 98-110

^{**} Meets the Information Literacy and Research requirement.

^{***} Admission to the undergraduate special education teacher preparation program and completion of a background clearance check is required prior to registration for SPED 415, SPED 428, SPED 441, and SPED 486. SPED 428, SPED 441, and SPED 415 each include a 45-hour practicum requirement. Students enrolled in SPED 415 must request an elementary school practicum placement, students enrolled in SPED 428 must request a middle/high school placement, and students enrolled in SPED 441 may request any PreK-12 setting. In SPED 486 teacher candidates will student teach 7 weeks at the elementary level and 7 weeks at the secondary level. A passing score on the Special Education exit exam is required prior to SPED 486.

⁺⁺

Note: All students must earn a minimum of 120 credit hours for the baccalaureate degree, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University.

Additional Requirements and Information

Declaration of Major

To declare the major, teacher candidates must have a C or better in ENGL 110C and meet with an advisor in the Darden College of Education and Professional Studies.

Virginia Board of Education Prescribed Assessments for Admission to an Approved Teacher Education Program

Old Dominion University students seeking admission to an approved teacher education program must satisfy the Virginia Board of Education required assessment for admission into an approved teacher education program.

For the most current information on the prescribed Virginia Board of Education admission assessment, visit the Virginia Department of Education at <https://www.doe.virginia.gov/>.

Admission to Undergraduate Teacher Education Program

All teacher candidates must be admitted to the special education program as a requirement of continuance and graduation. Admittance to the special education program requires that the teacher candidate:

- 1. Be a declared BS in special education student.
- 2. Have a cumulative GPA of 2.75.
- 3. Have a 2.75 GPA in major and core courses.
- 4. Have no grade below a C- in any course required in the program.
- 5. Submit an application for admittance that is approved by the program and the Darden College of Education and Professional Studies.

Additionally, teacher candidates should be admitted to the special education program by the end of their 60th credit hour. Transfer students with 60 or more credits should be admitted to the special education program by the end of their second semester enrolled at the University.

Continuance

Teacher candidates must:

- 1. Maintain a cumulative grade point average of 2.75 and a 2.75 major and core GPA.
- 2. Earn a grade no less than C- in all departmental requirements, major courses, and core courses.
- 3. Successfully complete a background clearance check.

Background Clearance Requirement: Old Dominion University requires a background clearance check of candidates interested in professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. The process to complete the ODU clearance background check is located at: <https://www.odu.edu/clinical-experiences/placement/background-checks> (<https://www.odu.edu/clinical-experiences/placement/background-checks/>). The ODU clearance process includes the FBI fingerprint SP-24 form, the child protective service/ social service check, and the sexual offender registry check. Candidates interested in professional education programs are advised to complete this clearance process immediately upon entry since the clearance process takes a minimum of eight weeks to complete. Please contact the Office of Clinical Experiences at 757-683-3348 with any questions.

Teacher candidates who fail to meet program requirements for two consecutive semesters will be encouraged to consider other academic and professional goals.

Additionally, passing scores on the Special Education exit exam is a required prerequisite to enrollment in SPED 486. Special Education exit examination scores will be submitted to the Office of Clinical Experiences by the

Undergraduate Program Director. All teacher candidates must consult with an academic advisor every semester to review their academic progress.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (C or better required)	3
Mathematics (C- or better required)		3
PSYC 203S	Lifespan Development (C- or better required)	3
Interpreting the Past (HIST 104H with a C- or better required)		3
Elective or Language and Culture (may be waived; if needed SPAN 101F preferred)		3
Credit Hours		15
Second Semester		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Human Creativity (C- or better required)		3
Oral Communication		3
LIBS 110G or STEM 251G	Information Literacy for the Digital Age (C- or better required) or Computer Literacy: Communication and Information	3
Elective or Language and Culture (may be waived; if needed SPAN 102F preferred)		3
Elective		1
Credit Hours		16
Sophomore		
First Semester		
Literature (C- or better required)		3
FOUN 301	Learning and Development (C- or better required)	3
Philosophy & Ethics		3
Nature of Science I (C- or better required)		4
Select one of the following:		
BIOL 105N	Biology for Nonscience Majors I	
BIOL 106N	Biology for Nonscience Majors II	
BIOL 110N/111N	Environmental Science for Non-Majors	
BIOL 112N/113N	Environment and Humanity	
BIOL 121N/122N	General Biology I	
Elective		3
Credit Hours		16

Second Semester		
STEM 370T	Technology and Society (writing intensive; C or better required)	3
FOUN 302	Assessment of Learning (C- or better required)	3
TLED 326	Socio-Cultural Perspectives in Education (C- or better required)	3
Nature of Science II (C- or better required)		4
Select one of the following:		
OEAS 110N	Earth Science	
OEAS 111N	Physical Geology	
ASTP 103N	Introductory Astronomy of the Solar System	
ASTP 104N	Introductory Astronomy of Galaxies and Cosmology	
OEAS 250N	Natural Hazards and Disasters	
Elective		3
Credit Hours		16

Junior

First Semester

TLED 426	Introduction to Literacy, Linguistics and Practice in the Classroom (C- or better required)	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics (C- or better required)	3
SPED 402	Instructional Design I: Learner Characteristics and Assessment (C- or better required)	3
SPED 440	Assistive Technology for Diverse Students (C- or better required)	3
Elective		3
Credit Hours		15

Second Semester

SPED 404	Characteristics and Medical Aspects of Disabling Conditions (C- or better required)	3
SPED 411	Classroom and Behavioral Management Techniques for Students with Diverse Needs (C- or better required)	3
SPED 441	Teaching Students with Severe Physical and Sensorimotor Disabilities (C- or better required; only offered in Spring)	3
SPED 469	Communication/Language Development/Intervention for Students with Significant Disabilities (C- or better required; only offered in Spring)	3
Elective		3
Credit Hours		15

Senior

First Semester

SPED 415	Instructional Design II: Curricular Procedures and Individualized Education Planning (C- or better required)	3
SPED 417	Collaboration and Transitions (C- or better required)	3
SPED 418	Instructional Strategies to Meet Diverse Learning Needs in Math (C- or better required)	3
SPED 428	Instructional Strategies for Students Accessing the Adapted Curriculum (C- or better required; only offered in Fall)	3
Elective		3

Credit Hours 15

Second Semester

SPED 486	Teacher Candidate Internship for Special Endorsement	12
Credit Hours		12

Total Credit Hours 120

Master's Degree Options

There is a linked program available to qualified students under existing university policy to link the Bachelor of Science (Special Education with a Major in Special Education Adapted Curriculum K-12) (p. 544) undergraduate program with the Master of Science in Education (Special Education with a Concentration in Early Childhood Special Education (<http://catalog.odu.edu/graduate/education/human-movement-studies-special-education/special-education-early-childhood-msed/>)) or Master of Science in Education (Special Education with a Concentration in K-12 Licensure-General Curriculum-K-12 (<http://catalog.odu.edu/graduate/education/human-movement-studies-special-education/special-education-k-12-licensure-general-curriculum-msed/>)) graduate program. See program director for additional details.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking

to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Special Education with a Major in Special Education General Curriculum K-12 (BS)

Lisa Morin, Ph.D., Undergraduate Program Director

The BS in special education draws courses from across the University to prepare teacher candidates interested in teaching special education. Course work spans the disciplines of English literature and composition; history; fine and performing arts; mathematics; natural sciences; social sciences; human growth and development; and educational foundations, technology, assessment, theory, and methods. The broad curriculum, along with the admittance, continuance, and graduation requirements described below, prepares teacher candidates for licensure endorsement for special education general curriculum K-12 for the Commonwealth of Virginia, including a passing score on the Praxis Teaching Reading: Elementary and Special Education (Test #5205) Assessment.

Major coursework is available in distance learning formats. Additional information is posted on the departmental website or available in hard copy from the department.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8

Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Courses in Written Communication, Literature, Human Creativity, Interpreting the Past, Human Behavior, Mathematics, and the Nature of Science are departmental requirements for all teacher candidates and are not met by the associate degree.

Language and Culture: See Requirements for Undergraduate Degrees section of this Catalog for requirement. If language needed, Spanish preferred.

Information Literacy and Research: met in the major with LIBS 110G or STEM 251G

Human Behavior: PSYC 203S required

Interpreting the Past: HIST 104H required

Impact of Technology: met in the major with STEM 370T

Nature of Science: Select one from BIOL 105N, BIOL 106N, BIOL 110N/BIOL 111N, BIOL 112N/BIOL 113N, or BIOL 121N/BIOL 122N and one from OEAS 110N, OEAS 111N, ASTP 103N, ASTP 104N, or OEAS 250N.

Upper-Division General Education

Satisfied in the major.

Requirements for Graduation

To graduate, teacher candidates must:

1. Minimum of 120 credit hours.
2. Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
3. Complete all program requirements.
4. Earn a grade of no less than C- in all departmental requirements (C in ENGL 110C and ENGL 211C), major courses, and core courses.
5. Have a minimum cumulative grade point average of 2.75 and 2.75 major and core GPA.
6. Pass the writing intensive (W) course in the major with a grade of C or higher.
7. Obtain passing scores on the Reading for Virginia Educators (RVE) assessment (Special Education General Curriculum K-12 only).
8. Obtain certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools.
9. Complete the Senior Assessment Survey.
10. Submit a professional portfolio according to Darden College of Education and Professional Studies and program requirements.

Due to changing University requirements, national accreditation standards, and Commonwealth of Virginia licensure regulations, the programs in the Darden College of Education and Professional Studies are under constant revision. Any changes resulting from these factors supersede the program requirements described in this catalog. Students should obtain current program information from their advisors and the Darden College of Education and Professional Studies website at <https://www.odu.edu/eps> (<https://www.odu.edu/eps/>).

Special Education Core

FOUN 301	Learning and Development	3
FOUN 302	Assessment of Learning	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics +	3
SPED 411	Classroom and Behavioral Management Techniques for Students with Diverse Needs	3
SPED 417	Collaboration and Transitions	3

STEM 370T	Technology and Society (writing intensive; C or better required) **	3
TLED 326	Socio-Cultural Perspectives in Education	3
TLED 426	Introduction to Literacy, Linguistics and Practice in the Classroom	3
Total Hours		24

+ LiveText is required for all Special Education majors and minors upon registration for SPED 400.

** Meets Impact of Technology and writing intensive requirement.

Special Education General Curriculum K-12 Major

General Education

Complete lower-division requirements	35-47
Complete upper-division requirements (met in the major)	

Special Education Core

Complete special education core requirements	24

Special Education General Curriculum K-12 Major

LIBS 110G	Information Literacy for the Digital Age **	3
or STEM 251G	Computer Literacy: Communication and Information	
SPED 402	Instructional Design I: Learner Characteristics and Assessment	3
SPED 403	Directed Field Experience in Special Education ***	3
SPED 415	Instructional Design II: Curricular Procedures and Individualized Education Planning ***	3
SPED 418	Instructional Strategies to Meet Diverse Learning Needs in Math	3
SPED 440	Assistive Technology for Diverse Students	3
SPED 486	Teacher Candidate Internship for Special Endorsement *****	12
TLED 408	Reading and Writing in Content Areas	3

Total Credit Hours	92-104

** Meets the Information Literacy and Research requirement.

*** Admission to the undergraduate special education teacher preparation program and completion of a background clearance check is required prior to registration for SPED 403, SPED 415, and SPED 486. SPED 403 and SPED 415 each include a 45-hour practicum requirement. Students enrolled in SPED 415 must request an elementary school practicum placement and students enrolled in SPED 403 must request a middle/high school placement. In SPED 486 teacher candidates will student teach 7 weeks at the elementary level and 7 weeks at the secondary level.

++ Passing scores on the Special Education exit exam and the PRAXIS Teaching Reading: Elementary (5205) assessment are required prior to SPED 486.

Note: All students must earn a minimum of 120 credit hours for the baccalaureate degree, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University.

Additional Requirements and Information

Declaration of Major

To declare the major, teacher candidates must have a C or better in ENGL 110C and meet with an advisor in the Darden College of Education and Professional Studies.

Virginia Board of Education Prescribed Assessments for Admission to an Approved Teacher Education Program

Old Dominion University students seeking admission to an approved teacher education program must satisfy the Virginia Board of Education required assessment for admission into an approved teacher education program.

For the most current information on the prescribed Virginia Board of Education admission assessment, visit the Virginia Department of Education at <https://www.doe.virginia.gov/>.

Admission to Undergraduate Teacher Education Program

All teacher candidates must be admitted to the special education program as a requirement of continuance and graduation. Admittance to the special education program requires that the teacher candidate:

1. Be a declared BS in special education student.
2. Have a cumulative GPA of 2.75.
3. Have a 2.75 GPA in major and core courses.
4. Have no grade below a C- in any course required in the program.
5. Submit an application for admittance that is approved by the program and the Darden College of Education and Professional Studies.

Additionally, teacher candidates should be admitted to the special education program by the end of their 60th credit hour. Transfer students with 60 or more credits should be admitted to the special education program by the end of their second semester enrolled at the University.

Continuance

Teacher candidates must:

1. Maintain a cumulative grade point average of 2.75 and a 2.75 major and core GPA.
2. Earn a grade no less than C- in all departmental requirements, major courses, and core courses.
3. Successfully complete a background clearance check.

Background Clearance Requirement: Old Dominion University requires a background clearance check of candidates interested in professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. The process to complete the ODU clearance background check is located at: <https://www.odu.edu/clinical-experiences/placement/background-checks> (<https://www.odu.edu/clinical-experiences/placement/background-checks/>). The ODU clearance process includes the FBI fingerprint SP-24 form, the child protective service/ social service check, and the sexual offender registry check. Candidates interested in professional education programs are advised to complete this clearance process immediately upon entry since the clearance process takes a minimum of eight weeks to complete. Please contact the Office of Clinical Experiences at 757-683-3348 with any questions.

Teacher candidates who fail to meet program requirements for two consecutive semesters will be encouraged to consider other academic and professional goals.

Additionally, passing scores on the Special Education exit exam is a required prerequisite to enrollment in SPED 486. Special Education exit examination scores will be submitted to the Office of Clinical Experiences by the Undergraduate Program Director. All teacher candidates must consult with an academic advisor every semester to review their academic progress.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (C or better required)	3
PSYC 203S	Lifespan Development (C- or better required)	3
Mathematics (C- or better required)		3
Interpreting the Past (HIST 104H with a C- or better required)		3
Elective or Language and Culture (may be waived; if needed SPAN 101F preferred)		3
Credit Hours		15
Second Semester		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Human Creativity (C- or better required)		3
Oral Communication		3
LIBS 110G or STEM 251G	Information Literacy for the Digital Age (C- or better required) or Computer Literacy: Communication and Information	3
Elective or Language and Culture (may be waived; if needed SPAN 102F preferred)		3
Elective		1
Credit Hours		16
Sophomore		
First Semester		
Literature (C- or better required)		3
FOUN 301	Learning and Development (C- or better required)	3
Philosophy & Ethics		3
Nature of Science I (C- or better required)		4
Select one of the following:		
BIOL 105N	Biology for Nonscience Majors I	
BIOL 106N	Biology for Nonscience Majors II	
BIOL 110N/111N	Environmental Science for Non-Majors	
BIOL 112N/113N	Environment and Humanity	
BIOL 121N/122N	General Biology I	
Elective		3
Credit Hours		16
Second Semester		
STEM 370T	Technology and Society (writing intensive; C or better required)	3
FOUN 302	Assessment of Learning (C- or better required)	3
TLED 326	Socio-Cultural Perspectives in Education (C- or better required)	3
Nature of Science II (C- or better required)		4
Select one of the following:		
OEAS 110N	Earth Science	

OEAS 111N	Physical Geology	
ASTP 103N	Introductory Astronomy of the Solar System	
ASTP 104N	Introductory Astronomy of Galaxies and Cosmology	
OEAS 250N	Natural Hazards and Disasters	
Elective		3
Credit Hours		16
Junior		
First Semester		
TLED 426	Introduction to Literacy, Linguistics and Practice in the Classroom (C- or better required)	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics (C- or better required)	3
SPED 440	Assistive Technology for Diverse Students (C- or better required)	3
Elective		3
Elective		3
Credit Hours		15
Second Semester		
SPED 402	Instructional Design I: Learner Characteristics and Assessment (C- or better required)	3
SPED 411	Classroom and Behavioral Management Techniques for Students with Diverse Needs (C- or better required)	3
SPED 417	Collaboration and Transitions (C- or better required)	3
TLED 408	Reading and Writing in Content Areas (C- or better required)	3
Elective		3
Credit Hours		15
Senior		
First Semester		
SPED 418	Instructional Strategies to Meet Diverse Learning Needs in Math (C- or better required)	3
SPED 403	Directed Field Experience in Special Education (C- or better required)	3
SPED 415	Instructional Design II: Curricular Procedures and Individualized Education Planning (C- or better required)	3
Elective		3
Elective		3
Credit Hours		15
Second Semester		
SPED 486	Teacher Candidate Internship for Special Endorsement	12
Credit Hours		12
Total Credit Hours		120

Master's Degree Options

There is a linked program available to qualified students under existing university policy to link the Bachelor of Science (Special Education with a Major in Special Education General Curriculum K-12) (p. 548) undergraduate program with the Master of Science in Education (Special Education with a Concentration in Early Childhood Special Education) (<http://catalog.odu.edu/graduate/education/human-movement-studies-special-education/special-education-early-childhood-msed/>) or Master of Science in Education (Special Education with a Concentration in K-12 Licensure-Adapted Curriculum-K-12) (<http://catalog.odu.edu/graduate/education/human-movement-studies-special-education/special-education-k-12-licensure-adapted-curriculum-msed/>) graduate program. See program director for additional details.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Special Education Minor Requirements

The minor in Special Education requires the completion of 12 credit hours. For completion of a minor, a student must have a minimum grade point average of 2.00 in all courses specified as a requirement for the minor

exclusive of prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement at Old Dominion University.

Select four of the following: 12

SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics *
SPED 402	Instructional Design I: Learner Characteristics and Assessment
SPED 411	Classroom and Behavioral Management Techniques for Students with Diverse Needs
SPED 415	Instructional Design II: Curricular Procedures and Individualized Education Planning
or SPED 417	Collaboration and Transitions

Total Credit Hours 12

* LiveText is required for all Special Education minors upon registration for SPED 400.

Bachelor of Science Sport Management (BS)

Michelle Redmond, Ph.D., Undergraduate Program Director
2020 Student Recreation Center
757 683-3354

This program is designed to prepare students for entry-level positions within the sport industry. Students acquire knowledge and skills needed for careers with professional sport teams and leagues, intercollegiate athletics, sport facility and event management companies, sport marketing agencies, and other sport-related businesses.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication Skills: Grade of C or better required in both courses.

Mathematics: Select from MATH 102M, MATH 103M, MATH 162M, STAT 130M

Human Behavior: ECON 200S or ECON 201S required

Philosophy and Ethics: Satisfied with SMGT 450W in the major.

Upper-Division General Education

A minor in Management or Marketing is recommended, but students may select another minor with approval from their advisor. Students must follow the requirements for the selected minor option as outlined in this Catalog.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Sport Management Major

General Education		
Complete lower-division requirements		38-44
Complete upper-division requirements (minor required; minimum of 12 credit hours)		12
Sport Management		
SMGT 214	Introduction to Sport Management *	3
SMGT 305	Sport Administrative Theory *	3
SMGT 312	Sport Sales *	3
SMGT 315	Sport Media and Public Relations *	3
or COMM 462	Sport Communication	
SMGT 331	Fiscal Planning and Management in Sport and Recreation *	3
SMGT 369	Sport Management Pre-Internship *	3
SMGT 414	Sport Marketing *	3
SMGT 421	Legal Aspects in Recreation and Sport Management *	3
SMGT 432	Sport Facility and Event Management *	3
SMGT 450W	Ethics and Morality in Sport **	3
SMGT 455	Sport in Contemporary Society *	3
SMGT 468	Sport Management Internship *	6-12
Additional Required Courses		
ACCT 201	Principles of Financial Accounting	3
ECON 202S	Principles of Microeconomics	3
MKTG 311	Marketing Principles and Problems	3
MGMT 325	Contemporary Organizations and Management	3
Total Credit Hours		101-113
* Grade of C- or better required.		
** Grade of C or better required.		

Elective credit may be needed to meet the minimum of 120 credits required for the degree. Additional SMGT courses as well as courses other than SMGT may be used to meet elective requirements.

Additional Requirements and Information

Prerequisites

1. MATH 102M, MATH 103M, MATH 162M or STAT 130M with a passing grade is a prerequisite for SMGT 214.
2. SMGT 214 is a prerequisite for all SMGT core courses.
3. ENGL 110C and ENGL 211C or the equivalent are prerequisites for SMGT 315 and SMGT 450W.
4. ACCT 201 is a prerequisite for SMGT 331.

Continuance

1. Maintain an overall grade point average of 2.0 or higher.
2. Maintain a grade point average of 2.0 or higher in the major.
3. Earn a grade of C or higher in SMGT 450W and a grade of C- or higher in all other SMGT core courses.
4. Passing grade in all additional required courses for the major (ACCT 201, ECON 202S, MKTG 311 and MGMT 325).
5. Complete SMGT 369 and all SMGT core course work prior to the internship.
6. A total of 9 credit hours of advisor-approved electives is required to attain 120 credit hours for graduation.

Exit

1. Have an overall grade point average of 2.0 or higher.
2. Have a grade point average of 2.0 or higher in the major.
3. Complete ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major SMGT 450W with a grade of C or better.
4. Complete an internship.
5. Satisfy all core competencies.
6. Complete 120 credit hours.
7. Take the University Senior Assessment Survey.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (C or better required)	3
Select one of the following:		3
MATH 102M	College Algebra	
MATH 103M	College Algebra with Supplemental Instruction	
MATH 162M	Precalculus I	
STAT 130M	Elementary Statistics	
Human Creativity		3
Oral Communication		3
Elective or Foreign Language (if required)		3
Credit Hours		15
Second Semester		
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	

Interpreting the Past		3
Information Literacy and Research		3
Elective or Foreign Language (if required)		3
SMGT 214	Introduction to Sport Management (C- or better required)	3
Credit Hours		15
Sophomore		
First Semester		
Nature of Science I		4
Literature		3
ACCT 201	Principles of Financial Accounting	3
ECON 200S or ECON 201S	Basic Economics (C- or better required) or Principles of Macroeconomics	3
SMGT 305	Sport Administrative Theory (C- or better required)	3
Credit Hours		16
Second Semester		
Nature of Science II		4
ECON 202S	Principles of Microeconomics	3
Impact of Technology		3
SMGT 312	Sport Sales (C- or better required)	3
SMGT 369	Sport Management Pre-Internship (C- or better required)	3
Credit Hours		16
Junior		
First Semester		
MKTG 311	Marketing Principles and Problems	3
SMGT 331	Fiscal Planning and Management in Sport and Recreation (C- or better required)	3
MGMT 325	Contemporary Organizations and Management	3
Minor or elective		3
Minor or elective		3
Credit Hours		15
Second Semester		
SMGT 315 or COMM 462	Sport Media and Public Relations (C- or better required) or Sport Communication	3
SMGT 414	Sport Marketing (C- or better required)	3
SMGT 421	Legal Aspects in Recreation and Sport Management (C- or better required)	3
SMGT 450W	Ethics and Morality in Sport (C or better required)	3
Minor or elective		3
Credit Hours		15

Senior

First Semester

SMGT 432	Sport Facility and Event Management (C- or better required)	3
SMGT 455	Sport in Contemporary Society (C- or better required)	3
Minor or Elective		3
Minor or Elective		3
Elective		3

Credit Hours

15

Second Semester

SMGT 468	Sport Management Internship (C- or better required)	6-12
Elective as needed		7

Credit Hours

13-19

Total Credit Hours

120-126

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor

Sport Management Minor

Requirements

SMGT 214* is a prerequisite for the minor and is not included in the calculation of the grade point average for the minor. Requirements for the minor are:

Select four from the following:	12
SMGT 305	Sport Administrative Theory
SMGT 312	Sport Sales
SMGT 315	Sport Media and Public Relations
SMGT 331	Fiscal Planning and Management in Sport and Recreation
SMGT 369	Sport Management Pre-Internship
SMGT 414	Sport Marketing
SMGT 415	Principles of Coaching Management
SMGT 421	Legal Aspects in Recreation and Sport Management
SMGT 450W	Ethics and Morality in Sport
SMGT 455	Sport in Contemporary Society
SMGT 456	Sport Psychology
SMGT 495	Topics in Sport Management
Total Credit Hours	12

* Grade of C- or better is required.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of 100- and 200-level courses and prerequisite courses (2.75 for teacher licensure with no less than C- earned in all core courses) and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University. To obtain a Virginia teaching license, all teacher education and licensure only students must attain a passing score on the appropriate Praxis II specialty area test.

Science, Technology, Engineering, and Mathematics (STEM) Education and Professional Studies

Web Site: <http://www.odu.edu/stemps> (<http://www.odu.edu/stemps/>)

Shana Pribesh, Chair

The department offers undergraduate courses FOUN 301 and FOUN 302 often taken as part of bachelor's programs in teacher preparation. The department also offers an undergraduate course FOUN 101S, Learning to Learn, in the Human Behavior area of the University's General Education requirements. We also offer LIBS 110G Information Literacy for the Digital Age as part of ODU's General Education requirements.

At the graduate level, the department offers the Master of Science in Education degree with a concentration in Instructional Design & Technology; a Master of Library and Information Studies; and a PhD in Education with concentrations in Instructional Design & Technology, and Educational Psychology and Program Evaluation. Students can enter the Educational Psychology and Program Evaluation PhD concentration directly from their undergraduate program. Please refer to the Graduate Catalog for information on these programs. (<http://catalog.odu.edu/graduate/>)

Teaching & Learning

Web Site: <http://www.odu.edu/teaching> (<http://www.odu.edu/teaching/>)

Angela Eckhoff, Chair

The Department of Teaching and Learning aims to promote the development of teacher candidates as professional educators, leaders, and critically engaged citizens. Through these efforts, teacher candidates become innovative and creative educators who make a difference for diverse learners. The Department offers three undergraduate programs: BS in Early Childhood Education, BS in Elementary Education, and MonarchTeach. The department also offers professional education courses to students who wish to teach in disciplines in secondary schools and are pursuing courses of study leading to baccalaureate degrees in either the College of Arts and Letters or the College of Sciences.

Programs

Bachelor of Science Programs

- Early Childhood Education (BS) (p. 557)
- Elementary Education (BS) (p. 560)

Additional Teacher Education Information

Teacher Education, Undergraduate Secondary (6-12) Programs - Mathematics and Science and Middle School Science (6-8)

MonarchTeach Program

The MonarchTeach program is an innovative teacher preparation program that introduces mathematics and science majors to the teaching profession through early field experiences. MonarchTeach, a collaboration between the Darden College of Education and Professional Studies and the College of Sciences, allows students to pursue secondary teacher licensure while at the same time completing their four-year mathematics or science degree program. Following completion, students are awarded a Virginia teaching license along with a BS degree in their content area.

MonarchTeach allows students to "Explore Teaching" through STEM 103, a two-credit field-based course. Through this course, students gain early teaching experience as they prepare and teach lessons in local elementary and middle school classrooms. This course meets weekly on the ODU campus and experienced master teachers assist students in preparing inquiry-based lessons. Additional courses required in the MonarchTeach program, drawn from both the Darden College of Education and Professional Studies and the College of Sciences, emphasize the relationships between mathematics and science, while integrating teaching content and skills throughout the field-intensive curriculum. Coursework in the MonarchTeach program prepares teacher candidates interested in teaching middle school science or secondary mathematics or science to complete content and pedagogical competency requirements for teacher licensure in the Commonwealth of Virginia.

All students seeking Virginia Department of Education licensure to teach in secondary schools must complete all admission, continuance, and exit requirements for approved Teacher Education Programs (see the Darden College of Education Teacher Education Program section of this catalog). Students can officially apply to the undergraduate teacher education program after completion of STEM 103. When applying to the program, students must fill out the appropriate paperwork provided by the Office of Clinical Experiences. To graduate and be recommended for licensure, students must complete the required coursework in an approved College of Sciences degree program and in the MonarchTeach program. Students must have a minimum major and overall GPA of at least 2.75, have earned a grade of at least C- in all of the professional development and supporting courses listed below (with the exception of Apprentice Teaching, which is a pass/fail course), have a passing score on the appropriate PRAXIS Content Test, and have passed the final teaching portfolio review.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in any field-based professional education course. The background clearance must be successfully completed prior to any field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <https://www.odu.edu/clinical-experiences/placement/background-checks> (<https://www.odu.edu/clinical-experiences/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates must complete this clearance process immediately in the first field-based course since the clearance process takes a minimum of eight weeks to complete.

Course Requirements

STEM 103	Foundations of STEM Teaching: An Inquiry-Based Approach	2
STEM 201	Knowing and Learning in STEM Education	3
STEM 202	Classroom Interactions in STEM Education (field based)	3
STEM 401	Project Based Instruction in STEM Education (field based)	3
STEM 402	Perspectives on STEM	3
SCI 468	Research Methods in Math and Sciences	3
or BIOL 468W	Research Methods in Mathematics and Science	
or CHEM 468	Research Methods in Mathematics and Science	
or OEAS 468W	Research Methods in Math and Sciences	
or PHYS 468W	Research Methods in Mathematics and Sciences	
STEM 485	Apprentice Teaching (field based)	9
Total Credit Hours		26

Mathematics education students in the MonarchTeach program must also complete MATH 375.

Program Requirements

Upon completion of STEM 103 students are encouraged to apply to the teacher preparation program MonarchTeach. Students who wish to teach science or mathematics at the middle school or secondary level must pursue courses of study leading to baccalaureate degrees in the College of Sciences. (See the College of Sciences section of this Catalog for full and specific requirements for science and mathematics secondary education.) In addition, to be eligible for state licensure to teach in Virginia middle or high schools, students must complete requirements in the Darden College of Education and Professional Studies listed below.

Admission

Students must:

1. Have an overall grade point average of 2.75 and a 2.75 in the academic major and the professional education core classes;
2. Submit the undergraduate teacher education program application to the Office of Clinical Experiences. (The application forms may be obtained on the Office of Clinical Experiences web page.); and
3. Acceptance into the Darden College of Education and Professional Studies teacher preparation program requires students to have no course grades in the academic major or professional education core below a C-, and an overall GPA of 2.75 or higher. Students should be formally admitted to teacher education before completing STEM 202 Classroom Interactions.

Continuance

Students must:

1. Maintain minimum overall grade point averages of 2.75 and 2.75 in the academic major and the professional education core;
2. Successfully complete all professional education courses and field experiences;

3. Be approved for Apprentice Teaching by the faculty; and
4. Pass Praxis Content Test in order to participate in Apprentice Teaching. Passing scores must be attached to the Apprentice Teaching application.

Exit

Students must:

1. Have minimum overall grade point averages of 2.75 and 2.75 in the academic major and the professional education core;
2. Successfully complete prescribed Apprentice Teaching and Seminar;
3. Have an exit interview; and
4. Have completed all course requirements. No courses in the academic major in which the student has made below a C- will be accepted toward meeting requirements in the Darden College of Education and Professional Studies.

Teacher Education, K-12 and Secondary Undergraduate Programs

Program Requirements

Students who wish to teach any of the disciplines listed below in secondary schools must pursue courses of study leading to baccalaureate degrees in either the College of Arts and Letters or the College of Sciences. (See either the College of Arts and Letters (<http://catalog.odu.edu/undergraduate/collegeofartsletters/>) or the College of Sciences (<http://catalog.odu.edu/undergraduate/collegeofsciences/>) section of this Catalog for full and specific requirements in any prospective teaching subject in secondary education.) In addition, to be eligible for state licensure to teach in secondary schools, students must complete requirements (listed below by subject area) in the Darden College of Education and Professional Studies.

Admission, Continuance, and Exit Requirements

Admission

Old Dominion University students seeking admission to an approved teacher education program must have submitted Praxis Core or approved alternative test of mathematics, reading, and writing (SAT or ACT).

Students must:

1. Have an overall grade point average of 2.75 and a 2.75 in the academic major and the professional education core.
2. Submit to the Office of Clinical Experiences an application form containing recommendations from two faculty members familiar with their work. (These forms may be obtained either in the Office of Clinical Experiences or in the appropriate chair's office in either the College of Arts and Letters or the College of Sciences.)

No courses in the academic major or professional education in which the student has made below a C (depending on the program) will be accepted for admission in the Darden College of Education and Professional Studies. Students should be formally admitted to teacher education before taking:

TLED 451	Developing Instructional Strategies for Teaching in the Middle/High School: English	3
TLED 452	Developing Instructional Strategies for Teaching in Middle/High School: Math and Science	3
TLED 455	Developing Instructional Strategies for Teaching in the Middle/High School: Social Studies	3

Continuance

Students must:

1. Maintain minimum overall grade point averages of 2.75 and 2.75 in the academic major and the professional education core.
2. Successfully complete TLED 301 and a subsequent practicum.
3. Be approved for teacher internship by the faculty.

4. Pass the Praxis Subject Assessment in order to participate in the teacher internship. Passing scores must be attached to the teacher internship application.
5. A clearance background check must be completed prior to placement in a field experience required for any observation and practicum courses and for the teacher candidate internship. For more information please review the clearance background check policy on the Office of Clinical Experiences website at <https://www.odu.edu/oce>. (<https://www.odu.edu/oce/>)

Exit

Students must:

1. Have minimum overall grade point averages of 2.75 and 2.75 in the academic major and the professional education core.
2. Successfully complete prescribed student teaching experiences.
3. Have an exit interview.
4. Have completed all course requirements. No courses in the academic major in which the student has made below a C (depending on the program) will be accepted toward meeting requirements in the Darden College of Education and Professional Studies.

Professional Education Course Requirements—Secondary

Art Education

This program leads to Licensure, K-12.

ARTE 301	Foundations of Art Education	3
ARTE 305	Elementary Art Education Methods and Classroom Management	3
ARTE 306	Secondary Art Education Methods and Classroom Management	3
TLED 408	Reading and Writing in Content Areas	3
TLED 485	Teacher Candidate Internship	12
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
ARTE 411	Curriculum and Instruction in Art Education	3
ARTE 480	Capstone in Art Education	3
Total Credit Hours		36

Dance Education

This program leads to Licensure, K-12.

TLED 301	Foundations and Introduction to Assessment of Education	3
TLED 360	Classroom Management and Discipline	2
TLED 408	Reading and Writing in Content Areas	3
TLED 430W	PK-12 Instructional Technology	3
TLED 485	Teacher Candidate Internship	12
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
EXSC 240	Prevention and Care of Injuries Related to Physical Activity	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
HPE 222	Teaching Individual Sports and Dance	3
Total Credit Hours		35

English Education

TLED 301	Foundations and Introduction to Assessment of Education	3
TLED 360	Classroom Management and Discipline	2
TLED 408	Reading and Writing in Content Areas	3
TLED 430W	PK-12 Instructional Technology	3

TLED 451	Developing Instructional Strategies for Teaching in the Middle/High School: English	3
TLED 483	Seminar in Teacher Education	1
TLED 485	Teacher Candidate Internship	12
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3

Total Credit Hours 33

Foreign Language Education

This program leads to Licensure to teach French, German, and/or Spanish. Students wanting to be certified to teach a foreign language must have a grade point average of at least 2.75 in the language and are strongly encouraged to participate in a structured learning experience in a country where the language is spoken. No course in the language with lower than a C (2.00) grade will be counted toward the degree or toward the number of credits required for student teaching. In addition, students must receive passing scores on language proficiency exams before they are approved for a student teaching assignment.

TLED 301	Foundations and Introduction to Assessment of Education	3
TLED 360	Classroom Management and Discipline	2
TLED 408	Reading and Writing in Content Areas	3
TLED 430W	PK-12 Instructional Technology	3
TLED 485	Teacher Candidate Internship	12
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
WLC 452	Methods for Teaching World Languages in Pre-K through Grade 12	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
WLC 456	Seminar in World Languages Teacher Education	1

Total Credit Hours 33

History/Social Sciences Education

TLED 301	Foundations and Introduction to Assessment of Education	3
TLED 360	Classroom Management and Discipline	2
TLED 408	Reading and Writing in Content Areas	3
TLED 430W	PK-12 Instructional Technology	3
TLED 455	Developing Instructional Strategies for Teaching in the Middle/High School: Social Studies	3
TLED 483	Seminar in Teacher Education	1
TLED 485	Teacher Candidate Internship	12
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3

Total Credit Hours 33

Music Education

This program leads to Licensure K-12.

TLED 301	Foundations and Introduction to Assessment of Education	3
TLED 360	Classroom Management and Discipline	2
TLED 408	Reading and Writing in Content Areas	3
TLED 485	Teacher Candidate Internship	12
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3

SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
Select one of the following concentrations:		6
Vocal		
MUSC 401	Music Education: Elementary Vocal and General Methods	
MUSC 402	Music Education: Practicum (Elementary Vocal and General)	
MUSC 403	Music Education: Secondary Vocal Methods	
MUSC 404	Music Education: Practicum (Secondary Vocal)	
Instrumental		
MUSC 401	Music Education: Elementary Vocal and General Methods	
MUSC 402	Music Education: Practicum (Elementary Vocal and General)	
MUSC 407	Music Education: Secondary Instrumental Methods	
MUSC 408	Music Education: Practicum (Secondary Instrumental)	
Total Credit Hours		32
Theatre Education		
This program leads to Licensure K-12.		
TLED 301	Foundations and Introduction to Assessment of Education	3
TLED 360	Classroom Management and Discipline	2
TLED 408	Reading and Writing in Content Areas	3
TLED 430W	PK-12 Instructional Technology	3
TLED 485	Teacher Candidate Internship	12
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
Total Credit Hours		29

Add-on Endorsements

Add-on endorsements are available in algebra I, English as a second language, journalism, and most other grade 6-12 areas. For information, please contact the Office of Clinical Experiences, website at <https://www.odu.edu/oce>. (<https://www.odu.edu/oce/>)

Bachelor of Science Early Childhood Education (BS)

Jody Sommerfeldt, Undergraduate Program Director

The BS in Early Childhood Education draws courses from across the University to prepare teacher candidates interested in teaching early childhood education. Course work spans the disciplines of English literature and composition; history; fine and performing arts; mathematics; natural sciences; social sciences; human growth and development; and educational foundations, technology, assessment, theory, and methods. The broad curriculum, along with the admittance, continuance, and graduation requirements described below, prepares teacher candidates to meet state license standards for the Commonwealth of Virginia, including a passing scores on the Praxis Teaching Reading: Elementary (Test #5205). Core coursework is available in both online and face-to-face formats. Additional information is posted on the department's website or available in hard copy from the department.

Please note: Admissions beyond Fall 2025 is on hold for program review.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: ENGL 110C and ENGL 211C or ENGL 231C; Departmental requirement for all teacher candidates, not met by the associate degree.

Mathematics: MATH 102M or MATH 103M; Departmental requirement for all teacher candidates, not met by the associate degree.

Information Literacy and Research: met in the major with LIBS 110G

Interpreting the Past: HIST 104H required; Departmental requirement for all teacher candidates, not met by the associate degree.

Human Behavior: PSYC 203S required; Departmental requirement for all teacher candidates, not met by the associate degree.

Nature of Science: Select one from BIOL 105N, BIOL 106N, BIOL 110N/BIOL 111N, BIOL 112N/BIOL 113N, BIOL 117N/BIOL 118N, BIOL 121N/BIOL 122N and one from PHYS 101N, CHEM 105N/CHEM 106N; Departmental requirement for all teacher candidates, not met by the associate degree.

Impact of Technology: met in the major

Upper-Division General Education

Satisfied in the major.

Requirements for Graduation

To graduate, teacher candidates must:

1. Complete all program requirements.
2. Earn a grade of no less than C- in all departmental requirements (C in ENGL 110C and ENGL 211C or ENGL 231C), major courses, and core courses.
3. Have a minimum cumulative grade point average of 2.75 and 2.75 core and major GPA.
4. Pass the writing intensive (W) course in the major with a grade of C or higher.
5. Complete the Senior Assessment Survey.
6. Submit a professional portfolio according to Darden College of Education and Professional Studies and program requirements.

NOTE: All students must earn a minimum of 120 credit hours for the Baccalaureate degree, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Due to changing University requirements, national accreditation standards, and Commonwealth of Virginia licensure regulations, the programs in the Darden College of Education and Professional Studies are under constant revision. Any changes resulting from these factors supersede the program requirements described in this catalog. Students should obtain current program information from their advisors and the Darden College of Education and Professional Studies website at <https://www.odu.edu/eps> (<https://www.odu.edu/eps/>).

Early Childhood Education Major

General Education

Complete lower-division requirements	35-41
Complete upper-division requirements (met in the major)	

Core Courses

TLED 301	Foundations and Introduction to Assessment of Education *	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
SPED 411	Classroom and Behavioral Management Techniques for Students with Diverse Needs	3
FOUN 301	Learning and Development	3
FOUN 302	Assessment of Learning	3
TLED 326	Socio-Cultural Perspectives in Education	3
TLED 426	Introduction to Literacy, Linguistics and Practice in the Classroom	3
TLED 430W	PK-12 Instructional Technology (C or better required; satisfies Impact of Technology requirement)	3

Major Courses

GEOG 100S	Human Geography	3
LIBS 110G	Information Literacy for the Digital Age	3
STAT 130M	Elementary Statistics	3
HPE 327	Teaching of Health and Physical Education, Pre-K-8	3
MATH 302	Geometry	3
TLED 320	Perspectives on the Young Child and the Family	3
TLED 328	Observation and Assessment in Early Childhood	3
TLED 330	The Arts in Early Childhood and Elementary Education	3
TLED 337	Literature for Young Children	3
TLED 338	Integrated Methods & Curriculum in Early Childhood Ed: Birth-Pre-K	4
TLED 483	Seminar in Teacher Education **	1
TLED 487	Teacher Candidate Internship for Early Childhood Education **	12
TLED 492	Integrating Instruction: Mathematics and Science Across the Early Childhood Curriculum	3
TLED 493	Integrating Literacy and Social Studies Across the PreK - 3 Curriculum	3

Total Credit Hours	109-115

- * LiveText is required for all Teacher Education majors and minors upon registration for TLED 301.
- ** A passing score on the Reading for Virginia Educators Assessment is required in TLED 483 and prior to TLED 487.

Additional Requirements and Information

Declaration of Major

To declare the major, teacher candidates must have a C or better in ENGL 110C and meet with an advisor in the Darden College of Education and Professional Studies.

Prescribed Virginia Board of Education Assessment for Admission to an Approved Teacher Education Program

Old Dominion University students seeking admission to an approved teacher education program must satisfy the Virginia Board of Education required assessment for admission into an approved teacher education program.

For the most current information on the prescribed Virginia Board of Education admission assessment, visit the Virginia Department of Education at <https://www.doe.virginia.gov/>.

Admission to Undergraduate Teacher Education Program

All teacher candidates must be admitted to the Early Childhood Education program as a requirement of continuance and graduation. Admittance to the early childhood education program requires that the teacher candidate:

1. Be a declared BS in early childhood education student.
2. Have a cumulative GPA of 2.75.
3. Have a 2.75 GPA in core and major courses.
4. Have no grade below a C- in any course required in the program.
5. Submit an application for admittance that is approved by the program and the Darden College of Education and Professional Studies.

Additionally, teacher candidates should be admitted to the early childhood education program by the end of their 60th credit hour. Transfer students with 60 or more credits should be admitted to the early childhood education program by the end of their second semester enrolled at the University.

Continuance

Teacher candidates must:

1. Maintain a cumulative grade point average of 2.75 and 2.75 core and major GPA.
2. Earn a grade no less than C- in all departmental requirements, major courses, and core courses.
3. Successfully complete a background clearance check.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. The process to complete the ODU clearance background check is located at: <http://www.odu.edu/success/academic/teacher-education/placement/background-checks> (<http://www.odu.edu/success/academic/teacher-education/placement/background-checks/>). The ODU clearance process includes the FBI fingerprint SP-24 form, the child protective service/social service check, and the sexual offender registry check. Candidates interested in professional education programs are advised to complete this clearance process immediately upon entry since the clearance process takes a minimum of eight weeks to complete. Please contact the Office of Clinical Experiences at 757-683-3348 with any questions.

Teacher candidates who fail to meet program requirements for two consecutive semesters will be encouraged to consider other academic and professional goals.

Additionally, passing scores on the Praxis Multiple Subject Assessment for Elementary Education and Praxis Teaching Reading are required in TLED 483 and prior to TLED 487. Test results will be submitted to the Office of Clinical Experiences. All teacher candidates must consult with an academic advisor every semester to review their academic progress.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
MATH 102M or MATH 103M	College Algebra (C or better required) or College Algebra with Supplemental Instruction	3
HIST 104H	Interpreting the American Past (C- or better required)	3
Philosophy and Ethics		3
BIOL 105N	Biology for Nonscience Majors I (preferred) (C- or better required)	4
or BIOL 106N, or BIOL 110N + BIOL 111N, or BIOL 112N + BIOL 113N, or BIOL 117N + BIOL 118N, or BIOL 121N + BIOL 122N		
Credit Hours		16
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Oral Communication		3
Human Creativity		3
Literature		3
PSYC 203S	Lifespan Development (C- or better required)	3
Credit Hours		15
Sophomore		
Fall		
FOUN 301	Learning and Development (C- or better required)	3
TLED 326	Socio-Cultural Perspectives in Education (C- or better required)	3
TLED 301	Foundations and Introduction to Assessment of Education (C- or better required)	3
TLED 430W	PK-12 Instructional Technology (meets Impact of Technology; C or better required)	3
PHYS 101N	Conceptual Physics (preferred) (C- or better required)	4
or CHEM 105N + CHEM 106N		
Credit Hours		16

Spring		
GEOG 100S	Human Geography (C- or better required)	3
FOUN 302	Assessment of Learning (C- or better required))	3
TLED 330	The Arts in Early Childhood and Elementary Education (C- or better required)	3
TLED 320	Perspectives on the Young Child and the Family (C- or better required)	3
STAT 130M	Elementary Statistics (C- or better required)	3
Credit Hours		15
Junior		
Fall		
TLED 338	Integrated Methods & Curriculum in Early Childhood Ed: Birth-Pre-K (C- or better required)	4
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics (C- or better required)	3
TLED 328	Observation and Assessment in Early Childhood (C- or better required)	3
MATH 302	Geometry (C- or better required)	3
Elective (or Language and Culture if required)		3
Credit Hours		16
Spring		
TLED 492	Integrating Instruction: Mathematics and Science Across the Early Childhood Curriculum (C- or better required)	3
HPE 327	Teaching of Health and Physical Education, Pre-K-8 (C- or better required)	3
LIBS 110G	Information Literacy for the Digital Age (C- or better required)	3
TLED 337	Literature for Young Children (C- or better required)	3
Elective (or Language and Culture if required)		3
Credit Hours		15
Senior		
Fall		
TLED 493	Integrating Literacy and Social Studies Across the PreK - 3 Curriculum (C- or better required)	3
TLED 426	Introduction to Literacy, Linguistics and Practice in the Classroom (C- or better required)	3
SPED 411	Classroom and Behavioral Management Techniques for Students with Diverse Needs (C- or better required)	3
TLED 483	Seminar in Teacher Education	1
Elective		3

Elective		2
Credit Hours		15
Spring		
TLED 487	Teacher Candidate Internship for Early Childhood Education (C- or better required)	12
Credit Hours		12
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Elementary Education (BS)

Jody Sommerfeldt, Undergraduate Program Director

The BS in Elementary Education draws courses from across the University to prepare teacher candidates interested in teaching elementary education. Course work spans the disciplines of English literature and composition; history; fine and performing arts; mathematics; natural sciences; social sciences; human growth and development; and educational foundations, technology, assessment, theory, and methods. The broad curriculum, along with the admittance, continuance, and graduation requirements described below, prepares teacher candidates to meet state license standards for

the Commonwealth of Virginia, including passing scores on the Praxis Teaching Reading: Elementary (Test #5205) and the Praxis Multiple Subject Assessment. Core coursework is available in both online and face-to-face formats. Additional information is posted on the department's website or available in hard copy from the department.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: ENGL 110C and ENGL 211C or ENGL 231C; Departmental requirement for all teacher candidates, not met by the associate degree.

Mathematics: MATH 102M or MATH 103M; Departmental requirement for all teacher candidates, not met by the associate degree.

Information Literacy and Research: met in the major with LIBS 110G

Interpreting the Past: HIST 104H required; Departmental requirement for all teacher candidates, not met by the associate degree.

Human Behavior PSYC 203S required; Departmental requirement for all teacher candidates, not met by the associate degree.

Nature of Science: Select one from BIOL 105N, BIOL 106N, BIOL 110N/BIOL 111N, BIOL 112N/BIOL 113N, BIOL 117N/BIOL 118N, BIOL 121N/BIOL 122N and an additional four-credit lab science (N course) from a different discipline; Departmental requirement for all teacher candidates, not met by the associate degree.

Impact of Technology: met in the major

Upper-Division General Education

Satisfied in the major.

Requirements for Graduation

To graduate, teacher candidates must:

1. Complete all program requirements.
2. Earn a grade of no less than C- in departmental requirements (C in ENGL 110C and ENGL 211C or ENGL 231C), major courses, and core courses.
3. Have a minimum cumulative grade point average of 2.75 and 2.75 core and major GPA.

4. Pass the writing intensive (W) course in the major with a grade of C or higher.
5. Complete the Senior Assessment Survey.
6. Submit a professional portfolio according to Darden College of Education and Professional Studies and meet all program requirements.

NOTE: All students must earn a minimum of 120 credit hours for the Baccalaureate degree, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Due to changing University requirements, national accreditation standards, and Commonwealth of Virginia licensure regulations, the programs in the Darden College of Education and Professional Studies are under constant revision. Any changes resulting from these factors supersede the program requirements described in this catalog. Students should obtain current program information from their advisors and the Darden College of Education and Professional Studies website at <https://www.odu.edu/eps> (<https://www.odu.edu/eps/>).

Elementary Education Major

General Education

Complete lower-division requirements	35-41
Complete upper-division requirements (met in the major)	

Core Courses

FOUN 301	Learning and Development	3
FOUN 302	Assessment of Learning	3
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics	3
SPED 411	Classroom and Behavioral Management Techniques for Students with Diverse Needs	3
TLED 301	Foundations and Introduction to Assessment of Education *	3
TLED 326	Socio-Cultural Perspectives in Education	3
TLED 426	Introduction to Literacy, Linguistics and Practice in the Classroom	3

Major Courses

GEOG 100S	Human Geography	3
LIBS 110G	Information Literacy for the Digital Age	3
TLED 320	Perspectives on the Young Child and the Family	3
TLED 337	Literature for Young Children	3
STAT 130M	Elementary Statistics	3
TLED 333	Measurement and Geometry for Teachers	3
STEM 433	Developing Instructional Strategies PreK-6: Mathematics	3
STEM 434	Developing Instructional Strategies PreK-6: Science	3
TLED 330	The Arts in Early Childhood and Elementary Education	3
TLED 430W	PK-12 Instructional Technology (C or better required; meets Impact of Technology)	3
TLED 432	Developing Instructional Strategies PreK-6: Language Arts	3
TLED 435	Developing Instructional Strategies PreK-6: Social Studies	3
TLED 478	Integrating Instruction Across the Curriculum PreK-6	3

TLED 479	Classroom Management and Practice PreK-3; PreK-6	3
TLED 483	Seminar in Teacher Education	1
TLED 488	Teacher Candidate Internship - Elementary Education **	12
Total Credit Hours		111-117

* LiveText is required for all Teacher Education majors and minors upon registration for TLED 301.

** Passing scores on the Reading for Virginia Educators Assessment and the Praxis Multiple Subject Assessment are required prior to TLED 488.

Additional Requirements and Information

Declaration of Major

To declare the major, teacher candidates must have a C or better in ENGL 110C and meet with an advisor in the Darden College of Education and Professional Studies.

Prescribed Virginia Board of Education Assessment for Admission to an Approved Teacher Education Program

Old Dominion University students seeking admission to an approved teacher education program must satisfy the Virginia Board of Education required assessment for admission into an approved teacher education program.

For the most current information on the prescribed Virginia Board of Education admission assessment, visit the Virginia Department of Education at <https://www.doe.virginia.gov/>.

Admission to Undergraduate Teacher Education Program

All teacher candidates must be admitted to the elementary education program as a requirement of continuance and graduation. Admittance to the elementary education program requires that the teacher candidate:

1. Be a declared BS in elementary education student.
2. Have a cumulative GPA of 2.75.
3. Have a 2.75 GPA in core and major courses.
4. Have no grade below a C- in any course required in the program.
5. Submit an application for admittance that is approved by the program and the Darden College of Education and Professional Studies.

Continuance

Teacher candidates must:

1. Maintain a cumulative grade point average of 2.75 and 2.75 core and major GPA.
2. Earn a grade no less than C- in all departmental requirements, major courses, and core courses.
3. Successfully complete a background clearance check.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. The process to complete the ODU clearance background check is located at: <http://www.odu.edu/success/academic/teacher-education/placement/background-checks> (<http://www.odu.edu/success/academic/teacher-education/placement/background-checks/>). The ODU clearance process includes the FBI fingerprint SP-24 form, the child protective service/social service check, and the sexual offender registry check. Candidates interested in professional education programs are advised to complete this clearance process immediately upon entry since the clearance process takes a minimum of eight weeks to complete. Please contact the Office of Clinical Experiences at 757-683-3348 with any questions.

Teacher candidates who fail to meet program requirements for two consecutive semesters will be encouraged to consider other academic and professional goals.

Additionally, passing scores on the Praxis Multiple Subject Assessment for Elementary Education and Praxis Teaching Reading Assessment are required prior to TLED 488. Test results will be submitted to the Office of Clinical Experiences. All teacher candidates must consult with an academic advisor every semester to review their academic progress.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
MATH 102M or MATH 103M	College Algebra (C or better required) or College Algebra with Supplemental Instruction	3
HIST 104H	Interpreting the American Past (C- or better required)	3
Philosophy and Ethics		3
BIOL 105N	Biology for Nonscience Majors I (preferred) (C- or better required)	4
or BIOL 106N, or BIOL 110N + BIOL 111N, or BIOL 112N + BIOL 113N, or BIOL 117N + BIOL 118N, or BIOL 121N + BIOL 122N		
Credit Hours		16
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Oral Communication		3
Human Creativity		3
Literature		3
PSYC 203S	Lifespan Development (C- or better required)	3
Credit Hours		15
Sophomore		
Fall		
LIBS 110G	Information Literacy for the Digital Age (C- or better required)	3
STAT 130M	Elementary Statistics (C- or better required)	3
TLED 301	Foundations and Introduction to Assessment of Education (C- or better required)	3
FOUN 301	Learning and Development (C- or better required)	3
Nature of Science (C- or better required)		4
(Select any four credit lab science "N course" that is different from Biology)		
Credit Hours		16

Spring		
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics (C- or better required)	3
GEOG 100S	Human Geography (C- or better required)	3
TLED 326	Socio-Cultural Perspectives in Education (C- or better required)	3
TLED 333	Measurement and Geometry for Teachers (C- or better required)	3
TLED 337	Literature for Young Children (C- or better required)	3
Credit Hours		15
Junior		
Fall		
TLED 426	Introduction to Literacy, Linguistics and Practice in the Classroom (C- or better required)	3
TLED 432	Developing Instructional Strategies PreK-6: Language Arts (C- or better required)	3
TLED 435	Developing Instructional Strategies PreK-6: Social Studies (C- or better required)	3
TLED 430W	PK-12 Instructional Technology (C or better required; meets Impact of Technology)	3
Elective (or Language and Culture if required)		3
Credit Hours		15
Spring		
FOUN 302	Assessment of Learning (C- or better required)	3
STEM 433	Developing Instructional Strategies PreK-6: Mathematics (C- or better required)	3
STEM 434	Developing Instructional Strategies PreK-6: Science (C- or better required)	3
SPED 411	Classroom and Behavioral Management Techniques for Students with Diverse Needs (C- or better required)	3
Elective (or Language and Culture if required)		3
Credit Hours		15
Senior		
Fall		
TLED 320	Perspectives on the Young Child and the Family (C- or better required)	3
TLED 330	The Arts in Early Childhood and Elementary Education (C- or better required)	3
TLED 478	Integrating Instruction Across the Curriculum PreK-6 (C- or better required)	3
TLED 479	Classroom Management and Practice PreK-3; PreK-6 (C- or better required)	3
TLED 483	Seminar in Teacher Education (C- or better required)	1

Elective		3
Credit Hours		16
Spring		
TLED 488	Teacher Candidate Internship - Elementary Education	12
Credit Hours		12
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Teacher Education

Old Dominion University's Professional Educator Program is a collaborative effort between the Darden College of Education and Professional Studies, the College of Arts and Letters, and the College of Sciences. The major purpose in its teacher education programs is to prepare teachers who have knowledge of their teaching disciplines, abilities to practice state-of-the-art instruction to students of various cultural and socioeconomic backgrounds, and demonstrate dispositions that reflect commitment to teaching and learning as well as lifelong professional growth and development.

For academic advising, contact Career and Advising Resource Center (CARC) and appropriate departmental offices in the Darden College of

Education and Professional Studies, the College of Arts and Letters, and the College of Sciences.

Baccalaureate Teacher Education Programs

- Students interested in teaching art, dance, English, world languages, music, social studies, history, or theatre, refer to the College of Arts & Letters (p. 82) section of this Catalog.
- Students interested in teaching biology, chemistry, computer science, Earth science, middle school science, physics, or math, refer to the College of Sciences (p. 674) section of this Catalog.
- Students interested in teaching elementary education PreK-6 (BS in Elementary Education) or early childhood education PreK-3 (BS in Early Childhood Education), refer to the Department of Teaching and Learning (p. 554) in the Darden College of Education and Professional Studies.
- Students interested in teaching special education or health and physical education (BS in Physical Education), refer to the Department of Human Movement Studies and Special Education (p. 529) in the Darden College of Education and Professional Studies.
- Students interested in teaching marketing or technology education (BS in Career and Technical Education), refer to the Department of Educational Leadership and Workforce Development (p. 513) in the Darden College of Education and Professional Studies.

Admission, Continuance, and Exit Requirements for Baccalaureate Approved Teacher Education Programs

Admission to Old Dominion University does not guarantee admission to a degree and/or a teacher preparation program in the student's specific area of interest. All such programs have admission, continuance, and exit requirements based on the Regulations Governing the Review and Approval of Education Programs in Virginia and specific Old Dominion University departmental criteria. These criteria include course work, minimum grade point averages, course grades, licensure assessments, professional dispositions, and faculty recommendations. Admission to an approved teacher education program is described in this section of the Catalog.

Admission

Students applying for admission to the teacher education program must:

1. Have a completed Clearance Background Check as specified in this section of the Catalog;
2. Have a minimum 2.75 grade point average overall (or as outlined in the specific curriculum), in the major, and in the content and professional education core courses;
3. Have at least a grade of C or C- (depending on the program) in all courses specified in the major curriculum to include content and professional education core courses; and
4. Provide authorization for the release of any disciplinary action that is contained in student records upon application.

Although students may enroll in a limited number of education courses, the following requirements must be on file in the Office of Clinical Experiences prior to enrolling in any professional education practicum course: 1) admission into the teacher education program; 2) professional education survey; and 3) the completed clearance background check process.

Continuance

Once individuals are admitted to the undergraduate teacher education program, they are expected to continue to maintain the same caliber of academic achievement during the remainder of their program. This will ensure that teacher candidates remain on track with projected graduation dates. In the event that a candidate experiences academic difficulty *immediately* prior to enrollment in a practicum course, the policies below will govern. Academic difficulty is defined as not meeting the minimum grade point average (GPA) program requirement or earning a grade or grades that do not meet the candidate's program requirements the first time the course was taken.

To continue in the respective teacher education program, the student must:

1. Maintain a 2.75 minimum grade point average overall (or as outlined in the specific curriculum), in the major and in the content and professional education core courses;
2. Continue to earn at least a grade of C or C- (depending on the program) in all courses specified in the major curriculum to include content and professional education core courses for continuance in the teacher education program; and
3. Have achieved passing scores in the prescribed Virginia Board of Education professional assessments for licensure described in this section of the Catalog, prior to the start of the teacher candidate internship orientation.

Score reports for all examinations must be on file in the Office of Clinical Experiences in room 1107 of the Education Building. These score reports are to be provided by the candidate and will not be returned. For the most current information on prescribed Virginia Board of Education professional assessments for each individual passing score, visit the Office of Clinical Experiences website (<https://www.odu.edu/oce/>) and review the *required assessments*.

Prior to placement in early field experiences, practica and/or internships, students are required to have a completed Clearance Background Check search, which consists of: *National Criminal Background Check for Employee or Volunteer Providing Care to Children, the Elderly and Disabled* (SP-24 Form), the Child Protective Service's *Central Registry Release of Information* (032-02-1515-11-eng, 02/14), a fingerprint check using the APPLICANT FD258 (REV 3-1-10) 1110-0046 fingerprinting card, and the National Sex Offender Registry and/or the Virginia State Police: Sex Offender Registry search. Students are liable for all costs incurred. Visit the Office of Clinical Experiences website (<https://www.odu.edu/oce/>) for more information.

Exit

Students must have:

1. A minimum 2.75 grade point average overall (or as outlined in the specific curriculum), in the major, and in the content and the professional education core courses;
2. Achieved grades of C or C- (as determined by the specific academic department) in all courses specified in the major curriculum to include content and professional education core courses;
3. Earned a passing grade in student teaching; and
4. Completed the senior assessment.

The Virginia Department of Education requires all initially licensed teachers, school counselors, administrators, and other school personnel to demonstrate proficiency in the use of educational technology for instruction and obtain certificates of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Due to changing University requirements, national accreditation standards, and Commonwealth licensure regulations, the programs in the Darden College of Education and Professional Studies are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students should obtain current program information from their advisors and the Darden College of Education and Professional Studies website at www.education.odu.edu (<https://www.odu.edu/education/>).

For more information on requirements in specific programs, students should refer to the individual program listings in this catalog or contact the Office of Clinical Experiences or the appropriate academic department in the College of Arts and Letters (<http://catalog.odu.edu/undergraduate/collegeofartsletters/>), the College of Sciences (p. 674), or the Darden College of Education and Professional Studies (<http://www.odu.edu/education/departments/>).

Teacher Candidate Dispositions

All teacher candidates are expected to demonstrate behaviors that are indicative of the following dispositions characteristic of effective educators. All candidates will be assessed a minimum of three times throughout their program, including entry. Any teacher candidate who is not displaying these dispositions will be subject to the disposition policy found at Office of Clinical Experiences website. Demonstrated professional dispositions are expected for continuance in the program.

Prescribed Virginia Board of Education Professional Assessments for Licensure

Old Dominion University teacher candidates seeking initial licensure through the completion of an approved teacher education program must successfully pass the Prescribed Virginia Board of Education Professional Assessments for Licensure prior to the start of the teacher candidate internship. The following assessments must be completed with a passing score:

1. Praxis subject assessment passing score approved by the Virginia Board of Education; and
2. Praxis Teaching Reading: Elementary (Test #5202). The passing score required for PreK-3, PreK-6, and K-12 special education general curriculum is 159.

For the most current information on the prescribed Virginia Board of Education professional assessments for each individual passing score, visit the Office of Clinical Experiences website, and review the Required Assessments.

Post-Baccalaureate Endorsement Teacher Education Programs

The Post-Baccalaureate Endorsement program is an approved teacher education program for individuals who have completed a bachelor's degree from a regionally accredited institution and wish to qualify for a Virginia teaching license. Students applying for admission into this approved teacher education program are considered graduate non-degree status and must meet the college's requirements for admitting students into an approved teacher education program. Admission to Old Dominion University does not guarantee admission into degree and/or teacher preparation programs in the Darden College of Education and Professional Studies. Program sheets for the Post-Baccalaureate Endorsement programs are available in the Office of Clinical Experiences.

Admission, Continuance and Exit Requirements for Post-Baccalaureate Teacher Education Programs

Admission

Students seeking admission into the post-baccalaureate endorsement program must:

1. Apply for admission to Old Dominion University as graduate non-degree seeking student;
2. Have achieved an overall GPA of 2.75-2.80 (as outlined in the specific curriculum);
3. Have earned a grade of C or C- (as determined by the specific academic department);
4. Interview with and receive recommendation for admittance from a department representative, or ODUGlobal representative;
5. Submit the Post-Baccalaureate Endorsement Program Application;
6. Be aware that only 12 hours of professional education courses from another institution may transfer into a post-baccalaureate endorsement program and that practicum and/or student teaching courses are not eligible for transfer;
7. Complete the professional dispositions self-survey; and
8. Attach the completed authorization for the release of any disciplinary action on file with the Office of Student Accountability and Academic Integrity.

Students who do not meet regular admission requirements may meet provisional admission into the post-baccalaureate endorsement program. For provisional status, a student must:

1. Apply for admission to Old Dominion University as a graduate non-degree seeking student;
2. Have achieved an overall GPA of 2.5-2.74 in the baccalaureate degree official transcript;
3. Have earned a grade of C or C- (as determined by the specific academic department);
4. Interview with and receive recommendation for admittance from a department representative, or ODUGlobal representative;
5. Submit the Post-Baccalaureate Endorsement Program Application;
6. Be aware that only 12 hours of professional education courses from another institution may transfer into a post-baccalaureate endorsement program and that practicum and/or student teaching courses are not eligible for transfer;
7. Complete the professional dispositions self-survey; and
8. Attach the completed authorization for the release of any disciplinary action on file with the Office of Student Accountability and Academic Integrity.

Students who wish to apply to a graduate program while in the post-baccalaureate endorsement program must meet all graduate program entry requirements. Only 12 credit hours of professional education course work from a post-baccalaureate endorsement program will transfer into a graduate program.

In order to student teach, all approved teacher education program requirements must be completed, to include all content and professional education course work with the appropriate grade and GPA as outlined in the respective curriculum and passing scores on Praxis II and the Virginia Reading Assessment (if required by the program).

Continuance

To continue in the respective post-baccalaureate teacher education program, the student must:

1. Maintain a 2.75-2.80 minimum grade point average overall (or as outlined in the specific curriculum), in the major and in the content and professional education core courses;
2. Maintain a 3.0 minimum grade point average overall (or as outlined in the specific curriculum), in the major and in the content and professional education core courses;
3. Continue to earn at least a grade of C or C- (depending on the program) in all courses specified in the major curriculum to include content and professional education core courses for continuance in the teacher education program; and
4. Have achieved passing scores in the prescribed Virginia Board of Education professional assessments for licensure described in this section of the catalog, prior to the start of the teacher candidate internship orientation.

Score reports for all examinations must be on file in the Career and Academic Resource Center and Office of Clinical Experiences. These score reports are to be provided by the candidate and will not be returned. For the most current information on prescribed Virginia Board of Education professional assessments for each individual passing score, visit the Office of Clinical Experiences website and review the *required assessments*.

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Exit

Students must have:

1. For undergraduate post-baccalaureate teacher education programs, maintain a 2.75 minimum grade point average overall (or as outlined in the specific curriculum), in the major and in the content and professional education core courses;
2. Maintain a 3.0 minimum grade point average overall (or as outlined in the specific curriculum), in the major and in the content and professional education core courses;
3. Achieved grades of C or C- (as determined by the specific academic department) in all courses specified in the major curriculum to include content and professional education core courses; and
4. Earned a passing grade in student teaching.

The Virginia Department of Education requires all initially licensed teachers, school counselors, administrators, and other school personnel to demonstrate proficiency in the use of educational technology for instruction and obtain certificates of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

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Frank Batten College of Engineering and Technology

Web Site: <http://www.odu.edu/eng> (<http://www.odu.edu/eng/>)

Jeffrey Fergus, Dean

Jeffrey LaCombe, Associate Dean for Undergraduate & Graduate Education

Sherif Ishak, Associate Dean for Research & Innovation

Stacie Ringleb, Associate Dean for Faculty Affairs and Student Engagement

Anthony Dean, Assistant Dean for Maritime and Defense Initiatives

Mission Statement

In accordance with the mission of Old Dominion University, the Frank Batten College of Engineering and Technology promotes the advancement of engineering knowledge, both by its creation and dissemination and by providing successful graduates and a continuously improving learning environment to its constituents, while maintaining ethical, multicultural and global standards.

College Diversity, Equity, and Inclusion Statement

The Frank Batten College of Engineering and Technology recognizes that diversity and inclusion are foundational to developing creative and robust engineering solutions to address complex global challenges. We are committed both to a diverse, equitable, and inclusive environment for students, faculty, and staff and to educating our students on the need for these in the engineering profession.

Overview

The Frank Batten College of Engineering and Technology at Old Dominion University offers degrees in engineering and in engineering technology. The course of study that leads to engineering degrees is characterized by a solid foundation in the theoretical underpinnings of engineering based on science and mathematics. Graduates of our undergraduate programs are well equipped to pursue advanced study through graduate education, pursue professional registration, or enter the engineering profession. The course of study that leads to engineering technology degrees is characterized by strong laboratory experiences and an emphasis on the application of engineering fundamentals and techniques that will prepare the graduate to be ready to embark on applied engineering career paths and implement advanced design, analysis and development concepts. The engineering technology degree is considered to be a terminal degree and graduates are prepared for manufacturing, testing, production, and operations.

The engineering and engineering technology programs at Old Dominion University are specifically designed to take advantage of the unique assets in the Hampton Roads area. These assets include:

1. a strong technology center to promote and use modeling and simulation
2. the NASA Langley Research Center with its focus on aerospace and virtual environments
3. the Jefferson Laboratories, a major center of nuclear physics and engineering
4. one of the major international deep-water ports on the east coast of the United States
5. a major shipbuilding and ship repair industry
6. a major high technology industry base
7. a very large presence of military facilities and military contractors

These assets have enabled the development of distinctive engineering and technology curricula. Points of distinction (from other programs in and out of the state) include the following:

Engineering Up-Front

Freshmen immediately become engaged in practical engineering and technology activities through a required course, ENGN 121 Introduction to Engineering and Technology. Team projects in different engineering disciplines allow students to experience the professional spectrum from

idea generation through its translation into the design, manufacture, and commercialization cycle. This course is well-suited to aid students in selecting a specific engineering discipline for their major for the remainder of their studies.

Multi-Disciplinary Industry Senior Project

Seniors may choose to join a multi-disciplinary team of students led by faculty and industry representatives to work on an industry project subject to specific deliverables and time and budget constraints.

Linked Bachelor's/Graduate Degree Programs

Undergraduate students in the Batten College of Engineering and Technology may apply for early admission into an engineering graduate program and may be permitted to apply credits for some courses simultaneously to both degrees. The degrees need not be in the same field of engineering.

Monarch Engineering and Innovation Laboratory (M-Lab)

Undergraduate and graduate students in the Batten College of Engineering and Technology have access to the M-Lab (<https://www.odu.edu/mlab/>) a 6,500 square-foot facility where they can learn how to use advanced hardware and software tools that enable 1) the analysis of complex problems, 2) the development of engineering solutions, 3) the analysis and testing of engineering solutions, 4) the development of prototypes from low to high-fidelity, 5) collaboration with students from different engineering programs and engineering disciplines, 6) collaboration with other colleges within the university, 7) collaboration with industry and research partners, and 8) the promotion of entrepreneurial and commercialization activities.

Professional Engineer (P.E.) Certification

The College encourages all of its graduates to eventually be certified as Professional Engineers (P.E.). The certification requires taking the Fundamentals of Engineering (FE) Examination and the Professional Engineering (P.E.) Examination. All students are encouraged to take the FE Examination in their senior year. For details, contact the departmental or Dean's Office and the following web site: www.dpor.virginia.gov (<http://www.dpor.virginia.gov>).

For further information, please visit the college's web site: <http://www.odu.edu/eng> (<http://www.odu.edu/eng/>)

Programs of Study

Bachelor of Science (Majors)

Engineering Programs

- Civil Engineering - B.S.C.E.
- Computer Engineering (Computer Engineering Major) - B.S.C.E.
- Computer Engineering (Modeling & Simulation Engineering Major) - B.S.C.E.
- Electrical Engineering - B.S.E.E.
- Mechanical Engineering - B.S.M.E.

Engineering Technology Program's Majors

- Civil Engineering Technology - B.S.E.T. (Major: Civil Engineering Technology)
- Electrical Engineering Technology - B.S.E.T. (Major: Electrical Engineering Technology)
- Manufacturing Engineering Technology - B.S.E.T. (Major: Manufacturing Engineering Technology)
- Mechanical Engineering Technology - B.S.E.T. (Major: Mechanical Engineering Technology)

Minors

- Minor in Aerospace Engineering (Department of Mechanical and Aerospace Engineering)

- Minor in Biomedical Engineering (Interdisciplinary, Department of Electrical and Computer Engineering)
- Minor in Civil Engineering (Department of Civil and Environmental Engineering)
- Minor in Civil Engineering Technology-Construction (Department of Engineering Technology)
- Minor in Computer Engineering (Department of Electrical and Computer Engineering)
- Minor in Cybersecurity (Interdisciplinary, see details below)
- Minor in Electrical Engineering (Department of Electrical and Computer Engineering)
- Minor in Electrical Engineering Technology (Department of Engineering Technology)
- Minor in Energy Engineering (Interdisciplinary, see details below)
- Minor in Engineering Management (Department of Engineering Management & Systems Engineering)
- Minor in Engineering Solutions for Climate Adaptation and Resilience
- Minor in Environmental Engineering (Department of Civil and Environmental Engineering)
- Minor in Global Engineering (Interdisciplinary, see details below)
- Minor in Marine Engineering (Department of Engineering Technology)
- Minor in Mechanical Engineering (Department of Mechanical and Aerospace Engineering)
- Minor in Mechanical Engineering Technology (Department of Engineering Technology)
- Minor in Military Leadership (Department of Naval Science)
- Minor in Modeling and Simulation (Department of Electrical and Computer Engineering)
- Minor in Uncrewed Systems Design & Development

Master's Programs

Engineering Programs

- Aerospace (Engineering, M.S., M.E.)
- Biomedical (Engineering, M.S., M.E.)
- Civil (Engineering, M.S.)
- Electrical and Computer Engineering (Engineering, M.S.)
- Engineering Management (M.S., M.E.M.)
- Environmental (Engineering, M.S.)
- Mechanical (Engineering, M.S., M.E.)
- Modeling & Simulation Engineering (Engineering, M.S.)
- Systems Engineering (Engineering, M.E.)

Doctoral Programs

Engineering Programs

- Aerospace (Engineering, Ph.D.)
- Biomedical (Engineering, Ph.D.)
- Civil and Environmental (Engineering, Ph.D.)
- Cybersecurity Engineering (Engineering, D.Eng.)
- Electrical and Computer (Engineering, Ph.D., D.Eng.)
- Engineering Management and Systems Engineering (Engineering, Ph.D., D.Eng.)
- Mechanical (Engineering, Ph.D., D.Eng.)
- Modeling and Simulation (Engineering, Ph.D., D.Eng.)

Accreditation

The following are engineering programs accredited by the Engineering Accreditation Commission of ABET www.abet.org (<http://www.abet.org>):

- Bachelor of Science in Civil Engineering
- Bachelor of Science in Computer Engineering

- Bachelor of Science in Electrical Engineering
- Bachelor of Science in Mechanical Engineering

The following are engineering technology programs accredited by the Engineering Technology Accreditation Commission ABET www.abet.org (<http://www.abet.org>):

- Bachelor of Science in Engineering Technology - Civil Engineering Technology
- Bachelor of Science in Engineering Technology - Electrical Engineering Technology
- Bachelor of Science in Engineering Technology - Mechanical Engineering Technology

The following program is certified by the American Society for Engineering Management www.asem.org (<http://www.asem.org>):

- Master of Engineering Management

Collaborative Programs

Cardinal Education

Stacie Ringleb, Associate Dean for Faculty Affairs and Student Engagement, ODU Cardinal Education Site Director

The Cardinal Education Program offers ODU engineering graduate students a selection of online graduate courses and programs to compliment the on-campus course offerings. It is a unique cooperative agreement that enables engineering students at ODU to enroll (and receive credit for) select online courses from six respected Virginia universities. The Cardinal Program (formerly CGEP) has a 35+ year record of leadership in distance learning.

Partnering engineering schools in the Commonwealth of Virginia include: Old Dominion University, Polytechnic Institute and State University, The University of Virginia, George Mason University, Virginia Virginia State University, and Virginia Commonwealth University. The program also serves the diverse continuing education needs of students working in industry and government.

Students seeking course registration via the Cardinal Education Program should contact the Cardinal Education Program Office in the Batten College of Engineering and Technology at Old Dominion University: <https://www.odu.edu/engineering/programs/cardinal-education> (<https://www.odu.edu/engineering/programs/cardinal-education/>)

Special Programs

Cooperative Education/Internships Program

The cooperative education programs in the Frank Batten College of Engineering and Technology at Old Dominion University are of the highest academic quality. These programs allow students to combine academic study with professional-level training. Cooperative education positions may be based on the alternating program style in which periods of full-time study are alternated with periods of full-time employment. Participation in the cooperative education program can be a source of financial support to help meet a substantial portion of college expenses. All departments in the Frank Batten College of Engineering and Technology strongly endorse the concept of cooperative education and internships.

Old Dominion University/Eastern Virginia Medical School Joint Program in Medicine

The joint program in medicine is designed to encourage highly qualified students to receive a BS from Old Dominion University and an MD from Eastern Virginia Medical School. Students apply after completion of their freshman year at Old Dominion University. Upon successful completion of requirements and graduation from Old Dominion University, a student accepted in the ODU/EVMS Joint Program in Medicine will be guaranteed admission to Eastern Virginia Medical School. Engineering and engineering technology students are encouraged to apply for this program. Complete information can be found in the College of Sciences section of this catalog.

Engineering Fundamentals Division & Curriculum

The Engineering Fundamentals Division (EFD) is designed to provide support to first-year engineering and transfer students as they make the transition into the Frank Batten College of Engineering and Technology. All students are admitted to this division until they are prepared to successfully take courses in their major. While in this division, students receive individualized counseling, mentoring, and advising support designed to prepare them for success in their chosen engineering or technology major. A key experience for students in this division is ENGN 121 Introduction to Engineering and Technology. This group-oriented course uses hands-on projects to expose students to the spectrum of engineering practices from innovation through design, manufacture and commercialization of a product or process. It also provides students with an opportunity to experience various aspects of engineering and have a basis for selecting their major.

Admission

Students who qualify for regular admission to the University will be accepted into EFD. Students in EFD may identify a desired degree program or may declare that they are undecided among engineering and engineering technology programs. They will be assigned an intended major code classification, which indicates that they are enrolled and, if appropriate, which is their preferred program.

Matriculation into an Engineering or Engineering Technology Degree Program

Students must meet with a major advisor and meet the following requirements in order to be declared:

1. Earn an overall GPA of 2.0 or better
2. Earn at least 30 credit hours applicable toward a degree, including the Engineering Fundamental courses listed below
3. Complete ENGN 121
4. Complete ENGN 122. A grade of C or higher may be required for progression in some programs.
5. Complete all freshman-level math courses with a C or higher (MATH 211 & MATH 212 for engineering majors and MATH 162M and MATH 163 or higher for engineering technology majors)
6. Complete any other major-specific requirements

Normally, students are not eligible to enroll in major courses until they are accepted into the degree program. Students may petition to waive this rule when extenuating circumstances warrant.

Continuance

Students are eligible to continue in the EFD as long as, within two years, they:

1. meet the continuance regulations of the University and
2. make reasonable progress toward matriculation into an engineering or engineering technology program.

A student who has ceased reasonable progress toward matriculation into a college degree program will be notified in writing. One semester following this notification, if reasonable progress has not resumed, the student will be referred to the Center for Major Exploration. A student who successfully completes the requirements must apply to and be accepted by a college degree program. Students not accepted into a degree program during a period of one semester beyond completion of the requirements will be referred to the Center for Major Exploration.

Computer Requirement

The Frank Batten College of Engineering and Technology requires that all incoming freshmen and transfer students to the college have a notebook or laptop computer that meets or exceeds the Mobile Monarch Student Notebook Program's recommended models for engineering majors. Students are strongly encouraged to consider purchasing one of the Mobile Monarch Student Notebook Program's notebooks; however, students may bring their

own notebook if it meets the specifications. Contact the campus Monarch Techstore for technology requirements and student programs at: <https://www.odu.edu/techstore>. (<https://www.odu.edu/techstore/>) Please note, Apple computers are not compatible with many necessary engineering software packages.

Engineering Fundamentals—Engineering Programs

The following courses are commonly taken during the Freshman year (minor differences will be seen from program to program). Please see the individual department/program pages for four-year academic plans.

First-Year Engineering Courses

ENGN 121	Introduction to Engineering and Technology *	4
ENGN 122	Computer Programming for Engineering	4
MATH 211	Calculus I	4
MATH 212	Calculus II	4
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
ENGL 110C	English Composition (grade of C or better required)	3
COMM 101R	Public Speaking **	3
PHYS 231N	University Physics I	4
Total Credits		30

* Meets the lower-division general education information literacy and research requirement.

** Civil Engineering majors may complete Human Creativity during the Freshman year and COMM 101R during the Sophomore year.

Engineering Fundamentals—Engineering Technology Programs

The Engineering Technology course requirements for the freshman year differ from the above by 1) MATH 211 and MATH 212 are replaced by MATH 162M and MATH 163, 2) COMM 101R is replaced by either ENGL 211C or ENGL 231C, and 3) PHYS 111N is taken in place of PHYS 231N. For additional details, please refer to the degree program guides appearing in the Engineering Technology section.

Advanced Placement

The University provides for possible advanced placement for up to 60 semester hours of course work. The student should refer to the advanced placement policy of specific departments (Mathematics and Statistics, Physics, Chemistry and Biochemistry, etc.) and the Policy for Prior Learning Assessment Credit Options at the Undergraduate Level found in this Catalog.

Qualified students may take advanced placement examinations in certain courses in the various departments of the Batten College of Engineering and Technology. The student should contact the chair of the department offering the course for information on applicability and approval.

Prospective freshmen are encouraged to take as many advanced placement courses as possible in high school. Further, prospective freshmen are encouraged to take as many AP examinations of the Educational Testing Service and CLEP examinations as possible. Qualifying scores on these examinations may result in advanced placement credit. However, freshmen should still consult with their faculty advisor before "skipping" courses given at Old Dominion University.

Additional information on advanced placement credit awarded for qualifying scores on AP and IB subject examinations can be found on the equivalency charts on the Office of Undergraduate Admissions website at <https://www.odu.edu/admission/undergraduate/credit> (<https://www.odu.edu/admission/undergraduate/credit/>).

Transfer Students

Transfer students seeking admission to an engineering or engineering technology program at Old Dominion University must complete the standard admission procedures as established by the Office of Admissions.

Transfer students are usually in one of the following categories:

1. students who have completed some course work, but who have not completed associate degrees
2. students who have completed associate degrees in appropriate fields before transferring.

Certain special policies have been developed for students in category (2). If the overall educational background of the transfer student who has completed an associate degree is felt to be sufficiently strong to permit them to pursue upper-division work satisfactorily, a composite or "package" evaluation of transfer credit may be made. This approach will permit some flexibility in accommodating students with slightly different but equally appropriate backgrounds, dependent on the engineering or engineering technology program involved. Certain deficiencies can be made up while the student is pursuing upper-division studies.

To be admitted as a transfer student with departmental junior standing, the student should have either completed an associate degree in an acceptable program or received full credit for two years of work indicated by the completion of the equivalent number of semester hours in the chosen engineering or engineering technology curriculum with a grade of C or better in each course.

Transfer students must earn a minimum of 25 percent of the total number of credits required for the degree from Old Dominion University and complete a minimum of 12 credit hours in upper-level courses in the major program from Old Dominion University.

Students transferring from the Virginia Community College System may view information about Old Dominion University's Guaranteed Admission Agreement, curriculum sheets, the letter of intent process, and Articulation Agreements on the Transfer Student Centers website (<https://www.odu.edu/transfer/transfer-centers/>).

Departments

- Civil and Environmental Engineering (p. 572)
- Electrical and Computer Engineering (p. 576)
- Engineering Management and Systems Engineering (p. 599)
- Engineering Technology (p. 600)
- Mechanical and Aerospace Engineering (p. 614)
- Naval Science (Naval Reserve Officers Training Corps) (p. 618)

Programs

Bachelor of Science in Civil Engineering

- Civil Engineering (BSCE) (p. 573)

Bachelor of Science in Computer Engineering

- Computer Engineering (BSCE) (p. 577)
- Computer Engineering with a Major in Modeling & Simulation Engineering (BSCE) (p. 587)

Bachelor of Science in Electrical Engineering

- Electrical Engineering (BSEE) (p. 592)

Bachelor of Science in Engineering Technology

- Engineering Technology with a Major in Civil Engineering Technology (BSET) (p. 601)
- Engineering Technology with a Major in Electrical Engineering Technology (BSET) (p. 604)
- Engineering Technology with a Major in Manufacturing Engineering Technology (BSET) (p. 607)

- Engineering Technology with a Major in Mechanical Engineering Technology (BSET) (p. 610)

Bachelor of Science in Mechanical Engineering

- Mechanical Engineering (BSME) (p. 614)

Minor Programs

- Aerospace Engineering Minor (p. 617)
- Biomedical Engineering Minor (p. 599)
- Civil Engineering Minor (p. 575)
- Civil Engineering Technology - Construction Minor (p. 604)
- Computer Engineering Minor (p. 586)
- Cybersecurity Minor (p. 571)
- Electrical Engineering Minor (p. 598)
- Electrical Engineering Technology Minor (p. 607)
- Energy Engineering Minor (p. 571)
- Engineering Management Minor (p. 599)
- Engineering Solutions for Climate Adaptation and Resilience Minor (p. 613)
- Environmental Engineering Minor (p. 575)
- Global Engineering Minor (p. 572)
- Marine Engineering Minor (p. 614)
- Mechanical Engineering Minor (p. 618)
- Mechanical Engineering Technology Minor (p. 613)
- Military Leadership Minor (p. 619)
- Modeling and Simulation Minor (p. 592)
- Uncrewed Systems Design & Development Minor (p. 572)

Naval ROTC Program

- NROTC (p. 618)

Linked Bachelor's/Master's Degree Programs

Linked Bachelor's/Master's programs are designed to allow qualified students to secure a space in a master's program available in the Frank Batten College of Engineering and Technology while they are still pursuing their undergraduate degrees. An eligible student can choose a master's program in the same discipline as his/her bachelor's program or in a complementary discipline. Subject to the approval of the undergraduate and graduate program directors, a student enrolled in a linked program can count up to six credit hours of course work towards both the undergraduate and the graduate degrees. Full-time students may be able to complete the requirements for the bachelor's degree in four years and the master's degree in one additional year. Students in linked programs must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Students who are matriculated in an undergraduate major in the Frank Batten College of Engineering and Technology with a GPA of at least 3.00 overall and 3.00 in the major are eligible to apply for admission to a Linked Bachelor's/Master's program. Transfer students who desire to be admitted to a linked program at the time they join an undergraduate major at Old Dominion University are eligible to apply if their overall GPA at their previous institution is 3.25 or higher. Prerequisite courses may be required for engineering technology majors to pursue a master's degree in engineering.

Continuance in a Linked Bachelor's/Master's program requires maintenance of a GPA of 3.00 or higher overall and in the major.

Linked Bachelor-to-PhD Programs

For a select number of exceptionally well-qualified students, the college has established a linked doctoral program that enables students to be admitted directly into the PhD program upon completion of the baccalaureate degree. A select number of exceptionally well-qualified students can be admitted

to the Bachelor/PhD program in their junior year while they are pursuing one of the undergraduate programs at Old Dominion University. This program encourages admitted students to work closely with faculty members and pursue a research experience. Just as in the Linked Bachelor/Masters program, six credit hours of graduate course work may again be counted towards the undergraduate degree and doctoral course work mentioned above for the Bachelor/PhD program. For linked bachelor's to doctoral programs, students must earn a minimum of 198 credit hours (120 discrete credit hours for the undergraduate degree and 78 discrete credit hours for the graduate degree). Students in these programs must maintain a GPA of 3.50 or better throughout their bachelor's and doctoral studies.

The student may opt to obtain the master's degree along the way to the doctorate. To obtain the master's degree, the student must utilize the six graduate credits obtained as part of their undergraduate program, use 18 credits of the graduate course work that is part of the PhD, and work with the Graduate Program Director to plan the final 6 credits.

Enterprise Centers

The Batten College of Engineering and Technology is a catalyst for the economic development of Hampton Roads. To this end, the college has established a number of centers to serve as engines for enterprise development. These centers utilize all University resources, including students and faculty.

Applied Research Center (ARC)

Hani Elsayed-Ali, Director

ARC is an advanced materials engineering and laser technology research center. Staffed with industry/university teams utilizing the Jefferson Lab technologies, ARC provides commercial product-related research in the areas of thin-film technology, laser and plasma processing of materials, materials analysis, and devices and sensor fabrication. For more information: www.odu.edu/engineering/applied-research-center (<https://www.odu.edu/engineering/applied-research-center/>).

Frank Reidy Research Center for Bioelectrics

Andrei Pakhomov, Executive Director

The mission of the Center is to increase scientific knowledge and understanding of the interaction of electromagnetic fields and ionized gases with biological cells and to apply this knowledge to the development of medical diagnostics, therapeutics, and environmental contamination. The objectives of the Center are to perform leading-edge interdisciplinary and multi-institutional research, recruit top faculty and exceptional graduate students, support regional, national, and international programs, and increase external funding and institutional visibility. For more information: www.odu.edu/bioelectrics (<https://www.odu.edu/frank-reidy-research-center-bioelectrics/>).

Affiliated Centers

Center for Secure and Intelligent Critical Systems

Sachin Shetty, Director

The Center for Secure and Intelligent Critical Systems (CSICS) conducts research on developing and integrating secure and intelligent technologies to ensure safe, reliable, and resilient infrastructure for the future. CSICS focuses on both theoretical and practical research in computational modeling, simulation, and analysis. For more information: <https://sics-c.org/>

Institute for Coastal Adaptation and Resilience

Jessica Whitehead, Executive Director

ICAR's mission is to advance the practice of coastal resilience and adaptation by engaging with communities, organizations, and businesses to develop and deploy solutions based on integrated, innovative, and applied research. For more information: <https://oduadaptationandresilience.org/>.

Commonwealth Center for Recurrent Flooding

Carol Considine, ODU Contact

The Commonwealth Center for Recurrent Flooding Resiliency engages the expertise, resources, and intellectual vibrancy of William & Mary and Old Dominion University in support of building resilience to rising waters. The Center serves, advises, and supports Virginia by conducting interdisciplinary studies and providing training, technical and non-technical services, and policy guidance in the area of recurrent flooding resilience to the Commonwealth and its local governments, state agencies, industries, and citizens.. For more information: <https://www.floodingresiliency.org/>

Mission Engineering Center

Thomas Irwin, Executive Director

The Center for Mission Engineering (CME) is an interdisciplinary applied research center focused on advancement in designing, analyzing, integrating, and improving the ability of systems to deliver desired mission outcomes. For more information: <https://oduinnovate.org/research-enterprise/center-for-mission-engineering/>

Virginia Digital Maritime Center

Mark Whitney, Executive Director

The Virginia Digital Maritime Center's mission is to support Virginia's maritime enterprise by leveraging applied research & cutting-edge technology to advance the maritime workforce, foster collaborative partnerships, and drive economic growth in Hampton Roads. For more information: <https://digitalmaritime.org/>

Virginia Institute for Spaceflight and Autonomy

Yiannis Papelis, Executive Director

The Virginia Institute for Spaceflight and Autonomy cultivates partnerships between governments, industry, and academia to grow the spaceflight and autonomy ecosystems on the Eastern Shore. For more information: <https://visaatodu.org/>

Virginia Modeling, Analysis, and Simulation Center

Eric Weisel, Associate Vice President for Applied Research and Executive Director, VMASC

The Virginia Modeling, Analysis, and Simulation Center (VMASC) is an enterprise center of Old Dominion University, supporting the University's research mission through innovation, workforce development, and industry ecosystem engagement programs that create and integrate digital technologies into everyday practice. The Center performs applied research leading to digital transformation. For more information: www.vmasc.org (<http://www.vmasc.org/>).

Virginia Beach Institute of Data Science

Khan Iftekharuddin, Director

The Virginia Beach Data Science Institute is at the forefront of education, research and collaboration for Hampton Roads region, state and globally. The Institute aims to be a driving force for building a vibrant academic community that will educate new generations of builders, thinkers, and leaders.

College Institutes

Institute for Autonomous and Connected Systems: The mission of IACS is to bring together faculty and students across campus from the Colleges of Engineering & Technology, Arts & Letters, and Sciences who have mutual interest in advancing the interdisciplinary research and development of autonomous and connected systems including un-crewed and autonomous vehicles in air, land, space, and maritime applications. Interim Director: Thomas Alberts.

Institute for Engineering in Medicine, Health, and Human

Performance: The Institute for Engineering in Medicine, Health, and Human Performance (EnMed) is the trans-disciplinary home for innovative

biomedical research, founded on unique academic, industrial, and military footprints at ODU and in Hampton Roads, to improve patient and community health outcomes and advance human performance. Director: Lobat Tayebi.

Departmental Centers and Institutes

Sustainable Development Institute promotes and provides engineering, ecological, environmental, and economic assistance to local, regional, and national governmental agencies, as well as international organizations and businesses. The institute actively participates in community service by conducting waste minimization and pollution prevention assistance to local businesses. Director: Mujde Erten-Unal.

Transportation Research Institute collaborates with centers and departments across the ODU campus to conduct innovation-based research in the core areas of transportation operations, transportation safety, transportation planning, freight transportation, and environment, energy, and sustainable transport. Director: Mecit Cetin.

Virginia Institute for Photovoltaics research spans from the Nanoscale (Fundamental Sciences and Engineering) through the Devices and balance of systems, to the deployment of Gigascale commercial power generation. The current focus is to research and develop the Science and Engineering of Photovoltaic Devices (or Solar cells) and bring them from the laboratory to the industry. Director: Sylvain Marsillac.

Virginia Institute for Image and Vision Analysis aims to leverage complimentary expertise of faculty in computer vision, signal/image processing and machine learning to become one of the leading institutes in the field. Research focuses on novel theory, state-of-art algorithms, architectures, real-time implementations for biomedical engineering, human- and machine-centric recognition, environmental and geoscience applications and computer-aided medical diagnosis systems. Director: Khan Iftekharuddin.

Center for Bioelectronics: The mission of the Center is to lead the effort of advancing scientific frontiers, ensuring educational accessibility for underrepresented students in STEM, and securing research leadership in critical areas, such as smart health and biomedical research. The ODU Center for Bioelectronics is dedicated to the mission of diversity, equity, and inclusion in education and the workforce. Director: Gymama Slaughter.

Minors

Programs

Minor Programs

- Cybersecurity Minor (p. 571)
- Energy Engineering Minor (p. 571)
- Global Engineering Minor (p. 572)
- Uncrewed Systems Design & Development Minor (p. 572)

Minor

Cybersecurity Minor

Saltuk Karahan, Undergraduate Program Director skarahan@odu.edu
School of Cybersecurity

This interdisciplinary minor in cybersecurity is focused on the technological, structural, social, and legal frameworks used to secure computer networks and software. The study of cybersecurity combines multiple fields including computer science, engineering, information technology, criminal justice, and philosophy, to name a few. In an effort to promote the security of computer networks, software, and cyber information, an interdisciplinary understanding about technological, legal, philosophical, and structural aspects of cybersecurity is needed. This minor will provide students from different majors the knowledge they need to prevent or respond to cyber incidents they are likely to encounter in their careers.

Requirements

Four courses chosen from:

12

CRJS 310	Cybercriminology: Foundations
CS 462	Cybersecurity Fundamentals
or ECE/MSIM 470	Foundations of Cyber Security
CS 463	Cryptography for Cybersecurity
CS 464	Networked Systems Security
CS 465	Information Assurance for Cybersecurity
CS 466	Principles and Practice of Cyber Defense
CYSE 300	Introduction to Cybersecurity
CYSE 301	Cybersecurity Techniques and Operations
CYSE 406	Cyber Law
CYSE 407	Digital Forensics
ECE 416	Cyber Defense Fundamentals
or MSIM 416	Cyber Defense Fundamentals
ECE 419	Cyber Physical System Security
or MSIM 419	Cyber Physical Systems Security
EET 405	Data Communications and Computer Networks
or EET 412	Wireless Communication Systems
IT 416	Network Server Configuration and Administration
IT 417	Management of Information Security
IT 418	Enterprise Information Assurance
IT 419	Enterprise Cyber Defense
IT 461	Implementing Internet Applications
PHIL 355E	Cybersecurity Ethics
RMI 443	Enterprise Risk Management
or RMI 412	Property & Liability Insurance Company Operations

The interdisciplinary minor in cybersecurity requires 12 credit hours of 300/400-level courses selected from at least two different disciplines with a maximum of six credits from any one discipline. For completion of the interdisciplinary minor, students must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses. At least six hours of upper-level courses must be taken through courses offered by Old Dominion University. Three credit hours may be in the major, if a major course is listed as an option for the interdisciplinary minor. As such, it will be credited toward both the major and the interdisciplinary minor.

Minor

Energy Engineering Minor

Sandeep Kumar, Department of Civil and Environmental Engineering,
Coordinator

This interdisciplinary minor is for students who would like to learn about energy engineering fundamentals, socio-environmental impacts of energy systems, and novel energy engineering technologies. The minor will enhance students' abilities to integrate knowledge from different disciplines with concepts used in energy engineering and offer students the opportunity to be recognized for study in this growing interdisciplinary field.

Requirements

The interdisciplinary minor requires 12 credit hours of 300/400-level courses selected from at least two different disciplines with a maximum of six credits from any one discipline. The course requirements are as follows:

Four courses chosen from:

12

CET 355	Sustainable Building Practices
CEE 458	Sustainable Development
CEE 459	Biofuels Engineering

ECE 303	Introduction to Electrical Power
ECE 403	Power Electronics
ECE 471	Introduction to Solar Cells
ECON 447W	Natural Resource and Environmental Economics
EET 370	Energy and The Environment
EET 483	Introduction to Smart Grids
EET 485	Electrical Power Systems
ENMA 301	Introduction to Engineering Management
ENMA 302	Engineering Economics
MAE 411	Mechanical Engineering Power Systems Theory and Design
MAE 413	Energy Conversion
MET 300	Thermodynamics
MET 471	Nuclear Systems I
OEAS 415	Waves and Tides
PHYS 415	Introduction to Nuclear and Particle Physics

One course relevant to energy engineering from the student's major can also be used as a minor course with the approval of the minor coordinator.

For completion of the minor, students must have a minimum overall grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of prerequisites. At least six hours of the required 12 must be taken through courses offered by Old Dominion University.

Minor Global Engineering Minor

To be named, Coordinator

The minor in global engineering is for students who plan to seek career opportunities in companies with global operations. With globalization of design and manufacturing, it has become important for engineers, engaged in transnational projects, to not only have better teamwork and communication skills, but also a good understanding of the socioeconomic, environmental and cultural aspects of global engineering projects. The global engineering minor provides an understanding of these aspects through courses that develop an understanding of global technology, quality assurance standards, and differences in cultural, communication and business practices in a global work environment.

Requirements

Students may obtain a minor in global engineering by successful completion of 12 semester credit hours in approved course work at the 300- or 400-level. In addition, a student seeking a minor in global engineering must satisfy all pre- or corequisite requirements for the courses selected. The requirements are as follows:

CEE 458	Sustainable Development	3
CEE 367	Cooperative Education *	3
or MAE 367	Cooperative Education	
Select two of the following:		6
GEOG 305	World Resources	
ENGL 371W	Language and Culture	
MKTG 411	Multi-National Marketing	
Total Credit Hours		12

* Preferably at a multinational company.

For completion of a minor, a student must have a grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses, prerequisites and corequisites and complete at least six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Minor Uncrewed Systems Design & Development Minor

The Frank Batten College of Engineering and Technology offers a minor program in Uncrewed Systems Design & Development that develops focused expertise in uncrewed vehicles and systems (aerial, surface and underwater). Autonomous and uncrewed systems (including "drones") are a rapidly emerging interdisciplinary technology area that merge many disciplines of engineering, science, and beyond. This 12-credit minor is open to students from any major, and is an especially appropriate minor for undergraduates in engineering and science fields.

Requirements

Prerequisites may be required for many courses in the minor. Please check the course description for each course for prerequisite information.

The basic course requirements are as follows:

Core Courses		
ENGN 485	Introduction to Uncrewed Aerial Systems	3
or GEOG 409	Drone Applications Proseminar	
ENGN 486	Multirotor UAS Design and Construction	3
Elective Courses		
Select two of the following:		6
ECE 346	Microcontrollers	
ECE 408	Fundamentals of Electric Vehicles	
ECE 445	Introduction to Computer Vision	
ECE 463	Design and Modeling of Autonomous Robotic Systems	
ENGN 487	Fixed Wing and VTOL UAS Design and Construction	
ENGN 488	Autonomous Mission Platforms Systems Integration	
GEOG 402	Geographic Information Systems	
MAE 403	Flight Mechanics	
MAE 406	Flight Vehicle Aerodynamics	
MAE 417	Propulsion Systems	
MAE 438	Applied Analog and Digital Control	

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses, prerequisites and corequisites and complete at least six hours of upper-level courses in the minor requirement through courses offered by Old Dominion University.

A maximum of six credits for disciplinary minors may share with other areas of the student's program. Approval of the department chair, chief departmental advisor, or designee may be required. Special attention should be paid to major/minor combinations where multiple courses overlap to ensure that the student is taking enough unique hours for the minor.

Civil and Environmental Engineering

Web Site: <http://www.odu.edu/cee> (<http://www.odu.edu/cee/>)

Sandeep Kumar, Chair

The Department of Civil and Environmental Engineering offers an undergraduate four-year program leading to the Bachelor of Science in Civil Engineering. The program is accredited by the Engineering Accreditation Commission (EAC) of ABET, <http://www.abet.org>. The department also offers a varied program of graduate study and research leading to the Master of Science, Master of Engineering, Doctor of Engineering, and Doctor of Philosophy degrees with concentrations in civil or environmental engineering. Areas of specialization include coastal, environmental,

geotechnical, hydraulics and water resources, transportation, and structural engineering. For further information, please visit the web site: <http://www.odu.edu/cee> (<http://www.odu.edu/cee/>).

Programs

Bachelor of Science in Civil Engineering Program

- Civil Engineering (BSCE) (p. 573)

Minor Programs

- Civil Engineering Minor (p. 575)
- Engineering Solutions for Climate Adaptation and Resilience Minor (p. 576)
- Environmental Engineering Minor (p. 575)

Bachelor of Science in Civil Engineering Civil Engineering (BSCE)

The undergraduate degree in civil engineering prepares graduates for entry into professional practice and continued intellectual and professional development throughout their career. The program prepares its graduates to serve as master planners, designers, constructors, and operators/managers of the built environment as well as stewards of natural resources and the environment. Civil engineering graduates are also prepared to serve as both innovators and integrators in the application of existing and developing technologies in the creation and maintenance of society's infrastructure. They also serve as evaluators and managers of risk and uncertainty and apply engineering knowledge and science to the protection of the built environment and public health.

The curriculum in civil engineering is designed to provide education in fundamental engineering sciences, certain nontechnical subjects, and all major areas of civil engineering, which will serve as a basis for entrance into civil engineering practice and/or graduate study. Technical elective courses are available that allow pursuit of several programs of study or specialization:

- Geotechnical
- Hydraulics and water resources
- Environmental
- Transportation
- Structural
- Coastal

In addition, course work in General Education skills and ways of knowing is required to assure a well-rounded program of study.

Civil Engineering Program Objectives

The program educational objectives describe the expected accomplishments of graduates during the first few years after graduation. The educational objectives of the civil engineering program, established with participation of all constituencies, are consistent with the mission of Old Dominion University and the Department of Civil and Environmental Engineering.

The objectives of the civil engineering program are to produce graduates who will:

- Successfully practice and/or pursue advanced studies in civil engineering or other fields.
- Effectively communicate the technical and social implications of civil engineering solutions.
- Appreciate and apply state-of-the-art practice in their chosen fields.
- Advance in the professional community through ethical practice, collaboration, and service.

Civil Engineering Program Outcomes

The program outcomes are statements that describe what students are expected to know and be able to do by the time of graduation. The

program outcomes have been established based on the program educational objectives, in consultation with the advisory council as documented in the minutes of the Civil and Environmental Engineering Visiting Council (CEEVC) meetings.

Students who qualify for graduation will have:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply the engineering design process to produce solutions that meet specified needs with consideration for public health and safety, and global, cultural, social, environmental, economic, and other factors as appropriate to the discipline.
3. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
4. An ability to communicate effectively with a range of audiences.
5. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
6. An ability to recognize the ongoing need for additional knowledge, to choose appropriate learning strategies, and to apply this knowledge.
7. An ability to function effectively as a member or leader of a team that establishes goals, plans tasks, meets deadlines, and creates a collaborative and inclusive environment.

In addition, students will have had opportunities for work experience through internships, practicum, and cooperative education. They will also have had opportunities to participate in student organizations for exposure to community service and for developing leadership skills. The students will be able to apply knowledge in environmental, geotechnical, structural, transportation, and water resources engineering.

In addition to the curriculum detailed below, all students in the Civil Engineering program are required to take the Fundamentals of Engineering exam (<http://ncees.org/exams/fe-exam/>) prior to graduation. Any student passing the FE exam prior to graduation will receive a reimbursement for the exam fee paid by the CEEVC.

Accreditation

The Bachelor of Science in Civil Engineering is accredited by the Engineering Accreditation Commission of ABET www.abet.org. (<http://www.abet.org>)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3

The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

The General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met through the major.

Upper-Division General Education

- Option A. Approved Minor, 12-24 credit hours; also second degree or second major
- Option B. Interdisciplinary Minor; 12 credit hours, (3 credit hours may be in the major area of study)
- Option C. An approved certification program such as teaching licensure (hours vary)
- Option D. Two Upper-Division Courses (6 credit hours) from outside the College of Engineering and Technology and are not required by the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Civil Engineering Major

In addition to the requirements shown in the degree program guide, all students in the Civil Engineering program are required to take the Fundamentals of Engineering exam (<https://ncees.org/engineering/fe/>) prior to graduation. Any student passing the FE exam prior to graduation will receive a reimbursement for the exam fee by the CEEVC.

General Education

Complete lower-division requirements	33-39
Complete upper-division requirements (minimum of 6 credit hours)	6

Civil Engineering Major

Complete civil engineering departmental and major requirements as shown on the degree program guide	84

Total Credit Hours	123-129

Degree Program Guide*

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
First Semester		
MATH 211	Calculus I (Grade of C or better required)	4

CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
ENGN 121	Introduction to Engineering and Technology	4
Human Creativity		3

Credit Hours	15

Second Semester

ENGN 122	Computer Programming for Engineering	4
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 212	Calculus II (Grade of C or better required)	4
PHYS 231N	University Physics I	4

Credit Hours	15

Sophomore

First Semester

CEE 204	Statics (Grade of C or better required)	3
COMM 101R	Public Speaking	3
MATH 312	Calculus III (or MATH 285)	4
PHYS 232N	University Physics II	4
CEE 240	Geographic Information Systems in Civil and Environmental Engineering	2

Credit Hours	16

Second Semester

CEE 205	Engineering Dynamics	3
CEE 220	Mechanics of Deformable Bodies	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Literature		3
Science Elective (BIOL 110N/111N or OEAS 111N)		4

Credit Hours	16

Junior

First Semester

MATH 307	Ordinary Differential Equations (or MATH 280)	3
CEE 304	Probability and Statistics for Civil Infrastructure	3
CEE 310	Structures I (Grade of C or better required)	3
CEE 320	Civil Engineering Materials	3
CEE 330	Hydromechanics (Grade of C or better required)	3

Credit Hours	15

Second Semester

CEE 305	Numerical Methods for Civil and Environmental Engineering	1
CEE 323	Soil Mechanics (Grade of C or better required)	3
CEE 324	Soil Mechanics Laboratory	1

CEE 340	Hydraulics and Water Resources	3
CEE 341	CE Hydraulics and Water Resources Laboratory	1
CEE 350	Environmental Pollution and Control	3
Interpreting the Past		3
Credit Hours		15
Senior		
First Semester		
CEE 370	Transportation Fundamentals	3
CEE 410	Concrete Design	3
CEE 430	Foundation Engineering	3
CEE 402	Professional Practice of Engineering	1
Gen Ed - Upper Level Requirement 1		3
Human Behavior		3
Credit Hours		16
Second Semester		
CEE 403W	Civil Engineering Design Project and Professional Practice (Grade of C or better required)	3
CEE 4XX		3
CEE 4XX		3
ENMA 480	Ethics and Philosophy in Engineering Applications **	3
Gen Ed - Upper Level Requirement 2		3
Credit Hours		15
Total Credit Hours		123

- * Does not include the University's General Education language and culture requirement. Additional hours may be required.
- ** Meets philosophy and ethics general education requirement.

Linked Bachelor's/Master's Degree Programs

Linked Bachelor's/Master's programs are designed to allow qualified students to secure a space in a master's program available in the Frank Batten College of Engineering and Technology while they are still pursuing their undergraduate degrees. An eligible student can choose a master's program in the same discipline as his/her bachelor's program or in a complementary discipline. Subject to the approval of the undergraduate and graduate program directors, a student enrolled in a linked program can count up to six credit hours of course work towards both the undergraduate and the graduate degrees. Full-time students may be able to complete the requirements for the bachelor's degree in four years and the master's degree in one additional year. Students in linked programs must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Students who are matriculated in an undergraduate major in the Frank Batten College of Engineering and Technology with a GPA of at least 3.00 overall and 3.00 in the major are eligible to apply for admission to a Linked Bachelor's/Master's program. Transfer students who desire to be admitted to a linked program at the time they join an undergraduate major at Old Dominion University are eligible to apply if their overall GPA at their previous institution is 3.25 or higher. Prerequisite courses may be

required for engineering technology majors to pursue a master's degree in engineering.

Continuance in a Linked Bachelor's/Master's program requires maintenance of a GPA of 3.00 or higher overall and in the major.

Linked Bachelor-to-PhD Programs

For a select number of exceptionally well-qualified students, the college has established a linked doctoral program that enables students to be admitted directly into the PhD program upon completion of the baccalaureate degree. A select number of exceptionally well-qualified students can be admitted to the Bachelor/PhD program in their junior year while they are pursuing one of the undergraduate programs at Old Dominion University. This program encourages admitted students to work closely with faculty members and pursue a research experience. Just as in the Linked Bachelor/Masters program, six credit hours of graduate course work may again be counted towards the undergraduate degree and doctoral course work mentioned above for the Bachelor/PhD program. For linked bachelor's to doctoral programs, students must earn a minimum of 198 credit hours (120 discrete credit hours for the undergraduate degree and 78 discrete credit hours for the graduate degree). Students in these programs must maintain a GPA of 3.50 or better throughout their bachelor's and doctoral studies.

The student may opt to obtain the master's degree along the way to the doctorate. To obtain the master's degree, the student must utilize the six graduate credits obtained as part of their undergraduate program, use 18 credits of the graduate course work that is part of the PhD, and work with the Graduate Program Director to plan the final 6 credits.

Minor Civil Engineering Minor

An undergraduate minor in civil engineering may be obtained by students from outside of the major by successful completion of 12 or more semester credit hours in approved civil engineering course work at the 300 or 400 level. In addition, a student seeking a minor in civil engineering must satisfy all pre- or corequisite requirements for the courses selected.

Requirements

CEE 323	Soil Mechanics	3
or CEE 340	Hydraulics and Water Resources	
CEE 310	Structures I	3
CEE 370	Transportation Fundamentals	3
or CEE 4xx **		
CEE 4xx **		3
Total Credit Hours		12

- ** CEE 4xx can be any senior-level elective in coastal, geotechnical, structural or water resources engineering. The precise course of study must be approved by the chief departmental advisor.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses, prerequisites and corequisites and complete a minimum of six hours of upper-level courses in the minor requirement through courses offered by Old Dominion University. Completion of a minor in civil engineering with a grade point average of 3.00 or greater partially satisfies the leveling requirements for graduate degrees in civil engineering.

Minor Environmental Engineering Minor

An undergraduate minor in environmental engineering may be obtained by successful completion of 12 or more semester credit hours in approved environmental engineering course work at the 300 or 400 level. In addition,

a student seeking a minor in environmental engineering must satisfy all pre- or corequisite requirements for the courses selected. For civil engineering majors pursuing the environmental engineering minor, one of two 400-level technical elective courses in environmental engineering may count toward one of the approved 400-level courses for the environmental engineering minor.

Requirements

Two tracks are available: aqueous environmental systems and environmental protection. The course requirements are as follows:

Aqueous Environmental Systems

CEE 350	Environmental Pollution and Control	3
Select three of the following:		9
CEE 440	Hydraulic Engineering	
CEE 446	Urban Stormwater Hydrology	
CEE 447	Groundwater Hydraulics	
CEE 450	Water Distribution and Wastewater Collection System Design	
CEE 451	Water and Wastewater Treatment	
CEE 482	Introduction to Coastal Engineering	
Total Credit Hours		12

Environmental Protection

CEE 350	Environmental Pollution and Control	3
Select three of the following:		9
CEE 451	Water and Wastewater Treatment	
CEE 452	Air Quality	
CEE 454	Hazardous Waste Treatment	
CEE 458	Sustainable Development	
CEE 459	Biofuels Engineering	
CEE 482	Introduction to Coastal Engineering	
CEE 455	Pollution Prevention and Green Engineering	
Total Credit Hours		12

For completion of a minor a student must have a minimum overall cumulative grade point average of 2.00 in courses specified as a requirement for the minor exclusive of lower-level courses, prerequisites and corequisites and complete a minimum of six hours of upper-level courses in the minor requirement through courses offered by Old Dominion University. Completion of a minor in environmental engineering with a grade point average of 3.00 or greater partially satisfies the leveling requirements for graduate degrees in environmental engineering.

Minor Engineering Solutions for Climate Adaptation and Resilience Minor Requirements

CEE 457	Adaptation to Sea Level Rise	3
CET 458	Managing the Climate Crisis	3
Select two of the following:		6
CET 332	Water Resources Engineering	
CET 420	Hydrology and Drainage	
CEE 446	Urban Stormwater Hydrology	
CEE 447	Groundwater Hydraulics	
CEE 455	Pollution Prevention and Green Engineering	
CET 456	Resilience and Sustainability	
CEE 458	Sustainable Development	

Civil Engineering majors completing the minor are limited to a maximum of six credits of CEE coursework. Civil Engineering Technology majors completing the minor are limited to a maximum of six credits of CET coursework.

For completion of the minor, students must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses. At least six hours of upper-level courses must be taken through courses offered by Old Dominion University.

Electrical and Computer Engineering

Web Site: <http://www.odu.edu/ece> (<http://www.odu.edu/ece/>)

Oscar González, Chair

The Department of Electrical and Computer Engineering offers undergraduate four-year degree programs leading to the Bachelor of Science in Electrical Engineering and the Bachelor of Science in Computer Engineering. These programs are accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>. The undergraduate programs provide a broad foundation in electrical and/or computer engineering through combined lecture and laboratory work and prepare the student for entering the profession of electrical and/or computer engineering. In addition, these programs prepare the students for further study at the graduate level.

The department also offers programs of graduate study leading to the degrees of Master of Science, Doctor of Engineering, and Doctor of Philosophy. Faculty members in electrical and computer engineering are actively engaged in research, and the department maintains extensive laboratory facilities to support the research work. Areas of specialization include AI and machine learning engineering, atomic layer deposition, autonomous systems, biomedical engineering, bioelectronics, communications and networking, computer hardware cybersecurity engineering, distributed simulation, high performance computing, intelligent transportation systems, laser processing, microelectronics/nanotechnology, modeling/simulation/visualization, medical modeling, multivariable systems/nonlinear control, photovoltaics, plasmas, quantum computing, signal and image processing, thin films, virtual reality, and augmented reality.

Students majoring in either electrical engineering or computer engineering may fulfill the upper-level General Education requirements through completion of a minor in the other discipline. Except for the major in modeling & simulation engineering, computer engineering students automatically meet this requirement with the built-in minor in computer science.

Mission Statement

The Department of Electrical and Computer Engineering at Old Dominion University is a partnership among students, faculty and staff in Service to the profession of Electrical and computer engineering through academic excellence, Research and real-world experiences, dedicated to a Vision of the future that includes Industry and community, Continuous improvement, and personal Enrichment and growth (SERVICE).

Continuance Regulations

It is the policy of the Department of Electrical and Computer Engineering to deny a student eligibility to enroll in program courses after it becomes evident that he or she is either unable or unwilling to maintain reasonable standards of academic achievement. Courses in the electrical and computer engineering major are defined as courses with an ECE prefix.

1. A student will be placed on departmental academic probation whenever his or her major grade point average (GPA) falls below 2.00 (after six or more hours have been attempted in the major).
2. Students on academic probation are expected to improve their major GPA by achieving a semester GPA of 2.0 or better during the next semester of attendance. A student on academic probation will have two consecutive semesters to improve their major GPA to 2.0 before termination from the program.
3. Following two consecutive semesters of academic probation, a student is subject to termination from the program if his or her major GPA is below 2.0 and the semester GPA is below 2.0 in the major at the end of either the Fall or Spring semester.

Appeals of termination from the program are in order if extenuating circumstances warrant. Appeals are to be made in writing to the chair of the department. Once the appeal is submitted, it is considered by the faculty of the department.

Programs

Bachelor of Science in Computer Engineering Programs

- Computer Engineering (BSCE) (p. 577)
- Computer Engineering with a Major in Modeling & Simulation Engineering (BSCE) (p. 587)

Bachelor of Science in Electrical Engineering Programs

- Electrical Engineering (BSEE) (p. 592)

Minor Programs

- Biomedical Engineering Minor (p. 599)
- Computer Engineering Minor (p. 586)
- Electrical Engineering Minor (p. 598)
- Modeling and Simulation Minor (p. 592)

Bachelor of Science in Computer Engineering Computer Engineering (BSCE)

Lee A. Belfore II, Chief Departmental Advisor

The computer engineering undergraduate degree program, available in both synchronous online and face-to-face formats, is designed to provide both a broad engineering background and a comprehensive foundation in the technical principles underlying the computer area. Students develop a background through course work in mathematics, the basic sciences, and general engineering. The technical core consists of course work from electrical engineering to address hardware aspects of computer engineering and course work from computer science to address software aspects.

There are two majors available in the Bachelor of Science in Computer Engineering degree: Computer Engineering major and Modeling & Simulation Engineering major. Adequate elective freedom is available to students in each major. The Computer Engineering major has a built-in minor in computer science, and four technical electives allow for specialization in one or more of four additional areas: computer hardware systems, computer networks, cyber security, or data analytics engineering. The Modeling and Simulation major allows students to select three technical elective courses. In addition, course work in General Education Skills and Ways of Knowing is required to assure a well-rounded program of study.

Students pursuing a Bachelor of Science in Computer Engineering degree (BSCE) are intended in their degree until Engineering Fundamental/foundational courses (I.E. Calculus I & II, Calculus-based University Physics I, Programming I, Chemistry I, and Engineering introductory courses) are completed.

Computer Engineering Program Educational Objectives

The computer engineering program seeks to prepare graduates who, after the first few years of their professional career, have:

1. established themselves as practicing engineering professionals in industry or government, or engaged in graduate study
2. demonstrated their ability to work successfully as members of a professional team and function effectively as responsible professionals
3. demonstrated their ability to adapt to new technology and career challenges.

Student Outcomes

The computer engineering student outcomes are as follows. Graduates must attain:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Accreditation

The Bachelor of Science in Computer Engineering is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>. (<http://www.abet.org>)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8

Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

The General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met through the major. The upper-division General Education requirement is met through a built-in minor in Computer Science.

Upper-Division General Education

Met in the major through a built-in minor in computer science.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Computer Engineering

Computer Engineering majors must earn a grade of C or better in all 200-level ECE courses and all CS courses prior to taking the next course in the sequence.

Any ECE course registration issues are to be resolved with the ECE Academic Coordinator and Program Manager.

General Education

Complete lower-division requirements	33-39

Complete upper-division requirements (satisfied in the major through a built-in minor in computer science)

Computer Engineering Major

Complete computer engineering departmental and major requirements as shown on the degree program guide	89

Total Credit Hours	122-128

Computer Engineering Areas of Specialization

Students in the Bachelor of Science in Computer Engineering degree program may focus their studies in one or more specialized areas by electing to take courses in computer hardware systems, computer networks, cyber security, or data analytics engineering.

The computer hardware systems area requires completion of four courses selected from the following: ECE 341, ECE 346, ECE 441, ECE 443, and ECE 483.

The computer networks area requires completion of the following four courses: ECE 355, ECE 451, ECE 452, and ECE 455.

The cyber security area requires completion of four courses selected from the following: ECE 346, ECE 355, ECE 416, ECE 419, ECE 455, ECE 470 and ECE 483.

The data analytics engineering area requires completion of the following courses: ECE 304, ECE 350, ECE 441, ECE 445, and ECE 450.

Degree Program Guide*

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly

encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Computer Engineering (BSCE)

Course	Title	Credit Hours
Freshman		
Fall		
ENGN 121	Introduction to Engineering and Technology	4
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N or CHEM 120	Foundations of Chemistry I Laboratory ** or Foundations of Chemistry I Laboratory for Online Degree Programs	1
MATH 211	Calculus I (Grade of C or better required)	4
ENGL 110C	English Composition (Grade of C or better required)	3
Credit Hours		15
Spring		
ENGN 122	Computer Programming for Engineering	4
MATH 212	Calculus II (Grade of C or better required)	4
COMM 101R	Public Speaking	3
PHYS 231N	University Physics I	4
Credit Hours		15
Sophomore		
Fall		
MATH 307 or MATH 280	Ordinary Differential Equations or Transfer Credit for Ordinary Differential Equations	3
ECE 201	Circuit Analysis I	3
ECE 241	Fundamentals of Computer Engineering	4
PHYS 232N	University Physics II	4
ECE 250	Object-Oriented Programming in C++ for Engineers	3
Credit Hours		17
Spring		
ECE 202	Circuit Analysis II	3
ECE 287	Fundamental Electric Circuit Laboratory	2
ENGL 231C or ENGL 211C	Writing, Rhetoric, and Research: Special Topics (Grade of C or better required) or Writing, Rhetoric, and Research	3
CS 252	Introduction to Unix for Programmers	1
CS 261	Java for Programmers	1
CS 381	Introduction to Discrete Structures	3
Literature Way of Knowing		3
Credit Hours		16

Junior		
Fall		
ECE 302 or ECE 306 or ECE 350 or ECE 314		3
ECE 304	Probability, Statistics, and Reliability	3
ECE 341	Digital System Design	3
CS 361	Data Structures and Algorithms	3
Human Creativity Way of Knowing		3
Credit Hours		15
Spring		
ECE 355	Introduction to Networks and Data Communications	3
ECE 342	Field Programmable Gate Arrays Design Laboratory	2
ECE 346	Microcontrollers	3
ECE 381	Introduction to Discrete-time Signal Processing	3
CS 350 or CS 330	Introduction to Software Engineering or Object-Oriented Design and Programming	3
Technical Elective ***		3
Credit Hours		17
Senior		
Fall		
ECE 481W	Preparatory ECE Senior Design (Grade of C or better required)	3
ECE 443	Computer Architecture	3
Technical Elective ***		3
ENMA 480	Ethics and Philosophy in Engineering Applications	3
Interpreting the Past Way of Knowing		3
Credit Hours		15
Spring		
ECE 482	ECE Senior Design	3
CS 471	Operating Systems	3
Technical Elective ***		3
Human Behavior Way of Knowing		3
Credit Hours		12
Total Credit Hours		122

- * Does not include the University's General Education language and culture requirement. Additional hours may be required.
- ** CHEM 120 is for online program students only.
- *** Computer Engineering major students need three technical elective courses selected from one of three options: (1) three 400-level ECE technical elective courses; (2) two 400-level ECE technical elective courses and one 300-level ECE technical elective course or one approved 300- or 400-level CS/MATH/Engineering course; (3) two 400-level ECE technical elective courses and one approved 300- or 400-level CS course or one approved 300- or 400-level CS/MATH/Engineering course.

Computer Engineering Major (BSCE) Dual Degree with Computer Science (BSCS)

Course	Title	Credit Hours
Freshman		
Fall		
ENGN 121	Introduction to Engineering and Technology ²	4
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N or CHEM 120	Foundations of Chemistry I Laboratory ¹ or Foundations of Chemistry I Laboratory for Online Degree Programs	1
MATH 211	Calculus I (Grade of C or better required)	4
ENGL 110C	English Composition (Grade of C or better required)	3
Credit Hours		15
Spring		
ENGN 122	Computer Programming for Engineering ³	4
Human Creativity Way of Knowing		3
MATH 212	Calculus II (Grade of C or better required)	4
PHYS 231N	University Physics I	4
Credit Hours		15
Sophomore		
Fall		
MATH 307 or MATH 280	Ordinary Differential Equations or Transfer Credit for Ordinary Differential Equations	3
ECE 201	Circuit Analysis I	3
PHYS 232N	University Physics II	4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
ECE 250	Object-Oriented Programming in C++ for Engineers	3
Credit Hours		16
Spring		
ECE 202	Circuit Analysis II	3
ECE 287	Fundamental Electric Circuit Laboratory	2
CS 252	Introduction to Unix for Programmers	1
CS 261	Java for Programmers	1
COMM 101R	Public Speaking	3
CS 381	Introduction to Discrete Structures	3
Human Behavior Way of Knowing		3
Credit Hours		16
Junior		
Fall		
ECE 241	Fundamentals of Computer Engineering	4

ECE 302 or ECE 306 or ECE 314 or ECE 350		3
CS 330	Object-Oriented Design and Programming	3
CS 390	Introduction to Theoretical Computer Science	3
CS 315	Computer Science Undergraduate Colloquium	1
Literature Way of Knowing		3
Credit Hours		17
Spring		
ECE 355	Introduction to Networks and Data Communications	3
ECE 341	Digital System Design	3
ECE 381	Introduction to Discrete-time Signal Processing	3
CS 361	Data Structures and Algorithms	3
CS 450 or CS 418	Database Concepts or Web Programming	3
Credit Hours		15
Senior		
Fall		
MATH 316	Introductory Linear Algebra	3
ECE 304	Probability, Statistics, and Reliability ⁴	3
CS 350	Introduction to Software Engineering	3
ENMA 480	Ethics and Philosophy in Engineering Applications ⁵	3
ECE Technical Elective I ⁶		3
Credit Hours		15
Spring		
ECE 346	Microcontrollers ⁷	3
CS 417	Computational Methods and Software	3
CS 355	Principles of Programming Languages	3
CS Upper Level Elective I		3
Interpreting the Past Way of Knowing		3
Credit Hours		15
Fifth Year		
Fall		
ECE 342	Field Programmable Gate Arrays Design Laboratory	2
ECE 481W	Preparatory ECE Senior Design (Grade of C or better required to meet the University Writing Intensive requirement)	3
ECE 443	Computer Architecture ⁸	3
CS 410	Professional Workforce Development I	3
CS Upper Level Elective II		3
Credit Hours		14
Spring		
ECE 482	ECE Senior Design	3
CS 471	Operating Systems	3

CS 411W	Professional Workforce Development II (Grade of C or better required to meet the University Writing Intensive requirement)	3
CS Upper Level Elective III		3
ECE Technical Elective II ⁶		3
Credit Hours		15
Total Credit Hours		153

- * Does not include the University's General Education language and culture requirement. Additional hours may be required.
- 1 CHEM 120 is for online program students only.
- 2 ENGN 121 satisfies the Computer Science Information Literacy & Research requirement.
- 3 ENGN 122 satisfies the Introduction to Programming requirement in the Computer Science curriculum.
- 4 ECE 304 satisfies the STAT 330 requirement in Computer Science curriculum
- 5 ENMA 480 satisfies the Computer Science Philosophy & Ethics requirement.
- 6 Computer Engineering students pursuing the dual degree with Computer Science have two remaining ECE 400-level Technical Elective courses.
- 7 ECE 346 satisfies the CS 170 requirement in Computer Science curriculum.
- 8 ECE 443 satisfies the CS 270 requirement in Computer Science curriculum.

The General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met through the major. The upper-division General Education requirement is met through a built-in minor in computer science and through the completion of a second major/degree.

Computer engineering and computer science majors must earn a grade of C or better in all 200-level ECE courses and all CS courses prior to taking the next course in the sequence.

Any ECE course registration issues are to be resolved with the ECE Academic Coordinator and Program Manager.

The five-year plan is a suggested curriculum to complete this degree program in five years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Computer Engineering Major (BSCE) Dual Degree with Cyber Operations Major (BS Cybersecurity)

Course	Title	Credit Hours
Freshman		
Fall		
ENGN 121	Introduction to Engineering and Technology ²	4
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N or CHEM 120	Foundations of Chemistry I Laboratory ¹ or Foundations of Chemistry I Laboratory for Online Degree Programs	1
MATH 211	Calculus I (Grade of C or better required)	4

ENGL 110C	English Composition (Grade of C or better required)	3
Credit Hours		15
Spring		
ENGN 122	Computer Programming for Engineering ³	4
MATH 212	Calculus II (Grade of C or better required)	4
COMM 101R	Public Speaking	3
PHYS 231N	University Physics I	4
Credit Hours		15
Sophomore		
Fall		
MATH 307 or MATH 280	Ordinary Differential Equations or Transfer Credit for Ordinary Differential Equations	3
ECE 201	Circuit Analysis I	3
ECE 241	Fundamentals of Computer Engineering	4
PHYS 232N	University Physics II	4
ECE 250	Object-Oriented Programming in C++ for Engineers	3
Credit Hours		17
Spring		
ECE 202	Circuit Analysis II	3
ECE 287	Fundamental Electric Circuit Laboratory	2
CYSE 200T	Cybersecurity, Technology, and Society	3
CS 261	Java for Programmers	1
CS 252	Introduction to Unix for Programmers	1
CS 381	Introduction to Discrete Structures	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Credit Hours		16
Junior		
Fall		
ECE 302 or ECE 306 or ECE 314 or ECE 350		3
ECE 355	Introduction to Networks and Data Communications	3
ECE 341	Digital System Design	3
CS 361	Data Structures and Algorithms	3
CRJS 215S or SOC 201S	Introduction to Criminology or Introduction to Sociology	3
Credit Hours		15
Spring		
ECE 304	Probability, Statistics, and Reliability	3
ECE 346	Microcontrollers ⁴	3
ECE 381	Introduction to Discrete-time Signal Processing	3

CS 350 or CS 330	Introduction to Software Engineering or Object-Oriented Design and Programming	3
ECE 342	Field Programmable Gate Arrays Design Laboratory	2
ENMA 480	Ethics and Philosophy in Engineering Applications	3
Credit Hours		17
Senior		
Fall		
ECE 481W	Preparatory ECE Senior Design (Grade of C or better required to meet the University Writing Intensive requirement)	3
ECE 443	Computer Architecture ⁵	3
CYSE 301	Cybersecurity Techniques and Operations	3
CS 471	Operating Systems	3
Credit Hours		12
Spring		
ECE 482	ECE Senior Design	3
ECE 419	Cyber Physical System Security ⁶	3
ECE 455	Network Engineering and Design ⁶	3
CYSE 406 or CRJS 406	Cyber Law or Cyber Law	3
Interpreting the Past Way of Knowing		3
Credit Hours		15
Fifth Year		
Fall		
ECE 416	Cyber Defense Fundamentals ⁶	3
CYSE 425W	Cybersecurity Strategy and Policy (Grade of C or better required to meet the University Writing Intensive requirement)	3
CS 467	Introduction to Reverse Software Engineering	3
ECE 470	Foundations of Cyber Security	3
Cyber Approved Program Elective ⁷		3
Human Creativity Way of Knowing		3
Credit Hours		18
Spring		
CS 390	Introduction to Theoretical Computer Science	3
CS 466	Principles and Practice of Cyber Defense	3
CYSE 368 or CYSE 494	Cybersecurity Internship or Entrepreneurship in Cybersecurity	3
PHIL 355E	Cybersecurity Ethics	3
Literature Way of Knowing		3
Credit Hours		15
Total Credit Hours		155

* Does not include the University's General Education language and culture requirement. Additional hours may be required.

¹ CHEM 120 is for online program students only.

2 ENGN 121 satisfies the Cyber Operations Information
Literacy & Research requirement.
3 ENGN 122 satisfies the CS 150 requirement in Cyber
Operations curriculum.
4 ECE 346 satisfies the CS 170 requirement in Cyber
Operations curriculum.
5 ECE 443 satisfies the CS 270 requirement in Cyber
Operations curriculum.
6 These courses are required courses for the Cyber
Operations curriculum & ECE Technical Electives for
Computer Engineering curriculum.
7 Cyber Approval Program Elective remaining options:
CS 476, CYSE 407, ECE 483, and IT 417.

The General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met through the major. The upper-division General Education requirement is met through a built-in minor in computer science and through the completion of a second major/degree.

Computer engineering and cyber operations majors must earn a grade of C or better in all 200-level ECE courses and all CS courses prior to taking the next course in the sequence.

Any ECE course registration issues are to be resolved with the ECE Academic Coordinator and Program Manager.

The five-year plan is a suggested curriculum to complete this degree program in five years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Computer Engineering Major (BSCE) Dual Degree with Cybersecurity Major (BS Cybersecurity)

Course	Title	Credit Hours
Freshman		
Fall		
ENGN 121	Introduction to Engineering and Technology ²	4
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N or CHEM 120	Foundations of Chemistry I Laboratory ¹ or Foundations of Chemistry I Laboratory for Online Degree Programs	1
MATH 211	Calculus I (Grade of C or better required)	4
ENGL 110C	English Composition (Grade of C or better required)	3
Credit Hours		15
Spring		
ENGN 122	Computer Programming for Engineering	4
MATH 212	Calculus II (Grade of C or better required)	4
COMM 101R	Public Speaking	3
PHYS 231N	University Physics I	4
Credit Hours		15

Sophomore		
Fall		
MATH 307 or MATH 280	Ordinary Differential Equations or Transfer Credit for Ordinary Differential Equations	3
ECE 201	Circuit Analysis I	3
ECE 241	Fundamentals of Computer Engineering	4
PHYS 232N	University Physics II	4
ECE 250	Object-Oriented Programming in C++ for Engineers	3
Credit Hours		17
Spring		
ECE 202	Circuit Analysis II	3
ECE 287	Fundamental Electric Circuit Laboratory	2
CYSE 200T	Cybersecurity, Technology, and Society	3
CS 252	Introduction to Unix for Programmers	1
CS 261	Java for Programmers	1
CS 381	Introduction to Discrete Structures	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Credit Hours		16
Junior		
Fall		
ECE 302 or ECE 306 or ECE 314 or ECE 350		3
ECE 341	Digital System Design	3
CS 361	Data Structures and Algorithms	3
CYSE 201S	Cybersecurity and the Social Sciences	3
CYSE 250	Basic Cybersecurity Programming and Networking	3
Credit Hours		15
Spring		
ECE 304	Probability, Statistics, and Reliability	3
ECE 342	Field Programmable Gate Arrays Design Laboratory	2
ECE 346	Microcontrollers	3
ECE 381	Introduction to Discrete-time Signal Processing	3
CS 350 or CS 330	Introduction to Software Engineering or Object-Oriented Design and Programming	3
CRJS 215S or SOC 201S	Introduction to Criminology (Human Behavior Way of Knowing) ³ or Introduction to Sociology	3
Credit Hours		17

Senior		
Fall		
ECE 481W	Preparatory ECE Senior Design (Grade of C or better required to meet the University Writing Intensive requirement)	3
ECE 443	Computer Architecture	3
ECE 355	Introduction to Networks and Data Communications	3
ECE 452	Introduction to Wireless Communication Networks ⁴	3
CYSE 301	Cybersecurity Techniques and Operations	3
Credit Hours		15
Spring		
ECE 482	ECE Senior Design	3
ECE 419	Cyber Physical System Security ⁴	3
ECE 455	Network Engineering and Design ⁴	3
CS 471	Operating Systems	3
CYSE 406 or CRJS 406	Cyber Law or Cyber Law	3
Interpreting the Past Way of Knowing		3
Credit Hours		18
Fifth Year		
Fall		
ECE 416	Cyber Defense Fundamentals ⁴	3
CYSE 300	Introduction to Cybersecurity	3
CS 462	Cybersecurity Fundamentals	3
PHIL 355E	Cybersecurity Ethics	3
IDS 300W	Interdisciplinary Theory and Concepts (Grade of C or better required to meet the University Writing Intensive requirement)	3
Human Creativity Way of Knowing		3
Credit Hours		18
Spring		
IDS 493	IDS Electronic Portfolio Project	3
CYSE 368 or CYSE 494	Cybersecurity Internship or Entrepreneurship in Cybersecurity	3
CYSE 425W or POLS 425W	Cybersecurity Strategy and Policy (Grade of C or better required to meet the University Writing Intensive requirement) or Cybersecurity Strategy and Policy	3
ENMA 480	Ethics and Philosophy in Engineering Applications	3
Literature Way of Knowing		3
Credit Hours		15
Total Credit Hours		161

* Does not include the University's General Education language and culture requirement. Additional hours may be required.

¹ CHEM 120 is for online program students only.

² ENGN 121 satisfies the Cybersecurity Information Literacy & Research requirement.

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³ CRJS 215S or SOC 201S satisfies the University's Human Behavior Way of Knowing requirement.

⁴ These courses are required courses for Cybersecurity curriculum (satisfying 2 Principles & 2 Application Courses) & ECE Technical Electives for Computer Engineering curriculum.

The General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met through the major. The upper-division General Education requirement is met through a built-in minor in computer science and through the completion of a second major/degree.

Computer engineering and cybersecurity majors must earn a grade of C or better in all 200-level ECE courses and all CS courses prior to taking the next course in the sequence.

Any ECE course registration issues are to be resolved with the ECE Academic Coordinator and Program Manager.

The five-year plan is a suggested curriculum to complete this degree program in five years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Electrical Engineering (BSEE) Dual Major/Degree with Computer Engineering Major (BSCE)

Course	Title	Credit Hours
Freshman		
Fall		
ENGN 121	Introduction to Engineering and Technology	4
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N or CHEM 120	Foundations of Chemistry I Laboratory ** or Foundations of Chemistry I Laboratory for Online Degree Programs	1
MATH 211	Calculus I (Grade of C or better required)	4
ENGL 110C	English Composition (Grade of C or better required)	3
Credit Hours		15
Spring		
ENGN 122	Computer Programming for Engineering	4
MATH 212	Calculus II (Grade of C or better required)	4
COMM 101R	Public Speaking	3
PHYS 231N	University Physics I	4
Credit Hours		15
Sophomore		
Fall		
MATH 307 or MATH 280	Ordinary Differential Equations or Transfer Credit for Ordinary Differential Equations	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3

ECE 201	Circuit Analysis I	3
PHYS 232N	University Physics II	4
CS 381	Introduction to Discrete Structures	3
Human Creativity Way of Knowing		3
Credit Hours		19
Spring		
ECE 202	Circuit Analysis II	3
ECE 287	Fundamental Electric Circuit Laboratory	2
ECE 241	Fundamentals of Computer Engineering	4
CS 252	Introduction to Unix for Programmers	1
ECE 250	Object-Oriented Programming in C++ for Engineers	3
MATH 312 or MATH 285	Calculus III or Transfer Credit for Calculus III	4
Credit Hours		17
Junior		
Fall		
ECE 302	Linear System Analysis	3
ECE 304	Probability, Statistics, and Reliability	3
ECE 461	Automatic Control Systems	3
ECE 341	Digital System Design	3
CS 261	Java for Programmers	1
Interpreting the Past Way of Knowing		3
Credit Hours		16
Spring		
ECE 303	Introduction to Electrical Power	3
ECE 313	Electronic Circuits	4
ECE 346	Microcontrollers	3
ECE 381	Introduction to Discrete-time Signal Processing	3
CS 361	Data Structures and Algorithms	3
ECE 451	Communication Systems	3
Credit Hours		19
Senior		
Fall		
ECE 342	Field Programmable Gate Arrays Design Laboratory	2
ECE 323	Electromagnetics	3
ECE 481W	Preparatory ECE Senior Design (Grade of C or better required)	3
ECE 443	Computer Architecture	3
ECE 332	Microelectronic Materials and Processes	3
ECE 355	Introduction to Networks and Data Communications	3
Credit Hours		17
Spring		
ECE 482	ECE Senior Design	3

CS 350 or CS 330	Introduction to Software Engineering or Object-Oriented Design and Programming	3
CS 471	Operating Systems	3
ENMA 480	Ethics and Philosophy in Engineering Applications	3
Human Behavior Way of Knowing		3
Literature Way of Knowing		3
Credit Hours		18
Total Credit Hours		136

- * Does not include the University's General Education language and culture requirement. Additional hours may be required.
- ** CHEM 120 is for online program students only.

The General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met through the major. The upper-division General Education requirement is met through a built-in minor in computer science and through the completion of a second major/degree.

Electrical & Computer engineering majors must earn a grade of C or better in all 200-level ECE courses and all CS courses prior to taking the next course in the sequence.

Any ECE course registration issues are to be resolved with the ECE Academic Coordinator and Program Manager. Students must have a 3.00 GPA or better and must obtain approval from their advisor and college dean to register for more than 18 hours in a semester.

The five-year plan is a suggested curriculum to complete this degree program in five years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Students seeking two degrees must complete a minimum of 150 credit hours.

Modeling & Simulation Engineering Major (BSCE) Dual Degree with Computer Science (BSCS)

Course	Title	Credit Hours
Freshman		
Fall		
ENGN 121	Introduction to Engineering and Technology ²	4
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N or CHEM 120	Foundations of Chemistry I Laboratory ¹ or Foundations of Chemistry I Laboratory for Online Degree Programs	1
MATH 211	Calculus I (Grade of C or better required)	4
ENGL 110C	English Composition (Grade of C or better required)	3
Credit Hours		15
Spring		
ENGN 122	Computer Programming for Engineering ³	4
MATH 212	Calculus II (Grade of C or better required)	4

PHYS 231N	University Physics I	4
Human Creativity Way of Knowing		3
Credit Hours		15
Sophomore		
Fall		
MATH 307 or MATH 280	Ordinary Differential Equations or Transfer Credit for Ordinary Differential Equations	3
ECE 201	Circuit Analysis I	3
PHYS 232N	University Physics II	4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
ECE 250	Object-Oriented Programming in C++ for Engineers	3
Credit Hours		16
Spring		
ECE 202	Circuit Analysis II	3
ECE 287	Fundamental Electric Circuit Laboratory	2
CS 261	Java for Programmers	1
CS 252	Introduction to Unix for Programmers	1
CS 381	Introduction to Discrete Structures	3
COMM 101R	Public Speaking	3
Human Behavior Way of Knowing		3
Credit Hours		16
Junior		
Fall		
ECE 241	Fundamentals of Computer Engineering	4
ECE 302	Linear System Analysis	3
CS 330	Object-Oriented Design and Programming	3
CS 390	Introduction to Theoretical Computer Science	3
CS 315	Computer Science Undergraduate Colloquium	1
Literature Way of Knowing		3
Credit Hours		17
Spring		
ECE 381	Introduction to Discrete-time Signal Processing	3
ECE 341	Digital System Design	3
ECE 304	Probability, Statistics, and Reliability ⁴	3
CS 361	Data Structures and Algorithms	3
CS 450 or CS 418	Database Concepts or Web Programming	3
Credit Hours		15
Senior		
Fall		
MATH 316	Introductory Linear Algebra	3

ECE 306	Discrete System Modeling and Simulation	3
CS 350	Introduction to Software Engineering	3
ENMA 480	Ethics and Philosophy in Engineering Applications ⁵	3
ECE Technical Elective I ⁶		3
Credit Hours		15
Spring		
ECE 320	Continuous System Modeling and Simulation	3
ECE 346	Microcontrollers ⁷	3
ECE 348	Simulation Software Design	3
CS 417	Computational Methods and Software	3
CS 355	Principles of Programming Languages	3
CS Upper Level Elective I		3
Credit Hours		18
Fifth Year		
Fall		
ECE 481W	Preparatory ECE Senior Design (Grade of C or better required to meet the University Writing Intensive requirement)	3
ECE 406	Computer Graphics and Visualization	3
ECE 443	Computer Architecture ⁸	3
ENMA 410	Agile Project Management	3
CS 410	Professional Workforce Development I	3
CS Upper Level Elective II		3
Credit Hours		18
Spring		
ECE 482	ECE Senior Design	3
CS 471	Operating Systems	3
CS 411W	Professional Workforce Development II (Grade of C or better required to meet the University Writing Intensive requirement)	3
CS Upper Level Elective III		3
Interpreting the Past Way of Knowing		3
Credit Hours		15
Total Credit Hours		160

- * Does not include the University's General Education language and culture requirement. Additional hours may be required.
- 1 CHEM 120 is for online program students only.
- 2 ENGN 121 satisfies the Computer Science Information Literacy & Research requirement.
- 3 ENGN 122 satisfies the Introduction to Programming requirement in the Computer Science curriculum.
- 4 ECE 304 satisfies the STAT 330 requirement in Computer Science curriculum
- 5 ENMA 480 satisfies the Computer Science Philosophy & Ethics requirement.
- 6 Computer Engineering - Modeling & Simulation Engineering Major students pursuing the dual degree with

7	Computer Science have one remaining ECE 400-level Technical Elective course.
8	ECE 346 satisfies the CS 170 requirement in Computer Science curriculum.
	ECE 443 satisfies the CS 270 requirement in Computer Science curriculum.

The General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met through the major. The upper-division General Education requirement is met through a built-in minor in computer science and through the completion of a second major/degree.

Modeling & Simulation Engineering and Computer Science majors must earn a grade of C or better in all 200-level ECE courses and all CS courses prior to taking the next course in the sequence.

Any ECE course registration issues are to be resolved with the ECE Academic Coordinator and Program Manager.

The five-year plan is a suggested curriculum to complete this degree program in five years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Linked Bachelor's/Master's Degree Programs

Linked Bachelor's/Master's programs are designed to allow qualified students to secure a space in a master's program available in the Frank Batten College of Engineering and Technology while they are still pursuing their undergraduate degrees. An eligible student can choose a master's program in the same discipline as his/her bachelor's program or in a complementary discipline. Subject to the approval of the undergraduate and graduate program directors, a student enrolled in a linked program can count up to six credit hours of course work towards both the undergraduate and the graduate degrees. Full-time students may be able to complete the requirements for the bachelor's degree in four years and the master's degree in one additional year. Students in linked programs must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Students who are matriculated in an undergraduate major in the Frank Batten College of Engineering and Technology with a GPA of at least 3.00 overall and 3.00 in the major are eligible to apply for admission to a Linked Bachelor's/Master's program. Transfer students who desire to be admitted to a linked program at the time they join an undergraduate major at Old Dominion University are eligible to apply if their overall GPA at their previous institution is 3.25 or higher. Prerequisite courses may be required for engineering technology majors to pursue a master's degree in engineering.

Continuance in a Linked Bachelor's/Master's program requires maintenance of a GPA of 3.00 or higher overall and in the major.

Linked Bachelor-to-PhD Programs

For a select number of exceptionally well-qualified students, the college has established a linked doctoral program that enables students to be admitted directly into the PhD program upon completion of the baccalaureate degree. A select number of exceptionally well-qualified students can be admitted to the Bachelor/PhD program in their junior year while they are pursuing one of the undergraduate programs at Old Dominion University. This program encourages admitted students to work closely with faculty members and pursue a research experience. Just as in the Linked Bachelor/Masters program, six credit hours of graduate course work may again be counted towards the undergraduate degree and doctoral course work mentioned above for the Bachelor/PhD program. For linked bachelor's to doctoral programs, students must earn a minimum of 198 credit hours (120 discrete credit hours for the undergraduate degree and 78 discrete credit hours for the

graduate degree). Students in these programs must maintain a GPA of 3.50 or better throughout their bachelor's and doctoral studies.

The student may opt to obtain the master's degree along the way to the doctorate. To obtain the master's degree, the student must utilize the six graduate credits obtained as part of their undergraduate program, use 18 credits of the graduate course work that is part of the PhD, and work with the Graduate Program Director to plan the final 6 credits.

Minor Computer Engineering Minor

Lee Belfore, Minor Coordinator

An undergraduate minor in computer engineering may be obtained by successful completion of 13 or more semester credit hours of approved electrical or computer engineering or computer science course work at the 200, 300 or 400 level. In addition, a student seeking a minor in computer engineering must satisfy all pre- or corequisite requirements for the courses selected. CS 150 (or CS 151 or CS 153) or ENGN 122, CS 250 (or CS 251 or CS 253 or (ECE 250 and CS 261)), and CS 252 are prerequisites for the minor and are not included in the calculation of the GPA for the minor. The chief departmental advisor must approve the precise course of study.

Requirements

The basic course requirements are as follows:

ECE 241	Fundamentals of Computer Engineering	4
CS 361	Data Structures and Algorithms	3
Select two of the following: *		6
ECE 341	Digital System Design	
ECE 346	Microcontrollers	
ECE 355	Introduction to Networks and Data Communications	
ECE 381	Introduction to Discrete-time Signal Processing **	
ECE 406	Computer Graphics and Visualization	
ECE 407	Introduction to Game Development	
ECE 441	Advanced Digital Design and Field Programmable Gate Arrays	
ECE 455	Network Engineering and Design	
ECE 483	Embedded Systems	
Total Credit Hours		13

* Course substitutions may be approved by the chief departmental advisor.

** Class not permitted for Electrical Engineering majors due to being a requirement in the major.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses (except for ECE 241), prerequisites and corequisites and complete a minimum of six hours of upper-division courses in the minor through courses offered by Old Dominion University. Completion of a minor in computer engineering with a GPA of 3.00 or greater partially satisfies the leveling requirements for graduate degrees in computer engineering.

Bachelor of Science in Computer Engineering

Computer Engineering with a Major in Modeling & Simulation Engineering (BSCE)

Lee A. Belfore II, Chief Departmental Advisor

The computer engineering undergraduate degree program, available in both synchronous online and face-to-face formats, is designed to provide both a broad engineering background and a comprehensive foundation in the technical principles underlying the computer area. Students develop a background through course work in mathematics, the basic sciences, and general engineering. The technical core consists of course work from electrical engineering to address hardware aspects of computer engineering and course work from computer science to address software aspects.

There are two majors available in the Bachelor of Science in Computer Engineering degree: Computer Engineering major and Modeling & Simulation Engineering major. Adequate elective freedom is available to students in each major. The Computer Engineering major has a built-in minor in computer science, and four technical electives allow for specialization in one or more of four additional areas: computer hardware systems, computer networks, cyber security, or data analytics engineering. The Modeling and Simulation major allows students to select three technical elective courses. In addition, course work in General Education Skills and Ways of Knowing is required to assure a well-rounded program of study.

Students pursuing a Bachelor of Science in Computer Engineering degree (BSCE) are intended in their degree until Engineering Fundamental/foundational courses (I.E. Calculus I & II, Calculus-based University Physics I, Programming I, Chemistry I, and Engineering introductory courses) are completed.

Computer Engineering Program Educational Objectives

The computer engineering program seeks to prepare graduates who, after the first few years of their professional career, have:

1. established themselves as practicing engineering professionals in industry or government, or engaged in graduate study
2. demonstrated their ability to work successfully as members of a professional team and function effectively as responsible professionals
3. demonstrated their ability to adapt to new technology and career challenges.

Student Outcomes

The computer engineering student outcomes are as follows. Graduates must attain:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Accreditation

The Bachelor of Science in Computer Engineering is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>. (<http://www.abet.org>)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

The General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met through the major.

Upper-Division General Education

- Option A. Approved Minor, 12-24 credit hours; also second degree or second major
- Option B. Interdisciplinary Minor; 12 credit hours, (3 credit hours may be in the major area of study)
- Option C. An approved certification program such as teaching licensure (hours vary)
- Option D. Two Upper-Division Courses (6 credit hours) from outside the College of Engineering and Technology and are not required by the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.

- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Computer Engineering with a Major in Modeling & Simulation Engineering

James Leathrum Jr., Program Advisor and Coordinator

Computer Engineering-Modeling & Simulation Engineering majors must earn a grade of C or better in all 200-level ECE courses and all CS courses prior to taking the next course in the sequence.

Any ECE course registration issues are to be resolved with the ECE Academic Coordinator and Program Manager.

General Education

Complete lower-division requirements 33-39

Complete upper-division requirements (minimum of 6 credit hours) 6

Modeling & Simulation Engineering Major

Complete modeling and simulation engineering departmental and major requirements as shown on the degree program guide 83

Total Credit Hours 122-128

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Computer Engineering with a Major in Modeling & Simulation Engineering (BSCE)

Course	Title	Credit Hours
Freshman		
Fall		
ENGN 121	Introduction to Engineering and Technology	4
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N or CHEM 120	Foundations of Chemistry I Laboratory ** or Foundations of Chemistry I Laboratory for Online Degree Programs	1
MATH 211	Calculus I (Grade of C or better required)	4
ENGL 110C	English Composition (Grade of C or better required)	3
Credit Hours		15
Spring		
ENGN 122	Computer Programming for Engineering	4
MATH 212	Calculus II (Grade of C or better required)	4
COMM 101R	Public Speaking	3
PHYS 231N	University Physics I	4
Credit Hours		15

Sophomore

Fall		
MATH 307 or MATH 280	Ordinary Differential Equations or Transfer Credit for Ordinary Differential Equations	3
ECE 201	Circuit Analysis I	3
ECE 241	Fundamentals of Computer Engineering	4
PHYS 232N	University Physics II	4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Credit Hours		17

Spring		
ECE 202	Circuit Analysis II	3
ECE 287	Fundamental Electric Circuit Laboratory	2
ECE 250	Object-Oriented Programming in C++ for Engineers	3
CS 381	Introduction to Discrete Structures	3
Literature Way of Knowing		3
Credit Hours		14

Junior		
Fall		
CS 261	Java for Programmers	1
ECE 302	Linear System Analysis	3
ECE 341	Digital System Design	3
ECE 306	Discrete System Modeling and Simulation	3
ECE 304	Probability, Statistics, and Reliability	3
Interpreting the Past Way of Knowing		3
Credit Hours		16

Spring		
ECE 346	Microcontrollers	3
ECE 348	Simulation Software Design	3
ECE 320	Continuous System Modeling and Simulation	3
ECE 381	Introduction to Discrete-time Signal Processing	3
Human Creativity Way of Knowing		3
Credit Hours		15

Senior		
Fall		
ECE 481W	Preparatory ECE Senior Design (Grade of C or better required)	3
ECE 406	Computer Graphics and Visualization	3
Technical Elective ***		3
ENMA 480	Ethics and Philosophy in Engineering Applications	3
Upper-Division General Education course		3
Credit Hours		15

Spring		
ECE 482	ECE Senior Design	3
Technical Elective ***		3
ENMA 410	Agile Project Management	3
Human Behavior Way of Knowing		3
Upper-Division General Education course		3
Credit Hours		15
Total Credit Hours		122

* Does not include the University's General Education language and culture requirement. Additional hours may be required.

** CHEM 120 is for online program students only.

*** Computer Engineering-Modeling and Simulation Engineering major students need two technical elective courses selected from one of two options: (1) two 400-level ECE technical elective courses or (2) one 400-level ECE technical elective course and one 300-level ECE technical elective course or one approved 300- or 400-level CS/MATH/Engineering course.

Electrical Engineering (BSEE) Dual Major/Degree with Modeling & Simulation Engineering Major (BSCE)

Course	Title	Credit Hours
Freshman		
Fall		
ENGN 121	Introduction to Engineering and Technology	4
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N or CHEM 120	Foundations of Chemistry I Laboratory ** or Foundations of Chemistry I Laboratory for Online Degree Programs	1
MATH 211	Calculus I (Grade of C or better required)	4
ENGL 110C	English Composition (Grade of C or better required)	3
Credit Hours		15
Spring		
MATH 212	Calculus II (Grade of C or better required)	4
ENGN 122	Computer Programming for Engineering	4
PHYS 231N	University Physics I	4
COMM 101R	Public Speaking	3
Credit Hours		15
Sophomore		
Fall		
MATH 307 or MATH 280	Ordinary Differential Equations or Transfer Credit for Ordinary Differential Equations	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3

ECE 201	Circuit Analysis I	3
PHYS 232N	University Physics II	4
CS 381	Introduction to Discrete Structures	3
Human Creativity Way of Knowing		3

Credit Hours		19

Spring		
ECE 202	Circuit Analysis II	3
ECE 287	Fundamental Electric Circuit Laboratory	2
ECE 241	Fundamentals of Computer Engineering	4
ECE 250	Object-Oriented Programming in C++ for Engineers	3
MATH 312 or MATH 285	Calculus III or Transfer Credit for Calculus III	4

Credit Hours		16

Junior		
Fall		
ECE 302	Linear System Analysis	3
ECE 304	Probability, Statistics, and Reliability	3
ECE 341	Digital System Design	3
ECE 461	Automatic Control Systems	3
CS 261	Java for Programmers	1
Interpreting the Past Way of Knowing		3
Credit Hours		16

Spring		
ECE 313	Electronic Circuits	4
ECE 346	Microcontrollers	3
ECE 451	Communication Systems	3
ECE 381	Introduction to Discrete-time Signal Processing	3
ECE 306	Discrete System Modeling and Simulation	3
ECE 320	Continuous System Modeling and Simulation	3

Credit Hours		19

Senior		
Fall		
ECE 323	Electromagnetics	3
ECE 481W	Preparatory ECE Senior Design (Grade of C or better required)	3
ECE 303	Introduction to Electrical Power	3
ECE 406	Computer Graphics and Visualization	3
ECE 348	Simulation Software Design	3
ECE 332	Microelectronic Materials and Processes	3

Credit Hours		18

Spring		
ECE 482	ECE Senior Design	3
ENMA 480	Ethics and Philosophy in Engineering Applications	3

ENMA 410	Agile Project Management	3
Technical Elective ***		3
Literature Way of Knowing		3
Human Behavior Way of Knowing		3
Credit Hours		18
Total Credit Hours		136

- * Does not include the University's General Education language and culture requirement. Additional hours may be required.
- ** CHEM 120 is for online program students only.
- *** Electrical & Computer Engineering students pursuing the double major/degree need their final technical elective course to be a 400-level ECE technical elective course.

The General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met through the major. The upper-division General Education requirement is met through the completion of a second major/degree.

Electrical & Computer engineering majors must earn a grade of C or better in all 200-level ECE courses and all CS courses prior to taking the next course in the sequence.

Any ECE course registration issues are to be resolved with the ECE Academic Coordinator and Program Manager. Students must have a 3.00 GPA or better and must obtain approval from their advisor and college dean to register for more than 18 hours in a semester.

The four-year plan is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Students seeking two degrees must complete a minimum of 150 credit hours.

Modeling & Simulation Engineering Major (BSCE) Dual Degree with Computer Science (BSCS)

Course	Title	Credit Hours
Freshman		
Fall		
ENGN 121	Introduction to Engineering and Technology ²	4
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N or CHEM 120	Foundations of Chemistry I Laboratory ¹ or Foundations of Chemistry I Laboratory for Online Degree Programs	1
MATH 211	Calculus I (Grade of C or better required)	4
ENGL 110C	English Composition (Grade of C or better required)	3
Credit Hours		15
Spring		
ENGN 122	Computer Programming for Engineering ³	4
MATH 212	Calculus II (Grade of C or better required)	4
PHYS 231N	University Physics I	4

Human Creativity Way of Knowing		3
Credit Hours		15
Sophomore		
Fall		
MATH 307 or MATH 280	Ordinary Differential Equations or Transfer Credit for Ordinary Differential Equations	3
ECE 201	Circuit Analysis I	3
PHYS 232N	University Physics II	4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
ECE 250	Object-Oriented Programming in C++ for Engineers	3
Credit Hours		16
Spring		
ECE 202	Circuit Analysis II	3
ECE 287	Fundamental Electric Circuit Laboratory	2
CS 261	Java for Programmers	1
CS 252	Introduction to Unix for Programmers	1
CS 381	Introduction to Discrete Structures	3
COMM 101R	Public Speaking	3
Human Behavior Way of Knowing		3
Credit Hours		16

Junior		
Fall		
ECE 241	Fundamentals of Computer Engineering	4
ECE 302	Linear System Analysis	3
CS 330	Object-Oriented Design and Programming	3
CS 390	Introduction to Theoretical Computer Science	3
CS 315	Computer Science Undergraduate Colloquium	1
Literature Way of Knowing		3
Credit Hours		17
Spring		
ECE 381	Introduction to Discrete-time Signal Processing	3
ECE 341	Digital System Design	3
ECE 304	Probability, Statistics, and Reliability ⁴	3
CS 361	Data Structures and Algorithms	3
CS 450 or CS 418	Database Concepts or Web Programming	3
Credit Hours		15
Senior		
Fall		
MATH 316	Introductory Linear Algebra	3

ECE 306	Discrete System Modeling and Simulation	3
CS 350	Introduction to Software Engineering	3
ENMA 480	Ethics and Philosophy in Engineering Applications ⁵	3
ECE Technical Elective I ⁶		3
Credit Hours		15
Spring		
ECE 320	Continuous System Modeling and Simulation	3
ECE 346	Microcontrollers ⁷	3
ECE 348	Simulation Software Design	3
CS 417	Computational Methods and Software	3
CS 355	Principles of Programming Languages	3
CS Upper Level Elective I		3
Credit Hours		18
Fifth Year		
Fall		
ECE 481W	Preparatory ECE Senior Design (Grade of C or better required to meet the University Writing Intensive requirement)	3
ECE 406	Computer Graphics and Visualization	3
ECE 443	Computer Architecture ⁸	3
ENMA 410	Agile Project Management	3
CS 410	Professional Workforce Development I	3
CS Upper Level Elective II		3
Credit Hours		18
Spring		
ECE 482	ECE Senior Design	3
CS 471	Operating Systems	3
CS 411W	Professional Workforce Development II (Grade of C or better required to meet the University Writing Intensive requirement)	3
CS Upper Level Elective III		3
Interpreting the Past Way of Knowing		3
Credit Hours		15
Total Credit Hours		160

- * Does not include the University's General Education language and culture requirement. Additional hours may be required.
- 1 CHEM 120 is for online program students only.
- 2 ENGN 121 satisfies the Computer Science Information Literacy & Research requirement.
- 3 ENGN 122 satisfies the Introduction to Programming requirement in the Computer Science curriculum.
- 4 ECE 304 satisfies the STAT 330 requirement in Computer Science curriculum
- 5 ENMA 480 satisfies the Computer Science Philosophy & Ethics requirement.
- 6 Computer Engineering - Modeling & Simulation Engineering Major students pursuing the dual degree with

591 Computer Engineering with a Major in Modeling & Simulation Engineering (BSCE)

Computer Science have one remaining ECE 400-level Technical Elective course.

7 ECE 346 satisfies the CS 170 requirement in Computer Science curriculum.

8 ECE 443 satisfies the CS 270 requirement in Computer Science curriculum.

The General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met through the major. The upper-division General Education requirement is met through a built-in minor in computer science and through the completion of a second major/degree.

Modeling & Simulation Engineering and Computer Science majors must earn a grade of C or better in all 200-level ECE courses and all CS courses prior to taking the next course in the sequence.

Any ECE course registration issues are to be resolved with the ECE Academic Coordinator and Program Manager.

The five-year plan is a suggested curriculum to complete this degree program in five years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Linked Bachelor's/Master's Degree Programs

Linked Bachelor's/Master's programs are designed to allow qualified students to secure a space in a master's program available in the Frank Batten College of Engineering and Technology while they are still pursuing their undergraduate degrees. An eligible student can choose a master's program in the same discipline as his/her bachelor's program or in a complementary discipline. Subject to the approval of the undergraduate and graduate program directors, a student enrolled in a linked program can count up to six credit hours of course work towards both the undergraduate and the graduate degrees. Full-time students may be able to complete the requirements for the bachelor's degree in four years and the master's degree in one additional year. Students in linked programs must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Students who are matriculated in an undergraduate major in the Frank Batten College of Engineering and Technology with a GPA of at least 3.00 overall and 3.00 in the major are eligible to apply for admission to a Linked Bachelor's/Master's program. Transfer students who desire to be admitted to a linked program at the time they join an undergraduate major at Old Dominion University are eligible to apply if their overall GPA at their previous institution is 3.25 or higher. Prerequisite courses may be required for engineering technology majors to pursue a master's degree in engineering.

Continuance in a Linked Bachelor's/Master's program requires maintenance of a GPA of 3.00 or higher overall and in the major.

Linked Bachelor-to-PhD Programs

For a select number of exceptionally well-qualified students, the college has established a linked doctoral program that enables students to be admitted directly into the PhD program upon completion of the baccalaureate degree. A select number of exceptionally well-qualified students can be admitted to the Bachelor/PhD program in their junior year while they are pursuing one of the undergraduate programs at Old Dominion University. This program encourages admitted students to work closely with faculty members and pursue a research experience. Just as in the Linked Bachelor/Masters program, six credit hours of graduate course work may again be counted towards the undergraduate degree and doctoral course work mentioned above for the Bachelor/PhD program. For linked bachelor's to doctoral programs, students must earn a minimum of 198 credit hours (120 discrete credit hours for the undergraduate degree and 78 discrete credit hours for the

graduate degree). Students in these programs must maintain a GPA of 3.50 or better throughout their bachelor's and doctoral studies.

The student may opt to obtain the master's degree along the way to the doctorate. To obtain the master's degree, the student must utilize the six graduate credits obtained as part of their undergraduate program, use 18 credits of the graduate course work that is part of the PhD, and work with the Graduate Program Director to plan the final 6 credits.

Minor

Modeling and Simulation Minor

James Leathrum, Minor Coordinator

An undergraduate minor in modeling and simulation may be obtained by successful completion of 12 or more credit hours of approved modeling and simulation engineering coursework at the 200-, 300-, and 400-level. In addition, a student seeking a minor in modeling and simulation must satisfy all pre- or corequisite requirements for the courses selected.

There are two tracks available in the minor in modeling and simulation: simulation application and simulation development. The minor coordinator must approve the precise course of study in the minor.

Requirements

The basic course requirements for the two tracks are as follows:

Simulation Application Track

STAT 330	An Introduction to Probability and Statistics (or ECE 304)	3
ECE 306	Discrete System Modeling and Simulation	3
ECE 320	Continuous System Modeling and Simulation	3
Select one of the following:		3
ECE 410	Model Engineering	
ECE 453	Analysis for Modeling and Simulation	
Total Credit Hours		12

Simulation Development Track

STAT 330	An Introduction to Probability and Statistics (or ECE 304)	3
ECE 306	Discrete System Modeling and Simulation	3
ECE 348	Simulation Software Design	3
Select one of the following:		3
ECE 406	Computer Graphics and Visualization	
ECE 407	Introduction to Game Development	
ECE 409	Introduction to Distributed Simulation	
Total Credit Hours		12

When appropriate, other course work can be developed in consultation with the minor coordinator.

For completion of the minor, a student must pass each course required for the minor, achieve a cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses, prerequisites and corequisites, complete a minimum of twelve credit hours of approved coursework for the minor, and complete at least six hours of upper-level courses in the minor requirement through courses offered by Old Dominion University. To enter the program, students must have completed calculus and one college-level computer-programming course (CS 150 or equivalent).

Bachelor of Science in Electrical Engineering

Electrical Engineering (BSEE)

Lee A. Belfore II, Chief Departmental Advisor

The electrical engineering undergraduate curriculum begins with a solid foundation in math, science, English, circuits, signals and linear systems, electronics, electromagnetics, digital systems, and microelectronics. Adequate elective freedom is available to the student to allow specialization in one or more of five areas: systems and automation engineering, physical electronics, computer hardware systems, power and renewable energy, or data analytics engineering. Emphasis is placed on understanding principles through theoretical investigation and experimental verification. In addition, course work in General Education Skills and Ways of Knowing is required to assure a well-rounded program of study.

Students pursuing a BSEE degree are intended in their degree until Engineering Fundamental/foundational courses (I.E. Calculus I & II, Calculus-based University Physics I, Programming I, Chemistry I, and Engineering introductory courses) are completed.

Electrical Engineering Program Educational Objectives

The electrical engineering program seeks to prepare graduates who, after the first few years of their professional career, have:

1. established themselves as practicing engineering professionals in industry or government, or engaged in graduate study
2. demonstrated their ability to work successfully as members of a professional team and function effectively as responsible professionals
3. demonstrated their ability to adapt to new technology and career challenges

Student Outcomes

The electrical engineering student outcomes are as follows. Graduates must attain:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. An ability to communicate effectively with a range of audiences.
4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Accreditation

The Bachelor of Science in Electrical Engineering is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>. (<http://www.abet.org>)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6

Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

The General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met through the major.

Upper-Division General Education

- Option A. Approved Minor, 12-24 credit hours; also second degree or second major
- Option B. Interdisciplinary Minor; 12 credit hours, (3 credit hours may be in the major area of study)
- Option C. An approved certification program such as teaching licensure (hours vary)
- Option D. Two Upper-Division Courses (6 credit hours) from outside the College of Engineering and Technology and are not required by the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Electrical Engineering

Electrical engineering majors must earn a grade of C or better in all 200-level ECE courses prior to taking the next course in the sequence.

Any ECE course registration issues are to be resolved with the ECE Academic Coordinator and Program Manager.

General Education

Complete lower-division requirements	33-39
Complete upper-division requirements (minimum of 6 credit hours)	6
Electrical Engineering Major	
Complete electrical engineering departmental and major requirements as shown on the degree program guide	84
Total Credit Hours	123-129

Electrical Engineering Areas of Specialization

Students in the Bachelor of Science in Electrical Engineering degree program may focus their studies in one or more specialized areas by electing to take courses in systems and automation engineering, physical electronics, computer hardware systems, power and renewable energy, or data analytics engineering.

The systems and automation engineering area requires completion of four courses selected from the following: ECE 381, ECE 451, ECE 455, ECE 458, and ECE 461.

The physical electronics area requires completion of four courses selected from the following: ECE 403, ECE 454, ECE 464, ECE 471, ECE 472, ECE 473, and ECE 474.

The computer hardware systems area requires completion of four courses selected from the following: ECE 341, ECE 346, ECE 441, ECE 443, and ECE 483.

The power and renewable energy area requires completion of four courses selected from the following: ECE 303, ECE 403, ECE 404, ECE 405, ECE 408, ECE 461, and ECE 471.

The data analytics engineering area requires completion of the following: ECE 304, ECE 346, ECE 350, ECE 445, and ECE 450.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Electrical Engineering (BSEE)*

Course	Title	Credit Hours
Freshman		
Fall		
ENGN 121	Introduction to Engineering and Technology	4
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
MATH 211	Calculus I (Grade of C or better required)	4
ENGL 110C	English Composition (Grade of C or better required)	3
Credit Hours		15
Spring		
ENGN 122	Computer Programming for Engineering	4
COMM 101R	Public Speaking	3
MATH 212	Calculus II (Grade of C or better required)	4
PHYS 231N	University Physics I	4
Credit Hours		15
Sophomore		
Fall		
MATH 307 or MATH 280	Ordinary Differential Equations or Transfer Credit for Ordinary Differential Equations	3
ECE 201	Circuit Analysis I	3

ECE 241	Fundamentals of Computer Engineering	4
PHYS 232N	University Physics II	4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Credit Hours		17
Spring		
ECE 202	Circuit Analysis II	3
ECE 287	Fundamental Electric Circuit Laboratory	2
ECE 304	Probability, Statistics, and Reliability	3
MATH 312 or MATH 285	Calculus III or Transfer Credit for Calculus III	4
Interpreting the Past Way of Knowing		3
Credit Hours		15
Junior		
Fall		
ECE 302	Linear System Analysis	3
ECE 313	Electronic Circuits	4
ECE 332	Microelectronic Materials and Processes	3
ECE 461	Automatic Control Systems	3
Human Creativity Way of Knowing		3
Credit Hours		16
Spring		
ECE 303	Introduction to Electrical Power	3
ECE 323	Electromagnetics	3
ECE 381	Introduction to Discrete-time Signal Processing	3
ECE 451	Communication Systems	3
Literature Way of Knowing		3
Credit Hours		15
Senior		
Fall		
ECE 481W	Preparatory ECE Senior Design (Grade of C or better required)	3
Technical Elective **		3
Technical Elective **		3
ENMA 480	Ethics and Philosophy in Engineering Applications	3
Upper-Division General Education course		3
Credit Hours		15
Spring		
ECE 482	ECE Senior Design	3
Technical Elective **		3
Technical Elective **		3
Human Behavior Way of Knowing		3

Upper-Division General Education course	3
Credit Hours	15

Total Credit Hours	123

- * Does not include the University's General Education language and culture requirement. Additional hours may be required.
- ** Electrical Engineering students need four technical elective courses selected from one of two options: (1) four 400-level ECE technical elective courses; (2) three 400-level ECE technical elective courses and one 300-level ECE technical elective course or one approved 300- or 400-level CS/MATH/Engineering course.

Electrical Engineering (BSEE) Dual Major/Degree with Computer Engineering Major (BSCE)*

Course	Title	Credit Hours
Freshman		
Fall		
ENGN 121	Introduction to Engineering and Technology	4
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N or CHEM 120	Foundations of Chemistry I Laboratory ** or Foundations of Chemistry I Laboratory for Online Degree Programs	1
MATH 211	Calculus I (Grade of C or better required)	4
ENGL 110C	English Composition (Grade of C or better required)	3
Credit Hours		15
Spring		
ENGN 122	Computer Programming for Engineering	4
MATH 212	Calculus II (Grade of C or better required)	4
COMM 101R	Public Speaking	3
PHYS 231N	University Physics I	4
Credit Hours		15
Sophomore		
Fall		
MATH 307 or MATH 280	Ordinary Differential Equations or Transfer Credit for Ordinary Differential Equations	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
ECE 201	Circuit Analysis I	3
PHYS 232N	University Physics II	4
CS 381	Introduction to Discrete Structures	3
Human Creativity Way of Knowing		3
Credit Hours		19
Spring		
ECE 202	Circuit Analysis II	3

ECE 287	Fundamental Electric Circuit Laboratory	2
ECE 241	Fundamentals of Computer Engineering	4
CS 252	Introduction to Unix for Programmers	1
ECE 250	Object-Oriented Programming in C++ for Engineers	3
MATH 312 or MATH 285	Calculus III or Transfer Credit for Calculus III	4
Credit Hours		17
Junior		
Fall		
ECE 302	Linear System Analysis	3
ECE 304	Probability, Statistics, and Reliability	3
ECE 461	Automatic Control Systems	3
ECE 341	Digital System Design	3
CS 261	Java for Programmers	1
Interpreting the Past Way of Knowing		3
Credit Hours		16
Spring		
ECE 303	Introduction to Electrical Power	3
ECE 313	Electronic Circuits	4
ECE 346	Microcontrollers	3
ECE 381	Introduction to Discrete-time Signal Processing	3
CS 361	Data Structures and Algorithms	3
ECE 451	Communication Systems	3
Credit Hours		19
Senior		
Fall		
ECE 342	Field Programmable Gate Arrays Design Laboratory	2
ECE 323	Electromagnetics	3
ECE 481W	Preparatory ECE Senior Design (Grade of C or better required)	3
ECE 443	Computer Architecture	3
ECE 332	Microelectronic Materials and Processes	3
ECE 355	Introduction to Networks and Data Communications	3
Credit Hours		17
Spring		
ECE 482	ECE Senior Design	3
CS 350 or CS 330	Introduction to Software Engineering or Object-Oriented Design and Programming	3
CS 471	Operating Systems	3
ENMA 480	Ethics and Philosophy in Engineering Applications	3
Human Behavior Way of Knowing		3

Literature Way of Knowing	3
Credit Hours	18
Total Credit Hours	136

- * Does not include the University's General Education language and culture requirement. Additional hours may be required.
- ** CHEM 120 is for online program students only.

The General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met through the major. The upper-division General Education requirement is met through a built-in minor in computer science and through the completion of a second major/degree.

Electrical & Computer engineering majors must earn a grade of C or better in all 200-level ECE courses and all CS courses prior to taking the next course in the sequence.

Any ECE course registration issues are to be resolved with the ECE Academic Coordinator and Program Manager. Students must have a 3.00 GPA or better and must obtain approval from their advisor and college dean to register for more than 18 hours in a semester.

The five-year plan is a suggested curriculum to complete this degree program in five years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Students seeking two degrees must complete a minimum of 150 credit hours.

Electrical Engineering (BSEE) Dual Major/Degree with Modeling & Simulation Engineering Major (BSCE)*

Course	Title	Credit Hours
Freshman		
Fall		
ENGN 121	Introduction to Engineering and Technology	4
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N or CHEM 120	Foundations of Chemistry I Laboratory ** or Foundations of Chemistry I Laboratory for Online Degree Programs	1
MATH 211	Calculus I (Grade of C or better required)	4
ENGL 110C	English Composition (Grade of C or better required)	3
Credit Hours		15
Spring		
MATH 212	Calculus II (Grade of C or better required)	4
ENGN 122	Computer Programming for Engineering	4
PHYS 231N	University Physics I	4
COMM 101R	Public Speaking	3
Credit Hours		15

Sophomore		
Fall		
MATH 307 or MATH 280	Ordinary Differential Equations or Transfer Credit for Ordinary Differential Equations	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
ECE 201	Circuit Analysis I	3
PHYS 232N	University Physics II	4
CS 381	Introduction to Discrete Structures	3
Human Creativity Way of Knowing		3
Credit Hours		19
Spring		
ECE 202	Circuit Analysis II	3
ECE 287	Fundamental Electric Circuit Laboratory	2
ECE 241	Fundamentals of Computer Engineering	4
ECE 250	Object-Oriented Programming in C++ for Engineers	3
MATH 312 or MATH 285	Calculus III or Transfer Credit for Calculus III	4
Credit Hours		16
Junior		
Fall		
ECE 302	Linear System Analysis	3
ECE 304	Probability, Statistics, and Reliability	3
ECE 341	Digital System Design	3
ECE 461	Automatic Control Systems	3
CS 261	Java for Programmers	1
Interpreting the Past Way of Knowing		3
Credit Hours		16
Spring		
ECE 313	Electronic Circuits	4
ECE 346	Microcontrollers	3
ECE 451	Communication Systems	3
ECE 381	Introduction to Discrete-time Signal Processing	3
ECE 306	Discrete System Modeling and Simulation	3
ECE 320	Continuous System Modeling and Simulation	3
Credit Hours		19
Senior		
Fall		
ECE 323	Electromagnetics	3
ECE 481W	Preparatory ECE Senior Design (Grade of C or better required)	3
ECE 303	Introduction to Electrical Power	3

ECE 406	Computer Graphics and Visualization	3
ECE 348	Simulation Software Design	3
ECE 332	Microelectronic Materials and Processes	3
Credit Hours		18
Spring		
ECE 482	ECE Senior Design	3
ENMA 480	Ethics and Philosophy in Engineering Applications	3
ENMA 410	Agile Project Management	3
Technical Elective ***		3
Literature Way of Knowing		3
Human Behavior Way of Knowing		3
Credit Hours		18
Total Credit Hours		136

* Does not include the University's General Education language and culture requirement. Additional hours may be required.

** CHEM 120 is for online program students only.

*** Electrical & Computer Engineering students pursuing the double major/degree need their final technical elective to be a 400-level ECE technical elective course.

The General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met through the major. The upper-division General Education requirement is met through the completion of a second major/degree.

Electrical & Computer engineering majors must earn a grade of C or better in all 200-level ECE courses and all CS courses prior to taking the next course in the sequence.

Any ECE course registration issues are to be resolved with the ECE Academic Coordinator and Program Manager. Students must have a 3.00 GPA or better and must obtain approval from their advisor and college dean to register for more than 18 hours in a semester.

The four-year plan is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Students seeking two degrees must complete a minimum of 150 credit hours.

Bachelor of Science in Physics (BS): Dual Degree with Electrical Engineering (BSEE)*

Course	Title	Credit Hours
Freshman		
Fall		
ENGN 121	Introduction to Engineering and Technology ¹	4
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
MATH 211	Calculus I (Grade of C or better required)	4

ENGL 110C	English Composition (Grade of C or better required)	3
Credit Hours		15
Spring		
ENGN 122	Computer Programming for Engineering	4
MATH 212	Calculus II (Grade of C or better required)	4
PHYS 261N or PHYS 231N or PHYS 226N	Advanced University Physics I or University Physics I or Honors: University Physics I	4
COMM 101R	Public Speaking	3
Credit Hours		15
Sophomore		
Fall		
MATH 307 or MATH 280	Ordinary Differential Equations or Transfer Credit for Ordinary Differential Equations	3
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1
ECE 201	Circuit Analysis I	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
PHYS 262N or PHYS 232N or PHYS 227N	Advanced University Physics II or University Physics II or Honors: University Physics II	4
Credit Hours		17
Spring		
ECE 202	Circuit Analysis II	3
ECE 287	Fundamental Electric Circuit Laboratory ²	2
ECE 241	Fundamentals of Computer Engineering	4
PHYS 319	Analytical Mechanics	3
MATH 312 or MATH 285	Calculus III or Transfer Credit for Calculus III	4
Credit Hours		16
Junior		
Fall		
ECE 302	Linear System Analysis	3
ECE 303	Introduction to Electrical Power	3
PHYS 323	Modern Physics	3
PHYS 355	Mathematical Methods of Physics	3
PHYS 425	Electromagnetism I ³	3
Credit Hours		15
Spring		
ECE 313	Electronic Circuits	4
ECE 381	Introduction to Discrete-time Signal Processing	3

ECE 323 or PHYS 453	Electromagnetics ⁴ or Electromagnetism II	3
PHYS 411 or PHYS 415 or PHYS 416 or PHYS 417		3
Literature Way of Knowing		3
Credit Hours		16
Senior		
Fall		
ECE 304	Probability, Statistics, and Reliability	3
ECE 461	Automatic Control Systems	3
ECE Technical Elective I ⁵		3
PHYS 452	Introduction to Quantum Mechanics	3
ENMA 480	Ethics and Philosophy in Engineering Applications ⁶	3
Credit Hours		15
Spring		
ECE 451	Communication Systems	3
PHYS 413	Methods of Experimental Physics	3
PHYS 456	Intermediate Quantum Mechanics ⁴	3
PHYS 499W or PHYS 489W and PHYS 490W		3
Human Behavior Way of Knowing		3
Credit Hours		15
Fifth Year		
Fall		
ECE 332	Microelectronic Materials and Processes	3
ECE 481W	Preparatory ECE Senior Design (Grade of C or better required to meet the University Writing Intensive requirement)	3
ECE Technical Elective II ⁵		3
PHYS 420	Introductory Computational Physics	3
Human Creativity Way of Knowing		3
Credit Hours		15
Spring		
ECE 482	ECE Senior Design	3
ECE Technical elective III ⁵		3
ECE Technical elective IV ⁵		3
PHYS 454	Thermal and Statistical Physics	3
Interpreting the Past Way of Knowing		3
Credit Hours		15
Total Credit Hours		154

- * Does not include the University's General Education language and culture requirement. Additional hours may be required.
- 1 ENGN 121 satisfies both the Physics Approved Seminar requirement and the PHYS Information Literacy and Research requirement in the Physics curriculum.
- 2 ECE 287 satisfies the PHYS 303 requirement in the Physics curriculum.
- 3 PHYS 425 satisfies the Nonmajor Engineering Elective requirement in the Electrical Engineering curriculum.
- 4 PHYS 453 and PHYS 456 offered spring semester only.

- 5 Electrical Engineering students need four technical elective courses selected from one of two options: (1) four 400-level ECE technical elective courses; (2) three 400-level ECE technical elective courses and one 300-level ECE technical elective course or one approved 300- or 400-level CS/MATH/Engineering course.
- 6 ENMA 480 satisfies the PHYS Philosophy & Ethics requirement in the Physics curriculum.

The General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met through the Electrical Engineering major/degree. The upper-division General Education requirement is met through the completion of a second major/degree.

Electrical engineering majors must earn a grade of C or better in all 200-level ECE courses prior to taking the next course in the sequence.

Any ECE course registration issues are to be resolved with the ECE Academic Coordinator and Program Manager.

The five-year plan is a suggested curriculum to complete this degree program in five years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Linked Bachelor's/Master's Degree Programs

Linked Bachelor's/Master's programs are designed to allow qualified students to secure a space in a master's program available in the Frank Batten College of Engineering and Technology while they are still pursuing their undergraduate degrees. An eligible student can choose a master's program in the same discipline as his/her bachelor's program or in a complementary discipline. Subject to the approval of the undergraduate and graduate program directors, a student enrolled in a linked program can count up to six credit hours of course work towards both the undergraduate and the graduate degrees. Full-time students may be able to complete the requirements for the bachelor's degree in four years and the master's degree in one additional year. Students in linked programs must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Students who are matriculated in an undergraduate major in the Frank Batten College of Engineering and Technology with a GPA of at least 3.00 overall and 3.00 in the major are eligible to apply for admission to a Linked Bachelor's/Master's program. Transfer students who desire to be admitted to a linked program at the time they join an undergraduate major at Old Dominion University are eligible to apply if their overall GPA at their previous institution is 3.25 or higher. Prerequisite courses may be required for engineering technology majors to pursue a master's degree in engineering.

Continuance in a Linked Bachelor's/Master's program requires maintenance of a GPA of 3.00 or higher overall and in the major.

Linked Bachelor-to-PhD Programs

For a select number of exceptionally well-qualified students, the college has established a linked doctoral program that enables students to be admitted directly into the PhD program upon completion of the baccalaureate degree. A select number of exceptionally well-qualified students can be admitted to the Bachelor/PhD program in their junior year while they are pursuing one of the undergraduate programs at Old Dominion University. This program encourages admitted students to work closely with faculty members and pursue a research experience. Just as in the Linked Bachelor/Masters program, six credit hours of graduate course work may again be counted towards the undergraduate degree and doctoral course work mentioned above for the Bachelor/PhD program. For linked bachelor's to doctoral programs, students must earn a minimum of 198 credit hours (120 discrete credit hours for the undergraduate degree and 78 discrete credit hours for the

graduate degree). Students in these programs must maintain a GPA of 3.50 or better throughout their bachelor's and doctoral studies.

The student may opt to obtain the master's degree along the way to the doctorate. To obtain the master's degree, the student must utilize the six graduate credits obtained as part of their undergraduate program, use 18 credits of the graduate course work that is part of the PhD, and work with the Graduate Program Director to plan the final 6 credits.

Minor Electrical Engineering Minor

Lee Belfore, Ph.D., Chief Departmental Advisor

An undergraduate minor in electrical engineering may be obtained by successful completion of 12 or more semester credit hours of approved electrical or computer engineering or computer science course work at the 200, 300 or 400 level. In addition, a student seeking a minor in electrical engineering must satisfy all pre- or corequisite requirements for the courses selected. Tracks in systems science, physical electronics, digital design, and electrical power are available. The chief departmental advisor must approve the precise course of study. The basic course requirements for the three main tracks are as follows:

Requirements

Systems Science Track

ECE 202	Circuit Analysis II	3
ECE 302	Linear System Analysis	3
ECE 304	Probability, Statistics, and Reliability	3
Select one of the following:		3
ECE 451	Communication Systems	
ECE 452	Introduction to Wireless Communication Networks	
ECE 455	Network Engineering and Design	
ECE 461	Automatic Control Systems	
Total Credit Hours		12

Physical Electronics Track

ECE 323	Electromagnetics	3
ECE 332	Microelectronic Materials and Processes	3
Select two of the following:		6
ECE 454	Introduction to Bioelectronics	
ECE 464	Biomedical Applications of Low Temperature Plasmas	
ECE 471	Introduction to Solar Cells	
ECE 472	Plasma Processing at the Nanoscale	
ECE 473	Solid State Electronics	
ECE 474	Optical Fiber Communication	
Total Credit Hours		12

Digital Design Track*

ECE 241	Fundamentals of Computer Engineering	4
ECE 341	Digital System Design	3
ECE 346	Microcontrollers	3
Select one of the following:		3
ECE 441	Advanced Digital Design and Field Programmable Gate Arrays	
ECE 443	Computer Architecture	
ECE 483	Embedded Systems	
Total Credit Hours		13

* The digital design track is not available for computer engineering majors and modeling and simulation engineering majors.

Electrical Power Track

ECE 303	Introduction to Electrical Power	3
ECE 323	Electromagnetics	3
Select two of the following:		6
ECE 403	Power Electronics	
ECE 404	Electric Drives	
ECE 405	Power System Design & Analysis	
ECE 408	Fundamentals of Electric Vehicles	
ECE 461	Automatic Control Systems	
ECE 471	Introduction to Solar Cells	
Total Credit Hours		12

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses, prerequisites and corequisites and complete at least six hours of upper-level courses in the minor requirement through courses offered by Old Dominion University. Completion of a minor in electrical engineering with a GPA of 3.00 or greater partially satisfies the leveling requirements for graduate degrees in electrical engineering.

Minor

Biomedical Engineering Minor

Dharmakeerthi Nawarathna, BME Minor Coordinator

This interdisciplinary minor is for students who would like to learn about processes encountered in biomedical engineering innovation and enhance their ability to integrate knowledge from different disciplines with principles used in biomedical engineering. The minor offers an opportunity for students to be recognized for study in this growing multidisciplinary field and to enhance competitiveness for job opportunities upon graduation.

Requirements

Course prerequisites for BME 403, BME 404, BME 405, and BME 409 are BIOL 240 or BIOL 250 and MATH 200, MATH 205 or MATH 211. Prerequisite courses are not included in the calculation of the grade point average for the minor.

Course requirements are as follows:

Select two of the following BME courses:		6
BME 403	Introduction to Mathematical Modeling in Physiology	
BME 404	Introduction to Biomaterials	
BME 405	Biomechanics	
BME 409	Introduction to Regenerative Medicine	
Select two elective courses from the following:		6
BIOL 446	Comparative Biomechanics	
BIOL 460	Frontiers in Nanoscience and Nanotechnology	
BIOL 490	Advanced Human Physiology	
BIOL 496	Topics in Biological Sciences (approved by minor advisor)	
CHEM 443	Intermediate Biochemistry	
ECE 454	Introduction to Bioelectronics	
ECE 462	Introduction to Medical Image Analysis (MIA)	
ECE 464	Biomedical Applications of Low Temperature Plasmas	

or BIOL 464	Biomedical Applications of Low Temperature Plasmas
EXSC 322	Anatomical Kinesiology
EXSC 417	Biomechanics
HLSC 405	Interprofessional Study Abroad on Global Health
MAE 303	Mechanics of Fluids
MAE 440	Introduction to Finite Element Analysis
MLS 324	Clinical Chemistry I
MSIM 451	Analysis for Modeling and Simulation
NMED 331	Fundamental Concepts in Nuclear Medicine Technology
NURS 456	Global Health Perspectives

Total Credit Hours **12**

Students have the option to substitute one course from those that satisfy their major requirements for one of the minor electives with approval of the minor coordinator.

Students interested in medical simulation are encouraged to select their electives from ECE 462 and MAE 440.

The interdisciplinary minor in biomedical engineering requires 12 credit hours of 300/400-level courses selected from at least two different disciplines with a maximum of six credits from any one discipline. For completion of the interdisciplinary minor, students must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses. At least six hours of upper-level courses must be taken through courses offered by Old Dominion University. Three credit hours may be in the major, if a major course is listed as an option for the interdisciplinary minor. As such, it will be credited toward both the major and the interdisciplinary minor.

Engineering Management and Systems Engineering

Web Site: <https://www.odu.edu/emse> (<https://www.odu.edu/emse/>)

Engineering Management and Systems Engineering

Ertunga Cem Ozelkan, Ph.D., Chair

Programs

Minor Program

- Engineering Management Minor (p. 599)

Minor

Engineering Management Minor

Opportunities for Employment and Graduate Studies

According to a recent Income and Salary Survey by the National Society of Professional Engineers, the median annual income of engineers having executive/administrative job functions is approximately \$20,000 higher than those having technical functions. This program provides undergraduate students with a set of courses that provides some of the basic management concepts useful to those aspiring to an executive/administrative management position in technology-based, project-oriented organizations. Upon graduation, this knowledge will help individuals qualify for project management positions or for entrepreneurial activities. Students interested in obtaining a strong preparation in engineering management should consider this minor.

Points of Interest

The minor in engineering management is intended for students with majors in engineering, engineering technology, computer science, physics, chemistry, mathematics, ocean, earth and atmospheric sciences, or biology. Students with majors in other disciplines may also pursue this minor, and they are encouraged to talk with their advisors to determine its appropriateness to their educational objectives. The minor develops the skills in team building, interpersonal communications, decision making, ethics and leadership, project management, risk analysis, and quality assurance that employers are increasingly looking for in both engineers and scientists, as well as in other employees in "high tech" organizations. The minor also satisfies the University's General Education upper-division requirement.

For additional information about the undergraduate minor in engineering management, contact:

Chair
Department of Engineering Management and Systems Engineering
Old Dominion University
Norfolk, VA 23529-0248

Telephone: (757) 683-4558
FAX: (757) 683-5640

Requirements

Applicants for the minor in engineering management must be juniors or seniors with a declared major and a minimum GPA of 2.00. The courses can also be taken by graduate students or other graduates. The minor requires completion of 12 credit hours of course work with a minimum grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses. A minimum of six hours in upper-level courses in the minor requirement must be taken through courses offered by Old Dominion University.

Curriculum

The course work for the minor in engineering management involves extensive writing assignments, oral presentations, and group projects, and is designed to develop the skills needed for rapid advancement in either industrial or government organizations. Twelve credit hours of course work is required to meet the requirements for the minor in engineering management. Students are required to complete three core engineering management classes and one engineering management elective. Any ENMA 300- or 400-level class is accepted as an elective for the minor, with the exception of internship or co-op courses. Students who intend to complete a master's in engineering management or in systems engineering should take ENMA 420 as part of their minor requirements as it is a prerequisite to the graduate programs.

Select three of the following:	9
ENMA 301	Introduction to Engineering Management
ENMA 302	Engineering Economics
ENMA 401	Project Management
ENMA 421	Decision Techniques in Engineering
ENMA 424	Risk Analysis in Engineering Management
Engineering Management elective *	3
Total Credit Hours	12

* Excluding internship and co-op courses

Engineering Technology

Web Site: <http://www.odu.edu/engtech> (<http://www.odu.edu/engtech/>)

Vukica Jovanovic, Chair

Old Dominion University has the unique advantage of having both engineering technology and engineering programs. The Engineering Technology Department offers a Bachelor of Science in Engineering Technology degree with majors in Civil Engineering Technology, Electrical

Engineering Technology, Manufacturing Engineering Technology, and Mechanical Engineering Technology as well as opportunities to select electives in multiple areas that prepare industry ready graduates.

The primary goal of the Department of Engineering Technology and its programs is to provide a general yet sufficiently specialized education to equip the student for immediate employment in a variety of engineering and technical fields. In general, engineering technology programs provide an opportunity for students who desire a technical undergraduate education to apply engineering knowledge to solve actual industrial problems. As a result, the engineering technology programs emphasize the practical application of technical knowledge with a strong laboratory program supporting the lecture content of the curricula. For further information, please visit the department website: <http://www.odu.edu/engtech> (<http://www.odu.edu/engtech/>).

Mission Statement

The mission of the department is to educate technically savvy and socially responsible applied engineers ready to embrace the challenges of an expanding global economy. The Department of Engineering Technology offers ABET accredited programs in Civil Engineering Technology, Electrical Engineering Technology, and Mechanical Engineering Technology. In addition to offering quality academic programs that are infused with learning-by-doing experiences, the department offers opportunities for internship, field trips, engineering competitions and professional society meetings. All programs can be completed on the main campus or online.

The department faculty take pride in their commitment to excellence in teaching, closely coupled with excellence in applied research and strong engagement with industry and community. The talented group of faculty are engineering professionals and possess a wealth of business and industrial experience. The faculty are engaged in applied research projects that are funded by industry and government agencies.

Degree completion through ODUGlobal

All upper-level courses required for all engineering technology programs are delivered via ODUGlobal. Thus, students with associate degrees, some college credit or military pathways may complete degree requirements without attending the main campus.

<https://online.odu.edu/academics/programs> (<https://online.odu.edu/academics/programs/>)

- For students with some college credits
- Complete at least 30 credits online from ODU

Computer Requirement

The Frank Batten College of Engineering and Technology requires that all incoming freshmen to the college have a notebook or laptop computer that meets or exceeds the Mobile Monarch Student Notebook Program's recommended models for engineering majors. Students are strongly encouraged to consider purchasing one of the Mobile Monarch Student Notebook Program's notebooks; however, students may bring their own notebook if it meets the specifications.

PLEASE NOTE ** Apple computers (MacBook, iMac, etc.) are NOT compatible with engineering software.

Recommended Specs for Engineering Programs can be found at <https://ww1.odu.edu/eng/ess/admitted#tab52=6&done1612907281342> (<https://ww1.odu.edu/eng/ess/admitted/#tab52=6&done1612907281342>).

Programs

Bachelor of Science in Engineering Technology Programs

- Engineering Technology with a Major in Civil Engineering Technology (BSET) (p. 601)
- Engineering Technology with a Major in Electrical Engineering Technology (BSET) (p. 604)

- Engineering Technology with a Major in Manufacturing Engineering Technology (BSET) (p. 607)
- Engineering Technology with a Major in Mechanical Engineering Technology (BSET) (p. 610)

Minor Programs

- Civil Engineering Technology - Construction Minor (p. 604)
- Electrical Engineering Technology Minor (p. 607)
- Engineering Solutions for Climate Adaptation and Resilience Minor (p. 613)
- Marine Engineering Minor (p. 614)
- Mechanical Engineering Technology Minor (p. 613)

Bachelor of Science in Engineering Technology Engineering Technology with a Major in Civil Engineering Technology (BSET)

Web Site: <https://ww1.odu.edu/engtech.html>

Civil Engineering Technology

Jon Lester, PhD, PE - Program Director

The Bachelor of Science in Engineering Technology (BSET) degree program has courses at the senior level specializing in the areas of construction management, structural design, and site development. Students in this program are prepared for employment in a wide range of professional and technical positions with the construction, consulting engineering, surveying and site development industries. Graduates are eligible to take the Fundamentals of Engineering exam, the first step to licensure as a professional engineer. CET courses include topics such as computer-aided drafting, statics, strength of materials, materials testing, surveying, building construction, steel and concrete design, soils and foundations, and hydrology and drainage. Effective written, oral, and graphic communications are practiced throughout the curriculum along with computer literacy. The program culminates in a senior project that integrates coursework with a practical project assignment in the student's area of interest. To satisfy the upper-division general education requirements, students are encouraged to complete a minor in engineering management, business management, environmental health and safety, or mechanical engineering technology.

Civil Engineering Technology Program

Mission Statement

The mission of the Civil Engineering Technology (CET) program is to sustain a high-quality undergraduate program of study leading to the Bachelor of Science in Engineering Technology degree. The program prepares graduates to become certified in their area of specialization. Civil engineering technology is a significant component of the University's commitment to science, engineering, and technology, particularly in structural design, construction, site development and related fields, which are of major importance to civilization. Students around the world are enabled to expand opportunities to enhance their education and pursue baccalaureate-level studies through ODUGlobal. Simultaneously, the program supports the general education components that yield a well-rounded graduate aware of and able to address societal needs and issues.

Typical technical problems that CET graduates will be able to address include building and non-building type structures and construction operations. Typical technical tasks the CET graduates will be expected to perform include planning and design, field testing and inspection, on-site technical coordination and control, and other tasks relevant to one's emphasis area.

Program Educational Objectives

The objective of the civil engineering technology program is to prepare graduates to establish themselves as successful professionals in structural design, site development, and construction management or related areas during the first few years of their careers by having demonstrated their ability to:

1. Identify and solve increasingly complex technical problems, both theoretically and practically, as raised by continually evolving technologies and industry needs and practices.
2. Make educated, responsible, and ethical decisions in response to the profession's and society's needs, with these decisions solidly grounded in science and engineering fundamentals.
3. Work effectively as a member or leader of technical teams and clearly communicate ideas leading to successful team outcomes.

Student Outcomes

After deliberations by its constituents, the civil engineering technology program has adopted five student outcomes for the Bachelor of Science degree program in civil engineering technology. These outcomes are listed below.

1. an ability to apply knowledge, techniques, skills, and modern tools of mathematics, science, engineering, and technology to solve broadly defined engineering problems appropriate to the discipline;
2. an ability to design systems, components, or processes meeting specified needs for broadly defined engineering problems appropriate to the discipline;
3. an ability to apply written, oral, and graphical communication in broadly defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
4. an ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and
5. an ability to function effectively as a member, as well as, a leader on technical teams.

Accreditation

The Bachelor of Science in Engineering Technology - Civil Engineering Technology is accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, <https://www.abet.org> (<https://www.abet.org/>), under the General Criteria and the Civil Engineering Technology Program Criteria.

Graduates of CET programs typically analyze and design systems, specify project methods and materials, perform cost estimates and analyses, and manage technical activities that support civil engineering projects. The curriculum provides instruction in the following curricular areas:

1. utilization of principles, hardware, and software that are appropriate to produce drawings, reports, quantity estimates, and other documents related to civil engineering technology;
2. performance of standardized field and laboratory tests related to civil engineering technology;
3. utilization of surveying methods appropriate for land measurement and/or construction layout;
4. application of fundamental computational methods and elementary analytical techniques in sub-disciplines related to civil engineering technology;
5. planning and preparation of documents appropriate for design and construction;
6. performance of economic analyses and cost estimates related to the design, construction, operations, and maintenance of systems associated with civil engineering technology;
7. selection of appropriate engineering materials and practices; and
8. performance of standard analysis and design in at least three sub-disciplines related to civil engineering technology.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

The General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met through the major.

Upper-Division General Education

- Option A: Any University-approved disciplinary minor (minimum of 12 hours), second degree, or second major.
- Option B: Any University-approved interdisciplinary minor (12 credit hours, 3 of which may be in the major).
- Option D: Two Upper-Division Courses (6 credit hours) from outside the College of Engineering and Technology and not required by the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Civil Engineering Technology Grade Requirements

Critical CET course sequences within the Civil Engineering Technology curricula require a minimum grade of C before progressing to subsequent courses. A grade of C- does not satisfy the requirement for a C grade.

The following courses require a minimum grade of C:

ENGL 110C	English Composition	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research Writing, Rhetoric, and Research: Special Topics	3
MATH 162M	Precalculus I	3
MATH 163	Precalculus II	3
MATH 211	Calculus I	4
ENGT 435W	Senior Design Project	3
ENGT 220	Strength of Materials	3
ENGT 200	Statics	3

Civil Engineering Technology Major

General Education

Complete lower-division requirements	32-38
Complete upper-division requirements (minimum of 6 credits)	6

Civil Engineering Technology Major

Complete civil engineering technology departmental and major requirements as shown on the degree program guide	83

Total Credit Hours	121-127

Degree Program Guide ¹

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Critical CET course sequences within the Civil Engineering Technology curricula require a minimum grade of C before progressing to subsequent courses. Refer to the individual CET course descriptions for information on specific C grade prerequisites. A grade of C- does not satisfy the requirement for a C grade.

Course	Title	Credit Hours
Freshman		
Fall		
ENGN 121	Introduction to Engineering and Technology	4
MATH 162M	Precalculus I (grade of C or better required)	3
ENGL 110C	English Composition (grade of C or better required)	3
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
Credit Hours		14
Spring		
MATH 163	Precalculus II (grade of C or better required)	3
PHYS 111N	Introductory General Physics	4
ENGN 122	Computer Programming for Engineering	4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Credit Hours		14
Sophomore		
Fall		
ENGT 200	Statics (grade of C or better required)	3

CET 120	Civil 2D Computer Aided Drafting	2
CET 210	Fundamentals of Building Construction	3
MATH 211	Calculus I (grade of C or better required)	4
PHYS 112N	Introductory General Physics	4
Credit Hours		16
Spring		
ENGT 220	Strength of Materials (grade of C or better required)	3
CET 205	Principles of Surveying	3
CET 221	Material Testing Laboratory	1
CET 260	CAD for Building Applications	2
COMM 101R	Public Speaking	3
Human Behavior (S)		3
Credit Hours		15
Junior		
Fall		
CET 265	Civil 3D CAD	2
CET 301	Introduction to Structural Design	4
CET 330	Fluid Mechanics	4
CET 355	Sustainable Building Practices	3
Human Creativity (A)		3
Credit Hours		16
Spring		
CET 340	Soils and Foundations	3
CET 341	Soil Testing Laboratory	1
CET 361	Construction Project Management	3
Approved CET Elective ⁴		3
ENMA 302	Engineering Economics	3
Literature (L)		3
Credit Hours		16
Senior		
Fall		
ENGT 434	Introduction to Senior Design Project	3
Approved CET Elective ⁴		3
Approved CET Elective ⁴		3
Upper Division Gen Ed ³		3
Historical Perspective (Interpreting the Past, H)		3
Credit Hours		15
Spring		
ENGT 435W	Senior Design Project (grade of C or better required)	3
Approved CET Elective ⁴		3
Approved CET Elective ⁴		3
ENMA 480	Ethics and Philosophy in Engineering Applications ²	3

Upper Division Gen Ed ³	3
Credit Hours	15
Total Credit Hours	121

- 1 Does not include the University's General Education language and culture requirement. Additional hours may be required.
- 2 Meets the philosophy and ethics general education requirement.
- 3 Additional courses will be required to complete a minor. See advisor for details.
- 4 Construction Management electives are: CET 365, CET 460, CET 462, CET 467, and CET 472.
Site Development electives are: CET 325, CET 332, CET 420, and CET 430.
Structural Design electives are: CET 400, CET 402, CET 405, CET 410, CET 412, CET 414, and CET 417.
Resilience and Sustainability electives are: CET 332, CET 420, CET 456, CEE 457, CET 458.

Civil Engineering Technology (CET) Approved Senior Electives

CET 325	Introduction to Land Development	3
CET 332	Water Resources Engineering	3
CET 334	Computer Applications in Hydraulic Engineering	3
CET 365	Building Information Modeling (BIM)	3
CET 395	Topics (Approved CET Elective)	3
CET 367	Cooperative Education	1-3
CET 368	Internship	1-3
CET 396	Topics (Approved CET Elective)	3
CET 400	Computer Applications in Structural Design	3
CET 402	Structural Steel Design (Replaces old CET 450)	3
CET 405	Environmental Loads	3
CET 410	Reinforced Concrete Design	3
CET 412	Wood Design (Replaces old CET 452)	3
CET 414	Bridge Design (Replaces old CET 485)	3
CET 417	Design of Reinforced Concrete Foundations (Replaces old CET 435)	3
CET 420	Hydrology and Drainage	3
CET 428	Buried Infrastructure	3
CET 430	Hydraulic Engineering	3
CET 456	Resilience and Sustainability	3
CEE 457	Adaptation to Sea Level Rise	3
CET 458	Managing the Climate Crisis	3
CET 460	Construction Cost Estimating	3
CET 462	Construction Planning and Scheduling	3
CET 467	Construction Finance and Equipment Utilization	3
CET 472	Contract Documents (Replaces old CET 445)	3
CET 495	Topics (Approved CET Elective)	3
CET 496	Topics (Approved CET Elective)	3

Linked Bachelor's/Master's Degree Programs

Linked Bachelor's/Master's programs are designed to allow qualified students to secure a space in a master's program available in the Frank Batten College of Engineering and Technology while they are still pursuing their

undergraduate degrees. An eligible student can choose a master's program in the same discipline as his/her bachelor's program or in a complementary discipline. Subject to the approval of the undergraduate and graduate program directors, a student enrolled in a linked program can count up to six credit hours of course work towards both the undergraduate and the graduate degrees. Full-time students may be able to complete the requirements for the bachelor's degree in four years and the master's degree in one additional year. Students in linked programs must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Students who are matriculated in an undergraduate major in the Frank Batten College of Engineering and Technology with a GPA of at least 3.00 overall and 3.00 in the major are eligible to apply for admission to a Linked Bachelor's/Master's program. Transfer students who desire to be admitted to a linked program at the time they join an undergraduate major at Old Dominion University are eligible to apply if their overall GPA at their previous institution is 3.25 or higher. Prerequisite courses may be required for engineering technology majors to pursue a master's degree in engineering.

Continuance in a Linked Bachelor's/Master's program requires maintenance of a GPA of 3.00 or higher overall and in the major.

Linked Bachelor-to-PhD Programs

For a select number of exceptionally well-qualified students, the college has established a linked doctoral program that enables students to be admitted directly into the PhD program upon completion of the baccalaureate degree. A select number of exceptionally well-qualified students can be admitted to the Bachelor/PhD program in their junior year while they are pursuing one of the undergraduate programs at Old Dominion University. This program encourages admitted students to work closely with faculty members and pursue a research experience. Just as in the Linked Bachelor/Masters program, six credit hours of graduate course work may again be counted towards the undergraduate degree and doctoral course work mentioned above for the Bachelor/PhD program. For linked bachelor's to doctoral programs, students must earn a minimum of 198 credit hours (120 discrete credit hours for the undergraduate degree and 78 discrete credit hours for the graduate degree). Students in these programs must maintain a GPA of 3.50 or better throughout their bachelor's and doctoral studies.

The student may opt to obtain the master's degree along the way to the doctorate. To obtain the master's degree, the student must utilize the six graduate credits obtained as part of their undergraduate program, use 18 credits of the graduate course work that is part of the PhD, and work with the Graduate Program Director to plan the final 6 credits.

Minor Civil Engineering Technology - Construction Minor

The minor in civil engineering technology – construction is open to all students (except civil engineering technology majors).

Requirements

The program consists of 12 credits and the specified courses are as follows:

CET 355	Sustainable Building Practices	3
CET 361	Construction Project Management	3
CET 460	Construction Cost Estimating	3
CET 462	Construction Planning and Scheduling (Const. Planning and Scheduling (replaces old CET 445))	3
Total Credit Hours		12

The courses are offered both on campus and through ODUGlobal.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a

requirement for the minor exclusive of lower-level courses and prerequisite courses and complete at least six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Bachelor of Science in Engineering Technology Engineering Technology with a Major in Electrical Engineering Technology (BSET)

Electrical Engineering Technology

Murat Kuzlu, Program Director

The Bachelor of Science in Engineering Technology with a major offers courses at the senior level in communications systems technology, embedded systems technology, power systems technology, mechatronics systems technology, and computer engineering technology. Students in this program take common courses in areas such as DC and AC circuits, electronic devices and circuits, digital electronics, linear electronics, microcontrollers, programming, Programmable Logic Controllers (PLCs), and electric machines. Supporting laboratories provide experience in instrumentation, testing and troubleshooting, and design and implementation. The program culminates with a senior project that integrates coursework with a practical project assignment in the student's area of interest. To satisfy the upper-division general education requirements, students are required to complete one of the following three options: 1) Option D: 6 hours of elective upper-division course work from outside of and not required by the student's major and college; 2) Option A: Any University-approved minor (minimum of 12 hours determined by the department), second degree, or second major; or 3) Option B: Any University-approved interdisciplinary minor (12 hours, three of which may be in the major). Graduates should be qualified for application positions in electronic and electrical product design and development, electronic and electrical system operation and maintenance, field operations, and various other technical functions.

Mission Statement

The mission of the Electrical Engineering Technology (EET) program is to sustain a high quality undergraduate program of study leading to the Bachelor of Science in Engineering Technology degree. It is a significant component of the University's commitment to science, engineering and technology, particularly in fields of major importance to the region. Through ODUGlobal (<https://online.odu.edu/academics/programs/electrical-engineering-technology/>), the electrical engineering technology program provides opportunities for technical personnel throughout the state and elsewhere to enhance their education and pursue baccalaureate level studies. Simultaneously, the program supports the general education components that yield a well-rounded graduate who is aware of societal needs and issues.

Program Educational Objectives

The objective of the electrical engineering technology program is to prepare graduates to establish themselves as successful professionals in electrical systems technology, computer engineering technology, or related areas during the first few years of their careers by having demonstrated their ability to:

1. Identify and solve increasingly complex technical problems, both theoretically and practically, as raised by continually evolving technologies and industry needs and practices.
2. Make educated, responsible, and ethical decisions in response to the needs of the profession and society, with these decisions solidly grounded in science and engineering fundamentals.
3. Work effectively as a member or leader of technical teams and clearly communicate ideas leading to successful team outcomes.

Typical technical problems that EET graduates will be able to address include planning, specification, development, design, procurement of

equipment and materials, implementation, and performance verification. Typical technical tasks the EET graduates will be expected to perform include: conducting engineering experiments, making observations, collecting and analyzing data, and formulating conclusions.

Student Outcomes

The electrical engineering technology program has adopted, after deliberations by its constituents, outcomes for the Bachelor of Science program in electrical engineering technology. These outcomes are listed below:

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline;
2. An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline;
3. An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes;
5. An ability to function effectively as a member or leader on a technical teams.

Accreditation

The Bachelor of Science in Engineering Technology - Electrical Engineering Technology is accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, <https://www.abet.org> (<https://www.abet.org/>), under the General Criteria and the Electrical/Electronic(s) Engineering Technology Program Criteria.

The curriculum provides EET graduates with instruction in the knowledge, techniques, skills, and use of modern tools necessary to enter careers in the design, application, installation, manufacturing, operation, and/or maintenance of electrical/electronic(s) systems. Graduates of the EET program are well-prepared for the design, development, and implementation of electrical/electronic(s) systems.

The curriculum includes the following topics:

1. application of circuit analysis and design, computer programming, associated software, analog and digital electronics, microcontrollers, and engineering standards to the building, testing, operation, and maintenance of electrical/electronic(s) systems;
2. application of natural sciences and mathematics at or above the level of trigonometry to the building, testing, operation, and maintenance of electrical/electronic systems;
3. analysis, design, and implementation of one or more of the following: control systems, instrumentation systems, communications systems, computer systems, power systems or energy systems;
4. application of project management techniques to electrical/electronic(s) systems; and
5. utilization of differential and integral calculus, as a minimum, to characterize the performance of electrical/electronic systems.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3

Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

The General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met through the major.

Upper-Division General Education

- Option A: Any University-approved disciplinary minor (minimum of 12 hours), second degree, or second major.
- Option B: Any University-approved interdisciplinary minor (12 credit hours, 3 of which may be in the major).
- Option D: Two Upper-Division Courses (6 credit hours) from outside the College of Engineering and Technology and not required by the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Electrical Engineering Technology Grade Requirements

Critical EET course sequences within the Electrical Engineering Technology curricula require a minimum grade of C before progressing to subsequent courses. A grade of C- does not satisfy the requirement for a C grade.

The following courses require a minimum grade of C:

ENGL 110C	English Composition	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research Writing, Rhetoric, and Research: Special Topics	3
MATH 162M	Precalculus I	3
MATH 163	Precalculus II	3
MATH 211	Calculus I	4
EET 110	Electrical Circuits I	3
EET 200	Electrical Circuits II	3
ENGT 435W	Senior Design Project	3

Electrical Engineering Technology Major

General Education

Complete lower-division requirements 32-38

Complete upper-division requirements	6
Electrical Engineering Technology Major	
Complete electrical engineering technology departmental and major requirements as shown on the degree program guide	83
Total Credit Hours	121-127

Graduates of the electrical engineering technology major are eligible to take the Fundamentals of Engineering (FE) exam in Virginia and many other states.

Degree Program Guide*

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course prerequisites are strictly enforced. Critical EET course sequences within the Electrical Engineering Technology curricula require a minimum grade of C before progressing to subsequent courses. Refer to the individual EET course descriptions for information on specific C grade and other prerequisite requirements. A grade of C- does not satisfy the requirement for a C grade.

Course	Title	Credit Hours
Freshman		
Fall		
ENGN 121	Introduction to Engineering and Technology	4
MATH 162M	Precalculus I (C or better required)	3
ENGL 110C	English Composition (C or better required)	3
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
Credit Hours		14
Spring		
MATH 163	Precalculus II (C or better required)	3
PHYS 111N	Introductory General Physics	4
ENGN 122	Computer Programming for Engineering	4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Credit Hours		14
Sophomore		
Fall		
EET 110	Electrical Circuits I (C or better required)	3
EET 120	Fundamentals of Logic Circuits	3
EET 125	Logic Circuits Laboratory	1
MATH 211	Calculus I (C or better required)	4
PHYS 112N	Introductory General Physics	4
Human Behavior (S)		3
Credit Hours		18
Spring		
EET 200	Electrical Circuits II (C or better required)	3

EET 205	Electrical Circuits Laboratory	1
EET 210	Electronic Circuits	3
EET 225	Electronic Circuits Laboratory	1
EET 263 or ENGT 270	Introduction to Programmable Logic Controllers (PLCs) or Automation and Controls	3
COMM 101R	Public Speaking	3
Credit Hours		14
Junior		
Fall		
ENGT 305	Advanced Technical Analysis	3
EET 300	Advanced Circuit Analysis	3
EET 310	Digital Electronics	3
EET 315	Digital Electronics Laboratory	2
EET 360	Electrical Power and Machinery	3
EET 366	Electrical Power and Machinery Laboratory	2
Credit Hours		16
Spring		
EET 320	Microcontroller Applications	3
EET 325	Microcontroller Applications Laboratory	2
EET 312	Principles of Communication Systems	4
Gen Ed. Interpreting the Past (H)		3
Gen Ed. Literature (L)		3
Credit Hours		15
Senior		
Fall		
ENGT 434	Introduction to Senior Design Project	3
Approved EET Elective ***		3
Approved EET Elective ***		3
Upper-Division General Education ***		3
Gen. Ed. Human Creativity (A)		3
Credit Hours		15
Spring		
ENGT 435W	Senior Design Project (C or better required)	3
Approved EET Elective ***		3
Approved EET Elective ***		3
Upper-Division General Education ***		3
ENMA 480	Ethics and Philosophy in Engineering Applications **	3
Credit Hours		15
Total Credit Hours		121

* Does not include the University's General Education language and culture requirement. Additional hours may be required.

** Meets the philosophy and ethics general education requirement.

*** Additional courses will be required to complete a minor.
See advisor for details.

Approved Electrical Engineering Technology (EET) Electives

EET 330	Linear Electronics	3
EET 335	Linear Electronics Laboratory	2
EET 370	Energy and The Environment	3
EET 373	Instrumentation	3
EET 405	Data Communications and Computer Networks	3
EET 412	Wireless Communication Systems	3
EET 420	Advanced Logic Design	3
EET 430	Advanced Motion Control Systems	3
EET 470	Microcontrollers/Embedded-Based Designs	3
EET 483	Introduction to Smart Grids	3
EET 485	Electrical Power Systems	3

Linked Bachelor's/Master's Degree Programs

Linked Bachelor's/Master's programs are designed to allow qualified students to secure a space in a master's program available in the Frank Batten College of Engineering and Technology while they are still pursuing their undergraduate degrees. An eligible student can choose a master's program in the same discipline as his/her bachelor's program or in a complementary discipline. Subject to the approval of the undergraduate and graduate program directors, a student enrolled in a linked program can count up to six credit hours of course work towards both the undergraduate and the graduate degrees. Full-time students may be able to complete the requirements for the bachelor's degree in four years and the master's degree in one additional year. Students in linked programs must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Students who are matriculated in an undergraduate major in the Frank Batten College of Engineering and Technology with a GPA of at least 3.00 overall and 3.00 in the major are eligible to apply for admission to a Linked Bachelor's/Master's program. Transfer students who desire to be admitted to a linked program at the time they join an undergraduate major at Old Dominion University are eligible to apply if their overall GPA at their previous institution is 3.25 or higher. Prerequisite courses may be required for engineering technology majors to pursue a master's degree in engineering.

Continuance in a Linked Bachelor's/Master's program requires maintenance of a GPA of 3.00 or higher overall and in the major.

Linked Bachelor-to-PhD Programs

For a select number of exceptionally well-qualified students, the college has established a linked doctoral program that enables students to be admitted directly into the PhD program upon completion of the baccalaureate degree. A select number of exceptionally well-qualified students can be admitted to the Bachelor/PhD program in their junior year while they are pursuing one of the undergraduate programs at Old Dominion University. This program encourages admitted students to work closely with faculty members and pursue a research experience. Just as in the Linked Bachelor/Masters program, six credit hours of graduate course work may again be counted towards the undergraduate degree and doctoral course work mentioned above for the Bachelor/PhD program. For linked bachelor's to doctoral programs, students must earn a minimum of 198 credit hours (120 discrete credit hours for the undergraduate degree and 78 discrete credit hours for the graduate degree). Students in these programs must maintain a GPA of 3.50 or better throughout their bachelor's and doctoral studies.

The student may opt to obtain the master's degree along the way to the doctorate. To obtain the master's degree, the student must utilize the six graduate credits obtained as part of their undergraduate program, use 18

credits of the graduate course work that is part of the PhD, and work with the Graduate Program Director to plan the final 6 credits.

Minor Electrical Engineering Technology Minor

The minor in electrical engineering technology is open to students (except electrical engineering and electrical engineering technology majors) who have completed at least one three-credit course in calculus. It is particularly helpful for those who are preparing for the Fundamentals of Engineering examination. The courses are offered both on campus and through ODUGlobal.

Requirements

The program consists of 12 credits. The specified courses are as follows:

Required

EET 370	Energy and The Environment	3
Select three more courses from the following:		9
EET 330	Linear Electronics	
EET 360	Electrical Power and Machinery	
EET 373	Instrumentation	
EET 405	Data Communications and Computer Networks	
EET 412	Wireless Communication Systems	
EET 420	Advanced Logic Design	
EET 430	Advanced Motion Control Systems	
EET 470	Microcontrollers/Embedded-Based Designs	
EET 483	Introduction to Smart Grids	
EET 485	Electrical Power Systems	

Total Credit Hours	12

Certain substitutions are possible if suitable justification is provided.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete at least six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Bachelor of Science in Engineering Technology Engineering Technology with a Major in Manufacturing Engineering Technology (BSET) Manufacturing Engineering Technology

Charles Lowe, Program Director

The Bachelor of Science in Engineering Technology (BSET) degree program in Manufacturing Engineering Technology (MFET) offers a variety of courses in the following areas: manufacturing processes, manufacturing principles, smart manufacturing, and metrology. Students in this program also take additional courses such as: engineering graphics, geometric dimensioning and tolerancing, statics, dynamics, automation and control (Programmable Logic Controller - PLCs). The program culminates with a senior project that integrates coursework with a practical project assignment in the student's area of interest. Graduates of the MFET program are qualified for positions in manufacturing systems design, development and manufacturing, maintenance, field operations, and various other technical functions. Potential positions are manufacturing engineer, quality assurance engineer, project engineer, robotics engineer, and mechatronics engineer.

Mission Statement

The mission of the Manufacturing Engineering Technology program is to sustain a high quality undergraduate program of study leading to the Bachelor of Science in Engineering Technology degree. It is a significant component of the University's commitment to science, engineering and technology, particularly in fields of major importance to the region. Through the University's distance learning program, the MFET program provides opportunities for technical personnel throughout the state and elsewhere to enhance their education and pursue baccalaureate level studies. Simultaneously, the program supports the general education components that yield a well-rounded graduate who is aware of societal needs and issues.

Program Educational Objectives

The objective of the Manufacturing Engineering Technology program is to prepare graduates to establish themselves as successful professionals in manufacturing systems or related areas during the first few years of their careers by having demonstrated their ability to:

1. Identify and solve increasingly complex technical problems, both theoretically and practically, as raised by continually evolving technologies and industry needs and practices.
2. Make educated, responsible, and ethical decisions in response to the needs of the profession and society, with these decisions solidly grounded in science and engineering fundamentals.
3. Work effectively as member or leader of technical teams and clearly communicate ideas leading to successful team outcomes.

Student Outcomes

The Manufacturing Engineering Technology program has adopted, after deliberations by its constituents, five student outcomes for the Bachelor of Science in Engineering Technology degree program in Manufacturing Engineering Technology. These outcomes are listed below:

1. Apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline;
2. Design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline;
3. Apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
4. Conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and
5. Function effectively as a member as well as a leader on technical teams.

Curriculum

The curriculum provides baccalaureate degree graduates with instruction in the knowledge, techniques, skills, and use of modern equipment in manufacturing engineering technology. Baccalaureate degree graduates build on the strengths of associate degree programs by gaining the knowledge, skills, and abilities for entry into manufacturing careers practicing various tools, techniques and processes. The curriculum must include instruction in the following topics:

1. Materials and manufacturing processes;
2. Product design process, tooling, and assembly;
3. Manufacturing systems, automation, and operations;
4. Statistics, quality and continuous improvement, and industrial organization and management; and
5. Capstone or integrating experience that develops and illustrates student competencies in applying both technical and non-technical skills in successfully solving manufacturing problems.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met through the major.

Upper-Division General Education

Met in the major through a built-in minor in engineering management.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Manufacturing Engineering Technology Grade Requirement

Critical MFET course sequences within the Manufacturing Engineering Technology curriculum require a minimum grade of C before progressing to subsequent courses. A grade of C- does not satisfy the requirement for a C grade.

The following courses require a minimum grade of C:

ENGL 110C	English Composition	3
ENGL 211C	Writing, Rhetoric, and Research	3
or ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 162M	Precalculus I	3
MATH 163	Precalculus II	3
MATH 211	Calculus I	4

MET 200	Materials and Manufacturing Processes	3
ENGT 435W	Senior Design Project	3

Manufacturing Engineering Technology Major

Students completing this major will receive a minor in engineering management.

General Education

Complete lower-division requirements	32-38

Complete upper-division requirements (met in the major through a built-in minor in engineering management)	12

Manufacturing Engineering Technology

Complete the MFET departmental and major requirements as shown on the degree program guide	77

Total Credit Hours	121-127

Degree Program Guide*

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGN 121	Introduction to Engineering and Technology	4
MATH 162M	Precalculus I (grade of C or better required)	3
ENGL 110C	English Composition (grade of C or better required)	3
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
Credit Hours		14
Spring		
MATH 163	Precalculus II (grade of C or better required)	3
PHYS 111N	Introductory General Physics	4
ENGN 122	Computer Programming for Engineering	4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Credit Hours		14
Sophomore		
Fall		
EET 120	Fundamentals of Logic Circuits	3
EET 125	Logic Circuits Laboratory	1
ENGT 230	Engineering Graphics and Computer Solid Modeling	3
ENGT 200	Statics	3
MATH 211	Calculus I (grade of C or better required)	4
COMM 101R	Public Speaking	3
Credit Hours		17

Spring		
MFET 235	Introduction to Robotics	3
MET 200	Materials and Manufacturing Processes (grade of C or better required)	3
ENGT 270 & ENGT 286	Automation and Controls and Automation and Controls Laboratory	4
Credit Hours		16
Junior		
Fall		
MFET 310	Design for Manufacturing	3
MET 310	Dynamics	3
ENGT 365	Geometric Dimensioning and Tolerancing	3
Credit Hours		15
Spring		
MFET 320	Introduction to Mechatronics	3
MFET 330	Quality Systems in Manufacturing	3
MFET 340	Computer Integrated Manufacturing	3
Credit Hours		15
Senior		
Fall		
ENGT 434	Introduction to Senior Design Project	3
Credit Hours		15
Spring		
ENGT 435W	Senior Design Project (grade of C or better required)	3
Credit Hours		15
Total Credit Hours		
Total Credit Hours		121

- * Does not include the University's General Education language and culture requirement. Additional hours may be required.
- ** Meets philosophy and ethics general education requirement.

Manufacturing Engineering Technology (MFET) Approved Electives

MFET 410	Computer Numerical Control in Production	3
MFET 420	Introduction To Welding Technologies	3
MFET 430	Additive Manufacturing	3
MFET 440	Advanced Manufacturing Processes	3
MFET 450	Lean Engineering	3
MFET 460	Facilities Planning and Material Handling	3
MET 427	Mechatronic System Design	3
MET 431	Modeling and Simulation of Mechatronic Systems	3
MET 485	Maintenance Engineering	3

Engineering Management (ENMA) Approved Courses

Select two of the following:		6
ENMA 301	Introduction to Engineering Management	
ENMA 302	Engineering Economics	
ENMA 421	Decision Techniques in Engineering	
ENMA 424	Risk Analysis in Engineering Management	

Please see the full Engineering Management Minor overview and requirements here (<https://catalog.odu.edu/undergraduate/engineering-technology/engineering-management-systems/engineering-management-minor/#requirementstext>).

Linked Bachelor's/Master's Degree Programs

Linked Bachelor's/Master's programs are designed to allow qualified students to secure a space in a master's program available in the Frank Batten College of Engineering and Technology while they are still pursuing their undergraduate degrees. An eligible student can choose a master's program in the same discipline as his/her bachelor's program or in a complementary discipline. Subject to the approval of the undergraduate and graduate program directors, a student enrolled in a linked program can count up to six credit hours of course work towards both the undergraduate and the graduate degrees. Full-time students may be able to complete the requirements for the bachelor's degree in four years and the master's degree in one additional year. Students in linked programs must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Students who are matriculated in an undergraduate major in the Frank Batten College of Engineering and Technology with a GPA of at least 3.00 overall and 3.00 in the major are eligible to apply for admission to a Linked Bachelor's/Master's program. Transfer students who desire to be admitted to a linked program at the time they join an undergraduate major at Old Dominion University are eligible to apply if their overall GPA at their previous institution is 3.25 or higher. Prerequisite courses may be required for engineering technology majors to pursue a master's degree in engineering.

Continuance in a Linked Bachelor's/Master's program requires maintenance of a GPA of 3.00 or higher overall and in the major.

Linked Bachelor-to-PhD Programs

For a select number of exceptionally well-qualified students, the college has established a linked doctoral program that enables students to be admitted directly into the PhD program upon completion of the baccalaureate degree. A select number of exceptionally well-qualified students can be admitted to the Bachelor/PhD program in their junior year while they are pursuing one of the undergraduate programs at Old Dominion University. This program encourages admitted students to work closely with faculty members and pursue a research experience. Just as in the Linked Bachelor/Masters program, six credit hours of graduate course work may again be counted towards the undergraduate degree and doctoral course work mentioned

above for the Bachelor/PhD program. For linked bachelor's to doctoral programs, students must earn a minimum of 198 credit hours (120 discrete credit hours for the undergraduate degree and 78 discrete credit hours for the graduate degree). Students in these programs must maintain a GPA of 3.50 or better throughout their bachelor's and doctoral studies.

The student may opt to obtain the master's degree along the way to the doctorate. To obtain the master's degree, the student must utilize the six graduate credits obtained as part of their undergraduate program, use 18 credits of the graduate course work that is part of the PhD, and work with the Graduate Program Director to plan the final 6 credits.

Bachelor of Science in Engineering Technology Engineering Technology with a Major in Mechanical Engineering Technology (BSET)

Mechanical Engineering Technology

Nathan Luetke, Program Director

The MET program offers courses at the senior level specializing in mechanical systems design, mechatronics systems, marine systems, manufacturing systems, and nuclear systems. Students in this program take common courses in areas such as computer-aided drafting, statics, strength of materials, dynamics, thermodynamics, fluid mechanics, and automation and controls. The program culminates in a senior project that integrates coursework with a practical project assignment in the student's area of interest. Graduates should be qualified for application positions in mechanical product design, development and manufacturing, mechanical system operation and maintenance, field operations, and various other technical functions.

Mission Statement

The mission of the Mechanical Engineering Technology (MET) program is to sustain a high-quality undergraduate program of study leading to the Bachelor of Science in Engineering Technology degree. It is a significant component of the University's commitment to science, engineering, and technology, particularly in fields of major importance to the region. Through ODUGlobal, the mechanical engineering technology program provides opportunities for technical personnel throughout the state and elsewhere to enhance their education and pursue baccalaureate level studies. Simultaneously, the program supports the general education components that yield a well-rounded graduate who is aware of societal needs and issues.

Program Educational Objectives

The objective of the mechanical engineering technology program is to prepare graduates to establish themselves as successful professionals in mechanical systems or related areas during the first few years of their careers by having demonstrated their ability to:

1. Identify and solve increasingly complex technical problems, both theoretically and practically, as raised by continually evolving technologies and industry needs and practices.
2. Make educated, responsible, and ethical decisions in response to the needs of the profession and society, with these decisions solidly grounded in science and engineering fundamentals.
3. Work effectively as member or leader of technical teams and clearly communicate ideas leading to successful team outcomes.

Student Outcomes

After deliberations by its constituents, the mechanical engineering technology program has adopted five student outcomes for the Bachelor of Science program in mechanical engineering technology. These outcomes are listed below:

1. an ability to apply knowledge, techniques, skills, and modern tools of mathematics, science, engineering, and technology to solve broadly defined engineering problems appropriate to the discipline;
2. an ability to design systems, components, or processes meeting specified needs for broadly defined engineering problems appropriate to the discipline;
3. an ability to apply written, oral, and graphical communication in broadly defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
4. an ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and
5. an ability to function effectively as a member, as well as, a leader on technical teams.

Accreditation

The Bachelor of Science in Engineering Technology - Mechanical Engineering Technology is accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, <https://www.abet.org>), under the General Criteria and the Mechanical Engineering Technology Program Criteria.

The curriculum prepares MET graduates with the knowledge, techniques, skills, and use of modern equipment in mechanical engineering technology. Baccalaureate degree graduates build on the strengths of associate degree programs by gaining proficiency in the analysis, applied design, development, implementation, or oversight of more advanced mechanical components, systems, or processes. The following curricular topics are covered:

1. Application of principles of geometric dimensioning and tolerancing;
2. Use of computer-aided drafting and design software;
3. Perform selection, set-up, and calibration of measurement tools/instrumentation;
4. Elements of differential and integral calculus;
5. Manufacturing processes;
6. Material science and selection;
7. Solid mechanics (such as statics, dynamics, strength of materials, etc.);
8. Mechanical system design;
9. Thermal sciences (such as thermodynamics, fluid mechanics, heat transfer, etc.);
10. Electrical circuits (AC and DC) and electronic controls;
11. Application of industry codes, specifications, and standards; and
12. Technical communications are typically used in the preparation of engineering proposals, reports, and specifications.

The capstone experience, ideally multidisciplinary, must be project-based and include formal design, implementation, and test processes.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3

Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met in the major.

Upper-Division General Education

- Option A: Any University-approved disciplinary minor (minimum of 12 hours), second degree, or second major.
- Option B: Any University-approved interdisciplinary minor (12 credit hours, 3 of which may be in the major).
- Option D: Two Upper-Division Courses (6 credit hours) from outside the College of Engineering and Technology and not required by the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Mechanical Engineering Technology Grade Requirements

Critical MET course sequences within the Mechanical Engineering Technology curricula require a minimum grade of C before progressing to subsequent courses. A grade of C- does not satisfy the requirement for a C grade.

The following courses require a minimum grade of C:

ENGL 110C	English Composition	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research Writing, Rhetoric, and Research: Special Topics	3
MATH 162M	Precalculus I	3
MATH 163	Precalculus II	3
MATH 211	Calculus I	4
ENGT 200	Statics	3
ENGT 220	Strength of Materials	3
MET 300	Thermodynamics	3
ENGT 435W	Senior Design Project	3

Mechanical Engineering Technology Major

General Education

Complete lower-division requirements	32-38
Complete upper-division requirements (minimum of 6 credit hours with option D)	6

Mechanical Engineering Technology Major		
Complete the mechanical engineering technology departmental and major requirements as shown on the degree program guide	83	
Total Credit Hours	121-127	

Degree Program Guide*

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGN 121	Introduction to Engineering and Technology	4
MATH 162M	Precalculus I (grade of C or better required)	3
ENGL 110C	English Composition (grade of C or better required)	3
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
Credit Hours		14
Spring		
MATH 163	Precalculus II (grade of C or better required)	3
PHYS 111N	Introductory General Physics	4
ENGN 122	Computer Programming for Engineering	4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Credit Hours		14
Sophomore		
Fall		
ENGT 230	Engineering Graphics and Computer Solid Modeling	3
ENGT 200	Statics (grade of C or better required)	3
MATH 211	Calculus I (grade of C or better required)	4
COMM 101R	Public Speaking	3
PHYS 112N	Introductory General Physics	4
Credit Hours		17
Spring		
ENGT 220	Strength of Materials (grade of C or better required)	3
MET 225	Strength of Materials Laboratory	1
ENGT 270	Automation and Controls	3
ENGT 286	Automation and Controls Laboratory	1
MET 200	Materials and Manufacturing Processes	3

Human Behavior (S)		3
Credit Hours		14
Junior		
Fall		
MET 300	Thermodynamics (grade of C or better required)	3
MET 310	Dynamics	3
MET 330	Fluid Mechanics	3
MET 331	Fluid Mechanics Laboratory	1
ENGT 365	Geometric Dimensioning and Tolerancing	3
Human Creativity (A)		3
Credit Hours		16
Spring		
MET 320	Design of Machine Elements	3
MET 340	Heat Transfer	3
MET 350	Thermal Applications	3
MET 351	Thermal Applications Laboratory	1
ENGT 305	Advanced Technical Analysis	3
Literature (L)		3
Credit Hours		16
Senior		
Fall		
ENGT 434	Introduction to Senior Design Project	3
ENMA 302	Engineering Economics	3
ENMA 480	Ethics and Philosophy in Engineering Applications ****	3
Approved Elective **		3
Interpreting the Past (H)		3
Credit Hours		15
Spring		
ENGT 435W	Senior Design Project (grade of C or better required)	3
Approved Elective **		3
Approved Elective **		3
Upper-Division General Education ***		3
Upper-Division General Education ***		3
Credit Hours		15
Total Credit Hours		121

- * Does not include the University's General Education language and culture requirement. Additional hours may be required.
- ** Approved Elective options listed below.
- *** Additional courses will be required to complete a minor. See advisor for details.
- **** Meets the philosophy and ethics general education requirement.

Approved Electives for Mechanical Engineering Technology Majors

MET 427	Mechatronic System Design	3
MET 431	Modeling and Simulation of Mechatronic Systems	3
MET 460	Refrigeration and Air Conditioning	3
MET 471	Nuclear Systems I	3
MET 472	Nuclear Systems II	3
MET 475	Marine Engineering I	3
MET 476	Marine Engineering II	3
MET 485	Maintenance Engineering	3
EET 360	Electrical Power and Machinery	3
EET 405	Data Communications and Computer Networks	3
MFET 310	Design for Manufacturing	3
MFET 320	Introduction to Mechatronics	3
MFET 330	Quality Systems in Manufacturing	3
MFET 340	Computer Integrated Manufacturing	3
MFET 410	Computer Numerical Control in Production	3
MFET 420	Introduction To Welding Technologies	3
MFET 430	Additive Manufacturing	3
MFET 440	Advanced Manufacturing Processes	3
MFET 450	Lean Engineering	3
MFET 460	Facilities Planning and Material Handling	3

Linked Bachelor's/Master's Degree Programs

Linked Bachelor's/Master's programs are designed to allow qualified students to secure a space in a master's program available in the Frank Batten College of Engineering and Technology while they are still pursuing their undergraduate degrees. An eligible student can choose a master's program in the same discipline as his/her bachelor's program or in a complementary discipline. Subject to the approval of the undergraduate and graduate program directors, a student enrolled in a linked program can count up to six credit hours of course work towards both the undergraduate and the graduate degrees. Full-time students may be able to complete the requirements for the bachelor's degree in four years and the master's degree in one additional year. Students in linked programs must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Students who are matriculated in an undergraduate major in the Frank Batten College of Engineering and Technology with a GPA of at least 3.00 overall and 3.00 in the major are eligible to apply for admission to a Linked Bachelor's/Master's program. Transfer students who desire to be admitted to a linked program at the time they join an undergraduate major at Old Dominion University are eligible to apply if their overall GPA at their previous institution is 3.25 or higher. Prerequisite courses may be required for engineering technology majors to pursue a master's degree in engineering.

Continuance in a Linked Bachelor's/Master's program requires maintenance of a GPA of 3.00 or higher overall and in the major.

Linked Bachelor-to-PhD Programs

For a select number of exceptionally well-qualified students, the college has established a linked doctoral program that enables students to be admitted directly into the PhD program upon completion of the baccalaureate degree. A select number of exceptionally well-qualified students can be admitted to the Bachelor/PhD program in their junior year while they are pursuing one of the undergraduate programs at Old Dominion University. This program encourages admitted students to work closely with faculty members and pursue a research experience. Just as in the Linked Bachelor/Masters program, six credit hours of graduate course work may again be counted towards the undergraduate degree and doctoral course work mentioned

above for the Bachelor/PhD program. For linked bachelor's to doctoral programs, students must earn a minimum of 198 credit hours (120 discrete credit hours for the undergraduate degree and 78 discrete credit hours for the graduate degree). Students in these programs must maintain a GPA of 3.50 or better throughout their bachelor's and doctoral studies.

The student may opt to obtain the master's degree along the way to the doctorate. To obtain the master's degree, the student must utilize the six graduate credits obtained as part of their undergraduate program, use 18 credits of the graduate course work that is part of the PhD, and work with the Graduate Program Director to plan the final 6 credits.

Minor Mechanical Engineering Technology Minor

The minor in mechanical engineering technology is open to students (except mechanical engineering, manufacturing engineering technology, and mechanical engineering technology majors) who have completed at least one four-credit course in calculus. It is particularly helpful for those who are preparing for the Fundamentals of Engineering examination. The courses are offered both on campus and through ODUGlobal.

Requirements

The program consists of 12 credits and the specified courses are as follows:

MET 300	Thermodynamics	3
MET 310	Dynamics	3
MET 330	Fluid Mechanics	3
MET 350	Thermal Applications	3
Total Credit Hours		12

Certain substitutions are possible if suitable justification is provided.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses, prerequisites and corequisites and complete at least six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Minor Engineering Solutions for Climate Adaptation and Resilience Minor

The minor in Engineering Solutions for Climate Adaptation and Resilience will train students with an interest in developing engineering skills focused on adaptation and resilience to climate change and associated hazards. It will provide students with an understanding of the science, impacts, and management strategies of climate change.

Requirements

CEE 457	Adaptation to Sea Level Rise	3
CET 458	Managing the Climate Crisis	3
Select two of the following:		6
CET 332	Water Resources Engineering	
CET 420	Hydrology and Drainage	
CEE 446	Urban Stormwater Hydrology	
CEE 447	Groundwater Hydraulics	
CEE 455	Pollution Prevention and Green Engineering	
CET 456	Resilience and Sustainability	
CEE 458	Sustainable Development	
CEE 482	Introduction to Coastal Engineering	
Total Credit Hours		12

Civil Engineering majors completing the minor are limited to a maximum of six credits of CEE coursework. Civil Engineering Technology majors completing the minor are limited to a maximum of six credits of CET coursework.

For completion of the minor, students must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses. At least six hours of upper-level courses must be taken through courses offered by Old Dominion University.

Minor

Marine Engineering Minor

Minor in Marine Engineering

The minor in marine engineering is open to all students with the exception of those students in the Mechanical Engineering Technology program who are specializing in Marine Systems. Students seeking the minor must satisfy all pre- or corequisite requirements for the courses selected. The minor is multidisciplinary and consists of four courses in topics that are relevant to the shipbuilding, maintenance, repair and maritime operations industries.

The course requirements are as follows:

MET 475	Marine Engineering I	3
MET 476	Marine Engineering II	3
MAE 450	Principles of Naval Architecture	3
MAE 417	Propulsion Systems	3
Total Credit Hours		12

For completion of a minor, a student must have a minimum overall grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses, prerequisites and corequisites and complete at least six hours of upper-level courses in the minor requirement through courses offered by Old Dominion University.

Mechanical and Aerospace Engineering

Web Site: <http://www.odu.edu/mae> (<http://www.odu.edu/mae/>)

Marwan Al-Haik, Chair
Colin Britcher, Associate Chair

The Mechanical and Aerospace Engineering (MAE) Department offers an undergraduate program leading to a Bachelor of Science in Mechanical Engineering. The program is accredited by the Engineering Accreditation Commission (EAC) of ABET, <http://www.abet.org>. The Department also offers varied programs of graduate study and research leading to the Master of Engineering, Master of Science, and Doctor of Philosophy degrees in either Mechanical Engineering or Aerospace Engineering. For further information, please visit the Department's web site: <http://www.odu.edu/mae> (<http://www.odu.edu/mae/>).

Mechanical Engineering Mission

1. To develop and maintain a high-quality undergraduate program of study leading to the bachelor's degree in Mechanical Engineering.
2. To develop and maintain high-quality graduate programs of study and research leading to master's and doctoral degrees in Mechanical Engineering or Aerospace Engineering.
3. To conduct a relevant and high-quality research program in the mechanical and aerospace engineering disciplines.
4. To provide practicing mechanical and aerospace engineers in Virginia the opportunities to develop and maintain up-to-date technical knowledge and skills.
5. To provide the unique skills and knowledge required by the mechanical and aerospace engineering professions to support existing government agencies, consulting firms and industry and help promote the

development of new and more competitive industries in Virginia and the nation.

Programs

Bachelor of Science in Mechanical Engineering Programs

- Mechanical Engineering (BSME) (p. 614)

Minor Programs

- Aerospace Engineering Minor (p. 617)
- Marine Engineering Minor (p. 617)
- Mechanical Engineering Minor (p. 618)

Bachelor of Science in Mechanical Engineering Mechanical Engineering (BSME)

Xiaoyu Zhang, Chief Departmental Advisor

The mechanical engineering program is among the most basic of all engineering programs, with a curriculum that embraces the major areas of power, design, and fluid or solid mechanics. Seniors may select a number of elective classes, approved by their advisor, providing a focus on specialties such as:

1. Power/energy conversion
2. Mechanical systems/design
3. Aerospace engineering
4. Other

The program is designed to prepare its graduates for professional practice in many facets of engineering, such as research, development, design, planning, testing, management, and consulting. The graduate is prepared to undertake challenging and creative engineering work in almost any industry, government agency, research organization, or consulting firm. The program also provides an excellent preparation for graduate school and the Fundamentals of Engineering (FE) Exam.

An undergraduate student handbook providing rules and a detailed semester-by-semester plan for the program is available on the department's web site. Courses are routinely scheduled in the late afternoon and evening to accommodate students with current employment.

Outcomes

The Mechanical and Aerospace Engineering Department has adopted, after deliberations by its constituents, 7 outcomes for the BSME program. These outcomes are listed below. The students who qualify for graduation will have:

1. Proficiency in mathematics, calculus-based physics, and engineering science, and an ability to apply knowledge in these areas to identify, formulate, and solve mechanical engineering problems.
2. An ability to design an engineering system, component, or process to meet specified needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
3. An ability to present ideas and technical material to diverse audiences visually, verbally, and in writing.
4. An ability to recognize professional and ethical responsibilities and professional practice issues and to acquire the broad education necessary to make informed judgments, which must consider the impact of engineering solutions in a global, economic, environmental, and societal context.
5. An ability to function effectively as a member or a leader of a team that establishes goals, plans tasks, meets deadlines, and creates a collaborative and inclusive environment.

- An ability to design and conduct experiments and to critically analyze and interpret data in various mechanical engineering areas.
- An ability to recognize the ongoing need to acquire and apply new knowledge.

Mechanical Engineering Objectives

The program's educational objectives describe the career and professional accomplishments that the program is preparing graduates to attain within a few years after graduation. The educational objectives of the mechanical engineering program, established with participation of all constituencies, are consistent with the mission of Old Dominion University and the Department of Mechanical and Aerospace Engineering.

The objectives of the mechanical engineering undergraduate program at Old Dominion University are that our graduates should accomplish the following:

- To establish themselves as successful professionals in the general areas of thermal/fluid systems, mechanical systems and design, and materials and manufacturing in industry and government settings by demonstrating their ability to:
 - Conduct themselves consistently in a responsible, professional and ethical manner.
 - Participate in continuing education, research and development, and in other lifelong creative efforts in science and technology.
 - Lead others in support of activities that promote service to, and economic development of, the community, the region, state and nation.
- To successfully pursue and complete graduate programs in mechanical engineering, aerospace engineering or a related field if they so desire.

Accreditation

The Bachelor of Science in Mechanical Engineering is accredited by the Engineering Accreditation Commission of ABET www.abet.org. (<http://www.abet.org>)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

General Education requirements in information literacy and research and impact of technology are met through the major. For additional information consult the department undergraduate handbook.

Upper-Division General Education

- Option A. Approved Minor, 12-24 credit hours; also second degree or second major
- Option B. Interdisciplinary Minor; 12 credit hours, (3 credit hours may be in the major area of study)
- Option C. An approved certification program such as teaching licensure (hours vary)
- Option D. Two Upper-Division Courses (6 credit hours) from outside the College of Engineering and Technology which are not required by the major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Mechanical Engineering Grade Requirements

Mechanical engineering majors must earn a grade of C or better in the following courses in order to continue to progress through the program:

ENGL 110C	English Composition	3
MATH 211	Calculus I	4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research Writing, Rhetoric, and Research: Special Topics	3
MATH 212	Calculus II	4
CHEM 121N	Foundations of Chemistry I Lecture	3
PHYS 231N	University Physics I	4
MAE 201	Materials Science	3
MAE 204	Engineering Mechanics I - Statics	3
MAE 205	Dynamics	3
MAE 220	Engineering Mechanics II - Solid Mechanics	3
MAE 303	Mechanics of Fluids	3
MAE 311	Thermodynamics I	3
MAE 332	Mechanical Engineering Design I	3
MAE 434W	Project Design and Management I	3

Mechanical Engineering Major

General Education

Complete lower-division requirements	36-42
Complete upper-division requirements (minimum of 6 credit hours)	6

Mechanical Engineering Major

Complete mechanical engineering departmental and major requirements as shown on the degree program guide	82
Total Credit Hours	124-130

Additional Requirements and Information

Continuance Regulations

It is the policy of the Department of Mechanical and Aerospace Engineering to deny a student eligibility to enroll in program courses after it becomes evident that he or she is either unable or unwilling to maintain reasonable standards of academic achievement. Required courses are all those specifically listed above. Major GPA is calculated based on courses with an MAE prefix.

- 1. Warning. A student will be placed on departmental academic warning if their major grade point average falls below 2.0 after six or more hours have been attempted in the major. Students on academic warning are expected to consult with their departmental advisors and to take immediate steps to improve their major GPA.
- 2. A student will be placed on departmental academic probation whenever their major grade point average falls below 2.0 for two consecutive semesters of enrollment. Students on academic probation are expected to improve their major GPA to 2.0 or above in no more than one additional regular semester (Fall or Spring). University rules for grade forgiveness will apply.
- 3. A student is subject to termination from the program if their major GPA remains below 2.0 after the additional regular semester on probation.
- 4. Students are expected to achieve the required grade (i.e. pass or C) in all required classes in no more than three completed attempts. Failure to do so renders the student subject to immediate termination from the program.

Appeals of termination from the program are in order if extenuating circumstances warrant. Appeals are to be made in writing to the chair of the department. Once the appeal is submitted, it is considered by the faculty of the department.

Degree Program Guide*

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
MATH 211	Calculus I (grade of C or better required)	4
CHEM 121N	Foundations of Chemistry I Lecture (grade of C or better required)	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
ENGL 110C	English Composition (grade of C or better required)	3
ENGN 121	Introduction to Engineering and Technology	4
Credit Hours		15
Spring		
MATH 212	Calculus II (grade of C or better required)	4
PHYS 231N	University Physics I (grade of C or better required)	4
ENGN 122	Computer Programming for Engineering	4
COMM 101R	Public Speaking	3
Credit Hours		15

Sophomore		
Fall		
PHYS 232N	University Physics II	4
MATH 312 or MATH 285	Calculus III or Transfer Credit for Calculus III	4
MAE 204	Engineering Mechanics I - Statics (grade of C or better required)	3
MAE 201	Materials Science (grade of C or better required)	3
MAE 203	Mechanical Engineering Laboratory I - Materials Science	1
MAE 230	Engineering Graphics and Computer Solid Modeling	2
Credit Hours		17
Spring		
MAE 205	Dynamics (grade of C or better required)	3
MAE 220	Engineering Mechanics II - Solid Mechanics (grade of C or better required)	3
MAE 225	Mechanical Engineering Laboratory II - Solid Mechanics	1
MATH 307 or MATH 280	Ordinary Differential Equations or Transfer Credit for Ordinary Differential Equations	3
Interpreting the Past		3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Credit Hours		16
Junior		
Fall		
MAE 303	Mechanics of Fluids (grade of C or better required)	3
MAE 305	Mechanical Engineering Laboratory III - Thermo/Fluids	1
MAE 311	Thermodynamics I (grade of C or better required)	3
MAE 340	Computational Methods in Mechanical Engineering	3
Literature		3
Human Creativity		3
Credit Hours		16
Spring		
MAE 332	Mechanical Engineering Design I (grade of C or better required)	3
MAE 315	Heat and Mass Transfer	3
MAE 336	Electromechanical Systems	3
Philosophy and Ethics **		3
Human Behavior		3
Credit Hours		15

Senior		
Fall		
MAE 433	Mechanical Engineering Design II	3
MAE 434W	Project Design and Management I (grade of C or better required)	3
MAE 436	Dynamic Systems and Control	3
MAE Option Course		3
STAT 330	An Introduction to Probability and Statistics	3
Credit Hours		15
Spring		
MAE 435	Project Design and Management II	3
MAE Option Course		3
MAE Option Course		3
Upper-Division General Education courses		6
Credit Hours		15
Total Credit Hours		124

- * Does not include the University's General Education language and culture requirement. Additional hours may be required.
- ** ENMA 480 is preferred.

Senior Electives

In the senior year, students should select their three elective courses to support a chosen specialty area. Examples include:

1. Power/energy: three courses from MAE 312, MAE 411, MAE 412, MAE 413, MAE 414, MAE 417, MAE 438, MAE 440
2. Mechanical systems design: three courses from MAE 404, MAE 422, MAE 431, MAE 438, MAE 440, MAE 441
3. Aerospace: three courses from MAE 403, MAE 406, MAE 417, MAE 420 (or MAE 440), MAE 438, MAE 460
4. Alternative combinations may be selected with advisor approval.

Linked Bachelor's/Master's Degree Programs

Linked Bachelor's/Master's programs are designed to allow qualified students to secure a space in a master's program available in the Frank Batten College of Engineering and Technology while they are still pursuing their undergraduate degrees. An eligible student can choose a master's program in the same discipline as his/her bachelor's program or in a complementary discipline. Subject to the approval of the undergraduate and graduate program directors, a student enrolled in a linked program can count up to six credit hours of course work towards both the undergraduate and the graduate degrees. Full-time students may be able to complete the requirements for the bachelor's degree in four years and the master's degree in one additional year. Students in linked programs must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Students who are matriculated in an undergraduate major in the Frank Batten College of Engineering and Technology with a GPA of at least 3.00 overall and 3.00 in the major are eligible to apply for admission to a Linked Bachelor's/Master's program. Transfer students who desire to be admitted to a linked program at the time they join an undergraduate major at Old Dominion University are eligible to apply if their overall GPA at their previous institution is 3.25 or higher. Prerequisite courses may be required for engineering technology majors to pursue a master's degree in engineering.

Continuance in a Linked Bachelor's/Master's program requires maintenance of a GPA of 3.00 or higher overall and in the major.

Linked Bachelor-to-PhD Programs

For a select number of exceptionally well-qualified students, the college has established a linked doctoral program that enables students to be admitted directly into the PhD program upon completion of the baccalaureate degree. A select number of exceptionally well-qualified students can be admitted to the Bachelor/PhD program in their junior year while they are pursuing one of the undergraduate programs at Old Dominion University. This program encourages admitted students to work closely with faculty members and pursue a research experience. Just as in the Linked Bachelor/Masters program, six credit hours of graduate course work may again be counted towards the undergraduate degree and doctoral course work mentioned above for the Bachelor/PhD program. For linked bachelor's to doctoral programs, students must earn a minimum of 198 credit hours (120 discrete credit hours for the undergraduate degree and 78 discrete credit hours for the graduate degree). Students in these programs must maintain a GPA of 3.50 or better throughout their bachelor's and doctoral studies.

The student may opt to obtain the master's degree along the way to the doctorate. To obtain the master's degree, the student must utilize the six graduate credits obtained as part of their undergraduate program, use 18 credits of the graduate course work that is part of the PhD, and work with the Graduate Program Director to plan the final 6 credits.

Minor Aerospace Engineering Minor Requirements

The Department of Mechanical and Aerospace Engineering offers a minor program in aerospace engineering comprising four courses chosen from the following list:

MAE 403	Flight Mechanics	3
MAE 406	Flight Vehicle Aerodynamics	3
MAE 417	Propulsion Systems	3
MAE 420	Aerospace Structures	3
or MAE 440	Introduction to Finite Element Analysis	
MAE 438	Applied Analog and Digital Control	3
MAE 460	Introduction to Space Systems Engineering	3
Total Hours Required (choose 4 courses):		12

It may be possible to substitute other appropriate senior-level mechanical and aerospace engineering courses with prior approval of the Mechanical and Aerospace Engineering Department. The minor in aerospace engineering is open to all students except for those majoring in mechanical engineering with a focus in aerospace engineering. All prerequisites and corequisites must be satisfied for all courses taken.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses, prerequisites and corequisites and complete at least six hours of upper-level courses in the minor requirement through courses offered by Old Dominion University.

Minor Marine Engineering Minor Minor in Marine Engineering

The minor in marine engineering is open to all students with the exception of those students in the Mechanical Engineering Technology program who are specializing in Marine Systems. Students seeking the minor must satisfy all pre- or corequisite requirements for the courses selected. The minor is multidisciplinary and consists of four courses in topics that are relevant to the shipbuilding, maintenance, repair and maritime operations industries.

The course requirements are as follows:

MET 475	Marine Engineering I	3
MET 476	Marine Engineering II	3
MAE 450	Principles of Naval Architecture	3
MAE 417	Propulsion Systems	3
Total Credit Hours		12

For completion of a minor, a student must have a minimum overall grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses, prerequisites and corequisites and complete at least six hours of upper-level courses in the minor requirement through courses offered by Old Dominion University.

Minor

Mechanical Engineering Minor

The Department of Mechanical and Aerospace Engineering offers a minor program with two emphases: thermal sciences and mechanics.

Requirements

The specific minimum courses required are as follows:

Thermal Sciences

MAE 303	Mechanics of Fluids	3
MAE 311	Thermodynamics I	3
MAE 312	Thermodynamics II	3
or MAE 414	Introduction to Gas Dynamics	
MAE 315	Heat and Mass Transfer	3
Total Credit Hours		12

Mechanics

MAE 332	Mechanical Engineering Design I	3
MAE 340	Computational Methods in Mechanical Engineering	3
MAE 404	Vibrations	3
MAE 436	Dynamic Systems and Control	3
Total Credit Hours		12

It may be possible to substitute other appropriate junior- or senior-level mechanical engineering courses for those specified above with prior approval of the department. Exceptions are rare and are not encouraged. All prerequisites and corequisites must be satisfied for all courses taken.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses, prerequisites and corequisites and complete at least six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Naval Science (Naval Reserve Officers Training Corps)

Web Site: <https://www.odu.edu/nrotc> (<https://www.odu.edu/nrotc/>)

Programs

Minor Program

- Military Leadership Minor (p. 619)

Naval ROTC Program

- NROTC (p. 618)

Naval Reserve Officers' Training Corps

Mission and Basic Program

The primary mission of the Department of Naval Science is to provide professional and leadership instruction to students who desire to serve as commissioned officers in the United States Navy or Marine Corps. The Naval ROTC program is administratively located under the Director of Military Activities and is situated, for academic matters, within the Batten College of Engineering and Technology. (<http://www.odu.edu/eng/>)

The NROTC program consists of two courses of instruction: the four-year program and the two-year program. Both apply to scholarship and non-scholarship (college program) students.

The four-year program is divided into a two-year basic course and a two-year advanced course.

The basic course is normally pursued by NROTC midshipmen during their freshman and sophomore years. While most freshmen begin the basic course during the fall, it is possible to enter the program in the spring semester.

Requirements

NAVS 101	Introduction to Naval Science	2
NAVS 102	Naval Sea Power and Maritime Affairs	3
NAVS 301	Navigation and Naval Operations I	3
NAVS 401	Leadership and Management I	3

The advanced course is normally pursued during the junior and senior years.

Accompanying laboratory sessions

NAVS 201	Naval Ships Systems I	3
NAVS 202	Naval Ships Systems II	3
NAVS 302	Navigation and Naval Operations II	3
NAVS 402	Leadership and Ethics	3

Students seeking a commission in the Marine Corps or Marine Corps Reserve are not required to take: NAVS 201, NAVS 202, NAVS 301, and NAVS 302 but instead must take NAVS 310 and NAVS 410.

Scholarship recipients supplement classroom instruction with an at-sea training period each summer. College program students supplement classroom instruction with at-sea training during the summer between their junior and senior years. Similarly, Marine Corps option students attend the six-week Marine Officer Candidate School at Quantico, Virginia during the summer between their junior and senior years.

The two-year NROTC program is extended to students who do not participate in NROTC during their freshman and sophomore years. Applications to join must be submitted during the sophomore year. If accepted for an unaffiliated scholarship, students will become a member of the unit upon acceptance and will be required to meet all NROTC standards and requirements.

Nuclear Power Option

To be most competitive, those students interested in entering the Navy's nuclear power program should have a college grade point average greater than 3.00. While any major is acceptable, all applicants must have completed at least two semesters of calculus (MATH 211 and MATH 212, or equivalent) and two semesters of calculus-based physics (PHYS 231N and PHYS 232N). Those students with a major in science, math, or engineering are most desirable. While not required, the following courses are recommended regardless of major for those students interested in navy nuclear power:

- Modern Physics
- Differential Equations
- Thermodynamics (ME)

- Principles of Chemistry
- Circuit Analysis

Minor

Military Leadership Minor

The minor in military leadership is a high quality, interdisciplinary, multidimensional, experiential, and culturally diverse program that exposes students to, and prepares them for, real life leadership opportunities and challenges. Students explore issues of leadership, citizenship, and social change within the context of an inquiry, experiential, and competency-based instructional design. The minor is open to all students who have completed the prerequisite courses. Students who are not enrolled in the military science or naval science program will receive academic credit for commissioning purposes.

For more information contact the Department of Naval Science at (757) 683-4741 or visit the web site: <http://www.odu.edu/nrotc> (<http://www.odu.edu/nrotc/>).

Requirements

The requirements for students in the Naval Science Department are completion of the following:

NAVS 301	Navigation and Naval Operations I	3
or NAVS 310	Evolution of Warfare	
NAVS 302	Navigation and Naval Operations II	3
or NAVS 410	Fundamentals of Maneuver Warfare	
NAVS 401	Leadership and Management I	3
NAVS 402	Leadership and Ethics	3
Select one of the following:		3
ENMA 301	Introduction to Engineering Management	
ENMA 401	Project Management	
ENGL 435W	Management Writing	
HIST 360	American Military History	
HIST 408	War and American Society in the Twentieth Century	
MGMT 325	Contemporary Organizations and Management	
MGMT 340	Human Resource Management	
NURS 480W	Nursing in the Health Care System: Leadership	
PHIL 442E	Studies in Applied Ethics	
POLS 326W	American Foreign Policy	
POLS 327W	Politics of National Security	
POLS 350T	Technology and War	
POLS 421	International Law	
PSYC 343	Personnel Psychology	
PSYC 345	Organizational Psychology	
Total Credit Hours		15

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Ellmer College of Health Sciences

Web Site: <http://www.odu.edu/hs> (<http://www.odu.edu/hs/>)

Bonnie L. Van Lunen, Dean
Christopher K. Rhea, Associate Dean for Research & Innovation
Barbara Kraj, Associate Dean for Education & Innovation

3000 Ellmer Health Sciences Building
1019 W 41st. Street, Norfolk, VA 23529

757-683-4960
<http://www.odu.edu/hs> (<http://www.odu.edu/hs/>)

Leanne White, Director of Advising
Nicole Boyette, Advisor
Kristen Haben, Advisor
Crystal Rawls, Advisor

The Ellmer College of Health Sciences' mission is to engage learners, make discoveries and improve health. We are a forward-focused College that improves health in our communities through innovative and interdisciplinary approaches. The college values integrity, inclusiveness, excellence and partnership. The degree programs are competitive, fully accredited (if applicable), and nationally recognized for quality graduates.

The college consists of the School of Exercise Science, the Gene W. Hirschfeld School of Dental Hygiene, the School of Medical Diagnostic and Translational Sciences, the School of Rehabilitation Sciences and the School of Speech-Language Pathology. These schools offer a variety of baccalaureate, master's, and doctoral degrees, undergraduate, graduate, and non-degree certificate programs, accelerated and degree completion programs, minors, and professional continuing education programs. In addition, many of these programs are offered off-campus and in a variety of online formats. See individual program information or the Graduate Catalog for details.

Program Application, Acceptance, and Continuance

Intended Health Sciences Students - Health Sciences Advising Center

Students who qualify for regular admission to the University and who intend to apply for admission to a health sciences major program are considered Intended Health Sciences students until admitted to their intended major.

They will be assigned an advisor in the Health Sciences Advising Center while completing general education and prerequisite requirements needed to apply to their intended major. Intended health sciences students receive individualized advising support designed to prepare them for success in their chosen health sciences major.

Contact:
Health Sciences Advising Center
3rd floor Ellmer Health Sciences Building
1019 W 41st. Street, Norfolk, VA 23529
757-683-5137
HSAdvising@odu.edu

<https://www.odu.edu/health-sciences-advising> (<https://www.odu.edu/health-sciences-advising/>)

Regulations for Continuance as an Intended Health Sciences Major

Students are eligible to continue as Intended Health Sciences majors as long as they meet both of the following:

1. Meet the continuance regulations of the University.
2. Make reasonable progress toward matriculation into Ellmer College of Health Sciences major program.

At the end of each semester (fall, spring, and summer), the Health Sciences Advising Center reviews the records of all students who do not meet minimum admissions requirements for their intended major (see admissions

information in the specific program sections of the Catalog and on the web site.) A student who has ceased reasonable progress toward admission into a Health Sciences degree program will be notified in writing via the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business.

Students who are not making satisfactory progress in Health Sciences will meet with their professional academic advisor in health sciences to determine the next steps. The advisor will assist the student in identifying another major in the school/college; facilitating a transfer to another school/college if the new major is known, or connecting with the Center for Orientation, Retention and Exploration (CORE) for assistance in selecting a new intended major.

Program Admission

A separate application must be submitted to be considered for acceptance into many of the health science majors. **Acceptance to the University does not constitute or guarantee acceptance into these health science majors.** Students are notified by the program director of their acceptance and any other program specific requirements such as physicals, immunizations, technical standards, etc. Application information, qualifications, deadlines, and advisors are listed in the specific program sections of the Catalog and on the web site.

Continuance in the health science majors requires strong academic achievement, including successful demonstration of knowledge and use of practical and critical thinking skills in laboratory and in clinical rotations. Criminal background checks may be required as specified in course syllabi or program-specific admission materials. Any student deemed unacceptable for clinical or other field rotation due to results from a criminal background check will not be allowed to complete the program of study.

Advanced Placement

Advanced placement credit may be earned for courses offered by the Ellmer College of Health Sciences upon validation of mastery of the subject matter and skills covered in the respective course(s). A fee may be charged for the assessment of competency. Please check with the school offering the course for further information.

Departments

- Dental Hygiene (p. 626)
- Exercise Science (p. 632)
- Medical Diagnostic & Translational Sciences (p. 636)
- Speech-Language Pathology (p. 646)

Programs

Bachelor of Science Programs

- Exercise Science (BS) (p. 632)
- Speech-Language Pathology and Audiology (BS) (p. 646)

Bachelor of Science in Dental Hygiene Programs

- Dental Hygiene (BSDH) (p. 626)
- Dental Hygiene Post-Licensure Major (BSDH) (p. 630)

Bachelor of Science in Health Sciences Programs

- Health Sciences with a Major in Pre-Clinical Studies (BSHS) (p. 621)
- Health Sciences with a Major in Recreational Therapy (BSHS) (p. 623)

Bachelor of Science in Medical Laboratory Science Programs

- Medical Laboratory Science (BSMLS) (p. 637)
- Medical Laboratory Science Degree Completion Major (BSMLS) (p. 639)

- Medical Laboratory Science with a Major in Cytology (BSMLS) (p. 641)

Bachelor of Science in Nuclear Medicine Technology Program

- Nuclear Medicine Technology (BSNMT) (p. 643)

Minor Programs

- Exercise Science Minor (p. 636)
- Health and Wellness Minor (p. 636)
- Medical Laboratory Science Minor (p. 641)
- Recreational Therapy Minor (p. 626)
- Speech-Language Pathology and Audiology Minor (p. 648)

EVMS – Early Assurance Programs

ODU and EVMS School of Health Professions have entered into Early Assurance Program (EAP) agreements. ODU applicants meeting certain criteria are eligible for early assurance into the EVMS Master of Pathologists' Assistant (MSHPA) program, Master of Physician Assistant (MPA) program, EVMS Master of Surgical Assisting (MSA) program, and Master of Laboratory Animal Science (MS) program. To be eligible to apply through the EAP program, students must meet and maintain specific criteria as outlined on the EVMS website:

Laboratory Animal Science (MS):

https://www.evms.edu/education/masters_programs/laboratory_animal_science/early_assurance_program/

Pathologists' Assistant (MSHPA):

https://www.evms.edu/education/masters_programs/pathologists_assistant/early_assurance_program/

Physician Assistant (MPA):

https://www.evms.edu/education/masters_programs/physician_assistant/admissions_information/early_assurance_program/

Surgical Assisting (MSA):

https://www.evms.edu/education/masters_programs/surgical_assisting/early_assurance_program/

Programs

Programs

Bachelor of Science in Health Science Programs

- Health Sciences with a Major in Pre-Clinical Studies (BSHS) (p. 621)
- Health Sciences with a Major in Recreational Therapy (BSHS) (p. 623)

Minor Programs

- Recreational Therapy Minor (p. 626)

Bachelor of Science in Health Sciences Health Sciences with a Major in Pre-Clinical Studies (BSHS)

The Pre-Clinical Studies major provides clear paths for students interested in graduate health professions with flexibility to select courses, depending on the anticipated graduate degree.

Major Declaration

To officially declare a major in Pre-Clinical Studies, students must complete the following courses with a grade of C or better: HLTH 120G, ENGL 110C, MATH 102M or MATH 103M or MATH 162M, CHEM 121N, CHEM 122N, CHEM 123N, CHEM 124N STAT 130M, and BIOL 250.

Students who have met all major declaration requirements will be referred by their advisor in the Health Sciences Advising Center to the program director for major declaration and assignment to a program advisor. For additional information on the curriculum or major declaration requirements, please contact the College of Health Sciences Advising Center (hsadvising@odu.edu).

Continuance and Readmission Policy

In addition to the Old Dominion University continuance policies in this catalog, the following policies are specific to all declared majors in the Pre-Clinical Studies Program:

1. A grade of C (2.00) or better is required in all required core courses and Pre-Clinical Studies major electives to continue in the program.
2. A student who earns a grade of C- or lower will not be considered in good academic standing in the major and must retake the course in the next semester the course is offered.
3. A Pre-Clinical Studies major student who does not earn a grade of C or higher in multiple major courses may be undeclared and must meet with the program director to create an academic success plan that outlines requirements for continuance in the major. Students who continue not to meet continuance requirements for more than one semester may be removed from the major and referred to the Academic Success Center for advising and degree counseling.
4. A cumulative grade point average of 2.7 or better is required to continue in the Pre-Clinical Studies program.
5. A student may be readmitted to the Pre-Clinical Studies major only once.

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: grade of C or better required in both courses

Oral Communication: Can be met in the major with HMSV 339

Mathematics: MATH 102M or MATH 103M or MATH 162M required (C or better required)

Information Literacy and Research: Met in the major prerequisite with HLTH 120G

Human Behavior: PSYC 201S or SOC 201S required (C or better required)

Philosophy and Ethics: PHIL 345E preferred (may also count toward Option D)

Nature of Science (C or better required): CHEM 121N, CHEM 122N, CHEM 123N, and CHEM 124N required (CHEM 103 may be needed as a prerequisite--consult advisor)

Impact of Technology: Met in the major with HLSC 485

Upper-Division General Education

- Option A: Disciplinary Minor (a minimum of 12 hours determined by the department) or Second Major or Second Degree
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C: An approved Certification Program such as teaching licensure
- Option D: Six hours of elective upper-division courses from outside the College of Health Sciences and not required by the student's major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Pre-Clinical Studies Major

General Education		
Complete lower-division requirements		32-41
Complete upper-division requirements (minimum of 6 credit hours)		3-6
Prerequisite Course *		
HLTH 120G	Information Literacy for Health Professions	3
Core Courses BSHS *		
HLSC 320	Health Equity and Disability Culture	3
HMSV 339	Interpersonal Relations	3
HLSC 390	The U.S. Healthcare Delivery System	3
HLSC 485	Health Informatics	3
HLSC 468	Internship	3
STAT 130M	Elementary Statistics	3
Pre-Clinical Studies *		
NMED 300	Medical Terminology	3
HLSC 445	Health Sciences Research Methods	3
BIOL 250	Human Anatomy and Physiology I	4
BIOL 251	Human Anatomy and Physiology II	4
Select one of the following:		3
MLS 403W	Management in the Clinical Setting	30
EXSC 431W	Wellness Programming and Administration	
PUBH 430W	Community Health Resources and Health Promotion	
Pre-Clinical Studies Electives *		30
Total Credit Hours		103-115

* Grade of C or better required.

Please contact your College of Health Sciences advisor for guidance on elective selection for specific pathways of study. Pre-Clinical Studies Electives may be selected from the following course options:

Biology: BIOL 121N, BIOL 122N, BIOL 123N, BIOL 124N, BIOL 150, BIOL 151, BIOL 293, BIOL 294, BIOL 316, BIOL 317

Chemistry: CHEM 211, CHEM 212, CHEM 213 CHEM 214, CHEM 441

Cytology: CYTO 404, CYTO 407, CYTO 430

Exercise Science: EXSC 322, EXSC 326, EXSC 327, EXSC 408, EXSC 417

Health Sciences: HLSC 405 or 300/400-level HLSC Study Abroad course

Medical Diagnostic and Translational Sciences: MDTS 400, MDTS 401

Medical Laboratory Science: MLS 307, MLS 308 MLS 310, MLS 313, MLS 420, MLS 468, MLS 339, MLS 340

Nuclear Medicine Technology: NMED 335

Physics: PHYS 111N, PHYS 112N

Psychology: PSYC 203S, PSYC 306, PSYC 353, PSYC 405

Electives

Additional elective credit may be needed to meet the minimum of 120 credit hours required for the degree.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition *	3
HLTH 120G	Information Literacy for Health Professions *	3
Mathematics (MATH 103M or MATH 102M or MATH 162M) *		3
Interpreting the Past		3
CHEM 103	Preparatory Chemistry (if needed as prerequisite to CHEM 121N) **	3
Credit Hours		15
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research * or Writing, Rhetoric, and Research: Special Topics	3
STAT 130M	Elementary Statistics *	3
PSYC 201S or SOC 201S	Introduction to Psychology * or Introduction to Sociology	3
CHEM 121N	Foundations of Chemistry I Lecture *	3
CHEM 122N	Foundations of Chemistry I Laboratory *	1
Human Creativity		3
Credit Hours		16

Summer		
Elective or Foreign Language (if required)		3
Credit Hours		3
Sophomore		
Fall		
HLSC 320	Health Equity and Disability Culture *	3
BIOL 250	Human Anatomy and Physiology I *	4
NMED 300	Medical Terminology *	3
CHEM 123N	Foundations of Chemistry II Lecture *	3
CHEM 124N	Foundations of Chemistry II Laboratory *	1
Credit Hours		14
Spring		
HMSV 339	Interpersonal Relations (Meets Oral Communication) *	3
BIOL 251	Human Anatomy and Physiology II *	4
PHIL 345E	Bioethics (Preferred)	3
Literature		3
Pre-Clinical Elective *		3
Credit Hours		16
Summer		
Minor Course, Elective, or Foreign Language (if required)		3
Credit Hours		3
Junior		
Fall		
HLSC 390	The U.S. Healthcare Delivery System *	3
HLSC 445	Health Sciences Research Methods *	3
Pre-Clinical Electives *		6
Minor Course or Upper-Division General Education		3
Credit Hours		15
Spring		
MLS 403W OR EXSC 431W OR PUBH 430W *		3
Pre-Clinical Electives *		8
Minor Course, Elective, or Oral Communication (if HMSV 339 not taken) ***		3
Credit Hours		14
Senior		
Fall		
HLSC 485	Health Informatics **	3
Pre-Clinical Electives *		9
Credit Hours		12
Spring		
HLSC 468	Internship *	3
Pre-Clinical Electives *		6
Minor Course, Elective, or Upper Division General Education+		3
Credit Hours		12
Total Credit Hours		120

- * Grade of C or better required
- ** CHEM 103 with a grade of C or better may be required as a pre-requisite for CHEM 121N. Please consult with your advisor to determine whether you need this course. If not, a general elective may be completed instead.
- *** If you completed HLSC 335 and did not complete HMSV 339, you will still need to meet the University's Oral Communication requirement. Consult your advisor for guidance.
- + Additional electives may be needed to reach 120 hours.

Bachelor of Science in Health Sciences Health Sciences with a Major in Recreational Therapy (BSHS)

Shelly Beaver, Undergraduate Program Director
3053 Ellmer College of Health Sciences Building
(757) 683-4415, sbeaver@odu.edu

The Recreational Therapy (RT) program at Old Dominion University strives to prepare competent, entry-level recreational therapists in the cognitive (knowledge), psychomotor (skill), and affective (behavior) learning domains. The RT program implements high-impact educational practices, such as community-engaged learning, interprofessional collaborative projects, and internships, to provide disciplinary-specific education and experiences across practice settings and diagnostic groups. Students gain necessary job task skills in the areas of assessment, planning, implementation, evaluation, documentation, administration, and professionalism, as outlined by the National Council for Therapeutic Recreation Certification (NCTRC). Upon graduation students will be eligible to sit for the NCTRC national certification exam to enter the profession as a qualified provider of recreational therapy services.

A minimum of 120 credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University, is required for the Recreational Therapy major.

National Council for Therapeutic Recreation Certification (NCTRC) is the credentialing organization for the profession of Therapeutic Recreation. <https://www.nctrc.org>

American Therapeutic Recreation Association (ATRA) is the national professional organization representing the interests and needs of recreational therapists. <https://www.atra-online.com> (<https://www.atra-online.com/>)

** The recreational therapy curriculum includes prerequisite coursework required for admission into ODU's Doctor of Occupational Therapy (OTD) program. Completing the recreational therapy program does not guarantee admission into the OTD program.*

Admission into the Recreational Therapy Major

To officially declare a major in Recreational Therapy, requirements are as follows:

1. Students must have an overall grade point average of 2.00.
2. Students must have completed the following courses: ENGL 110C (C or higher), PSYC 203S, BIOL 240 or BIOL 250, BIOL 241 or BIOL 251, and RT 261 (C- or higher).
3. Students who have met all Recreational Therapy major admission requirements will be referred by their advisor in the Health Sciences Advising Center to the Recreational Therapy Undergraduate Program Director for major declaration and assignment to a faculty advisor.
4. Students must pass a background check.
5. Students must be admitted to the Recreational Therapy major before enrolling in RT 300- or 400- level required courses.

- Students must comply with all policies and procedures outlined in the Recreational Therapy Student Handbook.

For additional information on the curriculum or major declaration requirements, please contact: Program Director (sbeaver@odu.edu) (sbeaver@odu.edu) or the College of Health Sciences Advising Center (hsadvising@odu.edu).

Continuance and Readmission Policy

In addition to Old Dominion University's continuance policies, the following policies are specific to all declared Recreational Therapy majors in the BSHS degree. All continuance policies for the Recreational Therapy major can be found in detail in the Recreational Therapy Student Handbook.

- A cumulative grade point average of 2.00 or better is required to continue in the major.
- Students placed on academic suspension by the University will not be considered in good academic standing and will be dismissed from the major. At the request of the student, their status may be changed to an intended major.
- Students may apply for readmission to the major once they have completed the academic suspension period, have been readmitted to the University, and have met all the entrance to major requirements.
- Students may be readmitted to the BSHS Recreational Therapy major only once.
- A student who leaves the major and is readmitted may be required to take additional course work prior to or concurrent with readmission.

Senior Internship

The senior internship, RT 468 is a capstone course and requires a 560-hour and 14-week internship experience at an approved health and human service agency practicing recreational therapy. Students will apply academic learning and will demonstrate competencies associated with entry-level practice in recreational therapy. The student's academic and agency direct supervisors must be Certified Therapeutic Recreation Specialists (CTRS). The senior internship is a planned, supervised, and evaluated culminating experience for students. The senior internship must adhere to all NCTRC internship standards for national certification. All coursework must be completed prior to a student beginning the senior internship experience.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3

Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication Skills: Grade of C or better required in both courses.

Human Behavior: PSYC 201S is required with a C or better.

Lower-division general education requirements met in the major:

- Mathematics: STAT 130M is a core requirement and met in the major, with a required grade of C- or better.
- Impact of Technology: HLSC 485 is met in the major, with a required grade of C- or better
- Oral Communication: met in the major with HMSV 339, with a required grade of C- or better

Lower-division general education requirements preferred courses:

- Information Literacy and Research: HLTH 120G is preferred
- Philosophy and Ethics: PHIL 345E is preferred

Upper-Division General Education

- Option A: Disciplinary Minor (a minimum of 12 hours determined by the department) or Second Major or Second Degree
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C: An approved Certification Program such as teaching licensure
- Option D: Six hours of elective upper-division courses from outside the College of Health Sciences and not required by the student's major.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Recreational Therapy Prerequisite Courses

BIOL 240	Fundamentals of Anatomy and Physiology I	4
or BIOL 250	Human Anatomy and Physiology I	

BIOL 241 or BIOL 251	Fundamentals of Anatomy and Physiology II Human Anatomy and Physiology II	4
PSYC 203S	Lifespan Development	3
RT 261	Foundations of Recreational Therapy Practice **	3
Total Credit Hours		14

Recreational Therapy Major

General Education

Complete lower-division requirements	32-38
Complete upper-division requirements (minimum of 6 credit hours)	6

Prerequisite Courses

Complete prerequisite courses	14

Core Courses BSHS

HLSC 320	Health Equity and Disability Culture **	3
HMSV 339	Interpersonal Relations **	3
HLSC 390	The U.S. Healthcare Delivery System **	3
HLSC 485	Health Informatics **	3
RT 468	Senior Internship *	12
STAT 130M	Elementary Statistics **	3

Recreational Therapy

RT 210	Leisure, Health, and Wellness **	3
RT 290	Professional Preparation in Recreational Therapy **	3
RT 366	Internship Preparation **	1
RT 420	Intervention Techniques in Recreational Therapy **	4
RT 430	Assessment, Documentation, and Evaluation in Recreational Therapy **	3
RT 450	Diagnostic Groups in Recreational Therapy **	3
RT 460	Administration of Recreational Therapy Services **	3
RT 470	Recreational Therapy Program Design and Implementation **	3
RT 480W	Evidence-Based Practice and Trends in Recreational Therapy *	3
NMED 300	Medical Terminology	3
PSYC 405	Psychopathology	3
Electives		6
CSD 465	Sign Language and Deaf Culture I	
PSYC 353	The Psychology of Adulthood and Aging	
RT 368	Junior Internship **	
Total Credit Hours		117-123

* Grade of C or better required.
** Grade of C- or better required

Electives

Additional elective credit may be needed to meet the minimum of 120 credit hours required for the degree.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition *	3
Human Creativity		3
Interpreting the Past		3
The Nature of Science I		4

Credit Hours 13

Spring

ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research * or Writing, Rhetoric, and Research: Special Topics	3
STAT 130M	Elementary Statistics **	3
RT 261	Foundations of Recreational Therapy Practice **	3
The Nature of Science II		4
General Elective		3

Credit Hours 16

Summer

Elective or Foreign Language (if required)		0-3

Credit Hours 0-3

Sophomore

Fall

Literature		3
BIOL 240 or BIOL 250	Fundamentals of Anatomy and Physiology I or Human Anatomy and Physiology I	4
HLSC 320	Health Equity and Disability Culture **	3
PSYC 203S	Lifespan Development	3
RT 290	Professional Preparation in Recreational Therapy **	3

Credit Hours 16

Spring

HLTH 120G	Information Literacy for Health Professions (Preferred)	3
BIOL 241 or BIOL 251	Fundamentals of Anatomy and Physiology II or Human Anatomy and Physiology II	4
PSYC 201S	Introduction to Psychology *	3
PHIL 345E	Bioethics (Preferred)	3
RT 210	Leisure, Health, and Wellness **	3

Credit Hours 16

Summer

Elective or Foreign Language (if required)		0-3

Credit Hours 0-3

Junior

Fall

HMSV 339	Interpersonal Relations **	3
NMED 300	Medical Terminology	3
PSYC 405	Psychopathology	3

RT 420	Intervention Techniques in Recreational Therapy **	4
Minor or Upper-Division General Education		3
Credit Hours		16
Spring		
HLSC 390	The U.S. Healthcare Delivery System **	3
RT 430	Assessment, Documentation, and Evaluation in Recreational Therapy **	3
RT 450	Diagnostic Groups in Recreational Therapy **	3
RT 460	Administration of Recreational Therapy Services **	3
Minor or Upper-Division General Education		3
Credit Hours		15
Summer		
RT 368	Junior Internship (Optional Elective) **	3
Credit Hours		3
Senior		
Fall		
HLSC 485	Health Informatics **	3
RT 366	Internship Preparation **	1
RT 470	Recreational Therapy Program Design and Implementation **	3
RT 480W	Evidence-Based Practice and Trends in Recreational Therapy *	3
CSD 465 or PSYC 353	Sign Language and Deaf Culture I (Optional Elective) or The Psychology of Adulthood and Aging	3
Credit Hours		13
Spring		
RT 468	Senior Internship *	12
Credit Hours		12
Total Credit Hours		120-126

* Grade of C or better required
** Grade of C- or better required

Minor Recreational Therapy Minor Requirements

RT 261* is a prerequisite for the minor and is not included in the calculation of the grade point average for the minor. Requirements for the minor are completion of 13 hours as follows:

RT 420	Intervention Techniques in Recreational Therapy	4
RT 450	Diagnostic Groups in Recreational Therapy	3
RT 460	Administration of Recreational Therapy Services	3
HLSC 320	Health Equity and Disability Culture	3
Total Credit Hours		13

* Grade of C- or better required.

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of 100- and 200-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Dental Hygiene

Web Site: <http://www.odu.edu/dental> (<http://www.odu.edu/dental/>)

Brenda Bradshaw, Chair
Tara Newcomb, Chief Departmental Advisor

The Gene W. Hirschfeld School of Dental Hygiene offers programs leading to the degrees of Bachelor of Science in Dental Hygiene (entry level and post-licensure) and Master of Science with a major in dental hygiene. The entry-level dental hygiene program is accredited by the Commission on Dental Accreditation.

International Dental Hygiene

The School of Dental Hygiene, committed to solving global oral health problems, offers a variety of service learning programs in partnership with non-governmental agencies, academic institutions, and private organizations worldwide. Faculty-led experiences offer unique opportunities for students to travel abroad, develop cross-cultural competence, experience global health challenges, and engage in projects that advance oral health. International locations are determined by the School of Dental Hygiene in conjunction with the Office of Study Abroad. Program participation requires approval from the School of Dental Hygiene and the Office of Study Abroad.

The Dental Hygiene Research Center

The focus of the Dental Hygiene Research Center is to support research through collaboration and partnerships that will provide a foundation for dental hygiene services and practice, advance the practice of dental hygiene, and improve the oral health status of the public. Multidisciplinary and interdisciplinary projects are developed with healthcare facilities, private industry, and other academic institutions. Undergraduate and graduate students are integrated into the research process, which contributes to the understanding between theory and practice.

Programs

Bachelor of Dental Hygiene Programs

- Dental Hygiene (BSDH) (p. 626)
- Dental Hygiene Post-Licensure Major (BSDH) (p. 630)

Linked Bachelor of Science in Dental Hygiene to Master of Science Program

Entry-level and BSDH Post-Licensure online dental hygiene students who have a cumulative 3.30 grade point average and senior standing may complete the Bachelor of Science in Dental Hygiene to Master of Science (BSDH-MS) dental hygiene linked program application. This program allows exceptional undergraduate students the opportunity to take up to 12 credit hours of graduate course work and apply them to both the undergraduate and graduate degrees. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Consult with the graduate program director for more information.

Bachelor of Science in Dental Hygiene Dental Hygiene (BSDH)

Brenda Bradshaw, Entry-Level Program Director

The baccalaureate program in dental hygiene is designed to prepare men and women as professional dental hygienists qualified for positions in a variety of health-care settings and/or for graduate study in dental hygiene. A dental hygienist is a licensed professional and member of the oral health care team who provides services to promote optimal oral health. Dental hygienists serve as clinical practitioners, educators, researchers, administrators, managers, program developers, consultants, and/or dental product sales representatives, depending on the individual's employment setting and educational background. In addition, dental hygienists with a bachelor's degree may pursue careers in elementary and secondary schools, community and public health settings, institutional, entrepreneurial and industrial dental hygiene, professional education, and research.

Students in good academic standing during the last semester of the Bachelor of Science in Dental Hygiene entry-level program may be approved by the School Chair to take the National Board Examination for Dental Hygiene and a regional licensing board examination. A successful outcome on both examinations is required to practice dental hygiene.

The School of Dental Hygiene reserves the right to require remedial work of any student who does not perform at a level satisfactory for patient care. Annually, students are required to submit documentation of a current background check, CPR certification, immunizations and diagnostic procedures. Students are required to complete the School of Dental Hygiene Entrance Health Form and strongly advised to be up to date on all appropriate immunizations to minimize risk of infectious disease due to the nature of clinical care as part of the dental hygiene curriculum. The University maintains liability insurance on the students while enrolled in the School of Dental Hygiene.

Admission to Bachelor of Science in Dental Hygiene (Entry-Level)

OVERVIEW: Admissions procedures and decisions are nondiscriminatory, and a diverse pool of qualified applicants is encouraged to apply.

Dental hygiene education curriculum is scientifically-oriented and rigorous. Accreditation requirements limit enrollment based on resources including faculty-student ratios. Therefore, admission is competitive with standardized and fair criteria and procedures to ensure selected candidates have the potential for successfully completing the program.

Required prerequisite courses and dental hygiene curricular content can be found below. Recommended courses for transfer from the Virginia Community College System (VCCS) can be viewed here: <https://www.odu.edu/transfer/vccs-transfer-guide> (<https://www.odu.edu/transfer/vccs-transfer-guide/>). To determine if courses taken outside of ODU will transfer, visit: <https://transfer2.odu.edu/equivalency/>. All applicants are highly encouraged to seek advising from the ODU College of Health Sciences Advising Team before applying. They can be reached by emailing: hsadvising@odu.edu. This program is fully on campus.

Below is an explanation of the 2-step application process with a list of criteria and instructions:

Step 1. Complete an online application to ODU as a degree-seeking student by December 1.

- Application information for undergraduate admission to the University can be found at: <https://odu.edu/admission/undergraduate> (<https://odu.edu/admission/undergraduate/>).

Step 2. Apply to the entry-level baccalaureate degree program of the School of Dental Hygiene (SODH) using the American Dental Education Association Dental Hygiene Centralized Application Service (ADEA DHCAS). The deadline for completing this application is February 1.

The following 4 bullet points list **Required** parts of the dental hygiene application:

- **All post-secondary educational official transcripts:** The applicant is responsible for providing accurate and comprehensive information regarding their academic history by including official transcripts from all educational institutions attended since high school including community colleges, four-year colleges, and universities. Instructions for entering academic history information and sending official

transcripts to DHCAS can be found at: https://help.liaisonedu.com/ADEA_DHCAS_Applicant_Help_Center (https://help.liaisonedu.com/ADEA_DHCAS_Applicant_Help_Center/). Failure to follow these instructions may cause delays in the verification of an application and/or the inability to be admitted to the School of Dental Hygiene. Candidates' Grade Point Averages (GPAs) are evaluated in two ways: Overall GPA (minimum 3.0) and Science GPA (minimum 3.3). All courses attempted and grades earned are calculated into the GPAs by DHCAS. GPA calculations include +/- grades, and all grades earned for each attempt at a course (repeated courses are included). For information about GPA calculations, visit: https://help.liaisonedu.com/ADEA_DHCAS_Applicant_Help_Center/Filling_Out_Your_ADEA_DHCAS_Application/Academic_History/4_ADEA_DHCAS_Course_Subjects (https://help.liaisonedu.com/ADEA_DHCAS_Applicant_Help_Center/Filling_Out_Your_ADEA_DHCAS_Application/Academic_History/4_ADEA_DHCAS_Course_Subjects/). GPA is weighed most heavily for admissions decisions. While minimum GPAs are expected, many applicants have well above the minimums and are considered most competitive.

- **High school unofficial transcripts:** This may take some time. Applicants are encouraged to request unofficial transcripts from their high school(s) early in the application process. You can upload them in the "documents" page of the application. High school grades are not considered and are not factored into the GPA. This is used mainly to ensure foreign language has been satisfied if taken in high school.
- **Two ODU School of Dental Hygiene Recommendation Forms:** These forms should be completed by current or previous academic and/or employer recommenders. Applicants send electronic copies of the School of Dental Hygiene Recommendation Form to their recommenders and explain that this specific form must be used. The form is located here (<https://www.odu.edu/sites/default/files/2023/documents/sodh-recommendation-form.pdf>). Then, go to the "Program Materials" section of the application, select "ODU," navigate to the "Evaluations" tab, and enter the recommenders' names and email addresses. Be sure to do this accurately. Recommenders will receive an email from dhcasinfo@dhcas.org requesting they provide an "online evaluation." NOTE: Recommendation letters are not accepted and will not be reviewed. For more information, visit: https://help.liaisonedu.com/ADEA_DHCAS_Applicant_Help_Center/Filling_Out_Your_ADEA_DHCAS_Application (https://help.liaisonedu.com/ADEA_DHCAS_Applicant_Help_Center/Filling_Out_Your_ADEA_DHCAS_Application/).
- **Essay:** Applicants must upload a well-written 300-500 words typed essay on the following topic: *"Dental hygienist professional roles include: clinician, corporate, public health, researcher, educator, administrator, and entrepreneur. Choose one role you are most interested in and explain how you would contribute to the profession in that role."* Applicants are highly encouraged to explore the American Dental Hygienists' Association website to gather information for their essay: <https://www.adha.org/professional-roles> (<https://www.adha.org/professional-roles/>). There is no required format or reference style for the essay.

The following 6 bullet points list **optional** information applicants may include that would award points on their application. GPA is weighed heavily for admissions decisions, but the following additional information may be used to support admissions decisions. To earn these points, upload applicable electronic certificates/documents to the DHCAS application as proof:

- Radiation Safety Certificate= .5 points
- Certified Dental Assistant Certificate= .5 points
- Current CPR Card= .5 points
- Enrollment information: the number of semesters enrolled at Old Dominion University (past and present). Proof of this would show on submitted ODU transcripts. .25 points are awarded for each previous and currently enrolled semester.

- Previous degrees that have been conferred as shown on official transcripts. Points awarded are: Associate degree= .25; Bachelor's degree= .5; Master's degree= .75.
- Admission Test for Dental Hygiene (ATDH) scores are optional, but recommended. If an applicant submits scores, points will be awarded based on a range of scores. SCORE RANGES: score of 200= 0 points; scores of 201 to 275= .25 points; scores of 276 to 350= .5 points; scores of 351 to 425= .75 points; scores of 426 to 500= 1 point. For more information about the ATDH and how to report scores, visit: <https://www.ada.org/education/testing/exams/admission-test-for-dental-hygiene-atdh> (<https://www.ada.org/education/testing/exams/admission-test-for-dental-hygiene-atdh/>).

3. Still have questions or concerns about the ADEA DHCAS application?

- Answers to most questions are found here: https://help.liaisonedu.com/ADEA_DHCAS_Applicant_Help_Center (https://help.liaisonedu.com/ADEA_DHCAS_Applicant_Help_Center/) or applicants may contact DHCAS Customer Service for assistance with questions about the application. Call 617-612-2095 or email dhcasinfo@dhcas.org.
- The SODH does not have access to an application until it has reached "verified" status by DHCAS. Applications will not be considered for admission unless verified by March 1.

4. Wait for email notification.

- Applicants will receive notification from the ODU Office of Admissions regarding the application decision for entrance into the University.
- Applicants will receive email notification in April from the SODH regarding the status of their application decision for entrance into the SODH (check email inbox and spam folder daily). If accepted or placed on the alternate candidate list, there will be deadlines in the email which will require immediate action.
- **Admission to ODU does not guarantee acceptance to the SODH. Applicants must be successfully admitted to both the University as a degree-seeking student and to the SODH.**

5. If accepted into the SODH, students will need to attend the SODH's required in-person orientation where they will meet with an advisor and register for dental hygiene classes. Orientation details will be emailed.

Guaranteed Entry Program

The guaranteed entry program is designed for highly qualified senior high school students who are committed to completing a Bachelor of Science in Dental Hygiene at Old Dominion University. Students accepted into this program will be guaranteed a position upon completion of the prerequisites and candidacy requirements as outlined by Old Dominion University School of Dental Hygiene. For more information, email hsadvising@odu.edu

Requirements for Entry-Level Program

Students must complete the entire curriculum of 120-126 credit hours (depending upon foreign language exemption) to meet degree requirements. All Dental Hygiene courses with the prefix DNTH are to be completed in a prescribed sequence within two academic years due to scheduling and space limitations. A minimum grade of C (2.00) must be obtained in all DNTH courses.

Students desiring to enroll in the BSDH Entry-level Dental Hygiene program must complete the lower-division general education courses noted below and departmental requirements for dental hygiene prior to beginning the dental hygiene major.

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3

Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

All prerequisite courses must be completed with a grade of C (2.00) or better. A grade of C- will not transfer into the School of Dental Hygiene.

Information Literacy/Research, Oral Communication, and Philosophy/Ethics will be met in the major.

Mathematics: STAT 130M*

Human Behavior: PSYC 201S* and SOC 201S*

Nature of Science: CHEM 105N* and CHEM 106N*, BIOL 150* and BIOL 151*, and BIOL 240* and BIOL 241* or BIOL 250* and BIOL 251*.

Impact of Technology (300/400 level preferred; any 300/400 level T course EXCEPT DNTH 440T meets upper-division general education/Option D)

Upper-Division General Education courses must be outside the College of Health Sciences.

*Grade of C or better required.

Upper-Division General Education

- Option A. Approved Disciplinary Minor, 12 hours minimum; also second degree or second major.
- Option B. Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Health Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Dental Hygiene Departmental Requirements

STAT 130M	Elementary Statistics *	3
PSYC 201S	Introduction to Psychology *	3

SOC 201S	Introduction to Sociology *	3
CHEM 105N	Introductory Chemistry *	3
CHEM 106N	Introductory Chemistry Laboratory *	1
BIOL 150	Introductory Microbiology *	3
BIOL 151	Introductory Microbiology Laboratory *	1
BIOL 240	Fundamentals of Anatomy and Physiology I *	4
or BIOL 250	Human Anatomy and Physiology I	
BIOL 241	Fundamentals of Anatomy and Physiology II *	4
or BIOL 251	Human Anatomy and Physiology II	
HLSC 318	Principles of Nutrition *	3
Total Credit Hours		28

* Grade of C or better required

Dental Hygiene Major*

General Education

Complete lower-division requirements	18-24
Complete upper-division requirements	3-6

Dental Hygiene Departmental Requirements

Complete dental hygiene departmental requirements	28

Dental Hygiene

Complete the requirements below	71

Total Credit Hours	120-129

Course	Title	Credit Hours
Third Year		
Fall		
DNTH 300	Dental Hygiene Theory I	4
DNTH 301	Dental Hygiene Services I	3
DNTH 302	Oral Anatomy and Histology	3
DNTH 303	Applied Dental Materials	3
DNTH 304	Oral Radiology I	3
Credit Hours		16
Spring		
DNTH 305	Dental Hygiene Theory II	3
DNTH 306	Dental Hygiene Services II	3
DNTH 307	Pharmacology and Medical Emergencies	3
DNTH 308	Oral Pathology	3
DNTH 309	Oral Radiology II	2
DNTH 310	Dental Hygiene Therapies and Practice	3
Credit Hours		17
Summer		
DNTH 316	Dental Hygiene Theory and Services III	3
DNTH 317	Anxiety and Pain Control	2
Option D: six hours of elective upper-division courses from outside the College of Health Sciences (includes upper-division "T" course)		0-6
Credit Hours		5-11

Fourth Year

Fall		
DNTH 410	Dental Hygiene Theory IV	3

DNTH 411	Dental Hygiene Services IV	6
DNTH 413	Community Oral Health Planning	3
DNTH 414	Educational Concepts for the Health Professional I	3
DNTH 415	Research Methods in the Health Sciences	3
Credit Hours		18
Spring		
DNTH 416	Administrative Leadership and Professional Development	3
DNTH 417W	Dental Hygiene Theory V	3
DNTH 418	Dental Hygiene Services V	6
DNTH 419	Community Oral Health Practice	3
Credit Hours		15
Total Credit Hours		71-77

* Grade of C or better is required in all DNTH courses

Additional Requirements and Information

Continuance Policy

In addition to the Old Dominion University Continuance policies in this catalog, the following policies are specific to all declared majors in the Gene W. Hirschfeld School of Dental Hygiene. A grade of D (1.00) or F in any dental hygiene course will result in academic dismissal from the program. Inability to attend clinical practice or community rotations due to an agency refusal or infraction in a background check will be cause for dismissal. One finding of a violation of the Code of Student Conduct for academic integrity is grounds for removal from the dental hygiene program.

1. A grade of C (2.00) or better is required in all dental hygiene courses to continue in the dental hygiene program.
2. A cumulative grade point average of 2.00 or better is required to continue in the dental hygiene program.
3. A dental hygiene student who earns a D (1.00) or F in a dental hygiene course and after dismissal from the program, may seek reapplication to be considered for readmission to the dental hygiene program (see Readmission Policy).

Policy on Readmission

Subsequent to dismissal or withdrawal for academic deficiencies, readmission may be sought through reapplication to the Dental Hygiene Program. A student who must repeat one or more courses in the dental hygiene major must first be readmitted to the dental hygiene program. In order to initiate the readmission process, the student shall submit a letter to the School of Dental Hygiene by emailing the Chair, requesting readmission to the program, with supporting documents to include a copy of official transcripts and letter of intention indicating the reasons why he/she should be reconsidered and proposed goals for achieving academic success no later than one month after dismissal date. A cumulative GPA of 3.0 will make the candidate competitive for readmission consideration. Students dismissed for violations of the Code of Student Conduct and/or Academic Integrity are ineligible for readmission. Once the School of Dental Hygiene has evaluated the letter of intent and official transcripts, the admissions committee will consider the student for readmission. The process of reconsideration will include a careful review of the student's academic records, the letter of intent, and an assessment of potential for academic progress in the future by a readmission committee. Recommendations relative to readmission will be referred to the School of Dental Hygiene Chair in conjunction with the Chief Department Advisor for final decision and notification, including conditions for readmission, where appropriate. Readmitted students are allowed to repeat a failed course only once. A student may be readmitted to the dental hygiene major only once. A student who leaves the major and is readmitted will be required to take additional course work prior to or concurrent with

readmission. Readmission will be granted on a space-available basis only after regular admission has been filled. Appeal of readmission decisions should be directed to the School of Dental Hygiene Chair.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition	3
CHEM 105N	Introductory Chemistry	3
CHEM 106N	Introductory Chemistry Laboratory	1
SOC 201S	Introduction to Sociology	3
Human Creativity		3
Credit Hours		13
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research or Writing, Rhetoric, and Research: Special Topics	3
PSYC 201S	Introduction to Psychology	3
BIOL 150	Introductory Microbiology	3
BIOL 151	Introductory Microbiology Laboratory	1
Interpreting the Past		3
Credit Hours		13
Sophomore		
Fall		
BIOL 240 or BIOL 250	Fundamentals of Anatomy and Physiology I or Human Anatomy and Physiology I	4
Literature		3
Impact of Technology (Option D 300/400)		3
Elective		0-3
Credit Hours		10-13
Spring		
BIOL 241 or BIOL 251	Fundamentals of Anatomy and Physiology II or Human Anatomy and Physiology II	4
STAT 130M	Elementary Statistics	3
HLSC 318	Principles of Nutrition	3
Upper-Division General Education		3
Credit Hours		13
Junior		
Fall		
DNTH 300	Dental Hygiene Theory I	4
DNTH 301	Dental Hygiene Services I	3
DNTH 302	Oral Anatomy and Histology	3
DNTH 303	Applied Dental Materials	3

DNTH 304	Oral Radiology I	3
Credit Hours		16
Spring		
DNTH 305	Dental Hygiene Theory II	3
DNTH 306	Dental Hygiene Services II	3
DNTH 307	Pharmacology and Medical Emergencies	3
DNTH 308	Oral Pathology	3
DNTH 309	Oral Radiology II	2
DNTH 310	Dental Hygiene Therapies and Practice	3
Credit Hours		17
Summer		
DNTH 316	Dental Hygiene Theory and Services III	3
DNTH 317	Anxiety and Pain Control	2
Credit Hours		5
Senior		
Fall		
DNTH 410	Dental Hygiene Theory IV	3
DNTH 411	Dental Hygiene Services IV	6
DNTH 413	Community Oral Health Planning	3
DNTH 414	Educational Concepts for the Health Professional I	3
DNTH 415	Research Methods in the Health Sciences	3
Credit Hours		18
Spring		
DNTH 416	Administrative Leadership and Professional Development	3
DNTH 417W	Dental Hygiene Theory V	3
DNTH 418	Dental Hygiene Services V	6
DNTH 419	Community Oral Health Practice	3
Credit Hours		15
Total Credit Hours		120-123

Linked Bachelor of Science in Dental Hygiene to Master of Science Program

Entry-level and BSDH Post-Licensure online dental hygiene students who have a cumulative 3.30 grade point average and senior standing may complete the Bachelor of Science in Dental Hygiene to Master of Science (BSDH-MS) dental hygiene linked program application. This program allows exceptional undergraduate students the opportunity to take up to 12 credit hours of graduate course work and apply them to both the undergraduate and graduate degrees. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Consult with the graduate program director for more information.

Bachelor of Science in Dental Hygiene Dental Hygiene Post-Licensure Major (BSDH)

Amber Hunt, BSDH Post-Licensure Online Program Director

The Bachelor of Science in Dental Hygiene (BSDH) Post-Licensure Online program is designed for students who have completed a certificate or associate degree from an accredited dental hygiene program and desire to continue their education toward a Bachelor of Science in Dental Hygiene. The program provides an opportunity for the licensed dental hygienist to gain knowledge, skills, and attitudes necessary for expanded career opportunities in education, oral health promotion, research, community and public health, management, and marketing. This program also provides a strong foundation for graduate studies. A minimum of 120 credit hours is necessary to obtain the baccalaureate degree. The length of time required to complete the program and University requirements is determined by the number of acceptable college transfer credits; at least 30 credit hours must be taken at Old Dominion University. Students can expect to complete the program in three academic semesters of full-time study. The BSDH Post-Licensure online program is available online or as a hybrid of online and on-campus courses.

Admission to the Bachelor of Science in Dental Hygiene Post-Licensure Online Program

A licensed dental hygienist educated at another institution who desires to pursue the Bachelor of Science in Dental Hygiene should apply and be accepted by Old Dominion University as an upper-level dental hygiene transfer student. Formal acceptance as a dental hygiene major will be determined by the Admissions Committee for the BSDH Post-Licensure Online Program. The School of Dental Hygiene BSDH Post-Licensure application must be submitted to the American Dental Education Association's Dental Hygiene Centralized Application Service (ADEA DHCAS) website (<https://www.adea.org/godental/apply/dhcas-application> (<https://www.adea.org/godental/apply/dhcas-application/>)) and must have "Verified" status to be considered complete and ready for review. Admission to the University does not constitute admission to the dental hygiene program.

Transfer applicants must meet the following requirements:

1. Certificate or associate degree in dental hygiene from a dental hygiene program accredited by the Commission on Dental Accreditation (CODA).
2. Successful completion of all University lower-level general education and department requirements.
3. Submission of **application to the Old Dominion University Office of Admissions** including official high school and college transcripts.
4. Acceptance to Old Dominion University.
5. Submission of completed **School of Dental Hygiene BSDH Post-Licensure application** to the American Dental Education Association's Dental Hygiene Centralized Application Service (**ADEA DHCAS website**) (<https://www.adea.org/godental/apply/dhcas-application> (<https://www.adea.org/godental/apply/dhcas-application/>)) with the following items:
 - a. Official transcripts from high school and college academic institutions attended
 - b. Copy of National Board Dental Hygiene Examination Score
 - c. Two professional letters of recommendation
 - d. Registered Dental Hygienist License

Requirements

Transfer students must satisfy the following:

1. Certificate or associate degree in dental hygiene from a dental hygiene program accredited by the Commission on Dental Accreditation (CODA).
2. Students without credit for ENGL 110C must achieve a passing score on the Writing Success Placement Tool (WSPT).
3. Successful completion of the University Lower-Division General Education requirements or a transfer associate degree.

4. Successful completion of department requirements or the equivalent. A grade of (C) or better is required in all courses. A grade of C- will not transfer to the School of Dental Hygiene.
5. Successful completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better and the Senior Assessment Survey.
6. Successful completion of 15 credits at the upper division to include a minimum of six credits to meet the Upper-Division General Education requirement.
7. Successful completion of five major courses.

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Information Literacy/Research, Oral Communication, Philosophy/Ethics, and Impact of Technology will be satisfied in the major for the BSDH Post-Licensure Program. With the exception of Mathematics, Human Behavior, and Nature of Science, which are departmental requirements, lower-level general education requirements may be met by a transferable associate degree.

Mathematics: STAT 130M*

Human Behavior: PSYC 201S* or PSYC 203S* and SOC 201S*

Nature of Science: CHEM 105N* and CHEM 106N*, BIOL 150* and BIOL 151*, and BIOL 240* and BIOL 241* or BIOL 250* and BIOL 251*

*Grade of C or better required

Upper-Division General Education

Successful completion of 15 credits at the upper division to include a minimum of six credits to meet the Upper-Division General Education requirement. This may include a minor.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Dental Hygiene Departmental Requirements

STAT 130M	Elementary Statistics *	3
PSYC 201S	Introduction to Psychology *	3
SOC 201S	Introduction to Sociology *	3
CHEM 105N	Introductory Chemistry *	3
CHEM 106N	Introductory Chemistry Laboratory *	1
BIOL 150	Introductory Microbiology *	3
BIOL 151	Introductory Microbiology Laboratory *	1
BIOL 240	Fundamentals of Anatomy and Physiology I *	4
or BIOL 250	Human Anatomy and Physiology I	
BIOL 241	Fundamentals of Anatomy and Physiology II *	4
or BIOL 251	Human Anatomy and Physiology II	

Total Credit Hours 25

* Grade of C or better required

Dental Hygiene Post-Licensure Major

General Education

Complete lower-division requirements	15-21
Complete upper-division requirements (Option D plus 9 additional credit hours)	15

Dental Hygiene Departmental Requirements

Complete dental hygiene departmental requirements	25

Dental Hygiene

DNTH 412W	Perspectives on Dental Hygiene Practice	3
DNTH 414	Educational Concepts for the Health Professional I	3
DNTH 415	Research Methods in the Health Sciences	3
DNTH 416	Administrative Leadership and Professional Development	3
DNTH 440T	Telehealthcare Technology	3

Total Credit Hours 70-76

Elective Credit

Elective credit may be needed to meet the minimum 120 credit hours required for the degree.

Additional Requirements and Information

Continuance

In addition to the Old Dominion University continuance policies, the following policy is specific to the BSDH Post-Licensure Online program. A grade of C (2.00) or better is required in all DNTH courses for graduation. A cumulative grade point average of a C (2.00) or better is required to continue in the dental hygiene program. A grade of D (1.00) or F in any dental hygiene course will not be considered in good academic standing in the major and will result in an evaluation of the individual student's academic progress on a case-to-case basis. Dental hygiene students will be allowed to repeat a failed course only once.

One finding of a violation of the Code of Student Conduct for academic integrity is grounds for removal from the dental hygiene program.

Students admitted to the BSDH Post-Licensure Online program who do not take a course for two academic years or more, have completed reactivation

with Old Dominion University, and are eligible to start or continue the BSDH Post-Licensure Online program based on the continuance policy, must submit the following updated document(s) prior to taking classes:

- Registered Dental Hygienist License

Linked Bachelor of Science in Dental Hygiene to Master of Science Program

Entry-level and BSDH Post-Licensure online dental hygiene students who have a cumulative 3.30 grade point average and senior standing may complete the Bachelor of Science in Dental Hygiene to Master of Science (BSDH-MS) dental hygiene linked program application. This program allows exceptional undergraduate students the opportunity to take up to 12 credit hours of graduate course work and apply them to both the undergraduate and graduate degrees. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Consult with the graduate program director for more information.

Exercise Science

School of Exercise Science

<https://www.odu.edu/exercise-science> (<https://www.odu.edu/exercise-science/>)

Daniel Russell, Ph.D., Chair

2024 Student Recreation & Well-Being Center
757-683-6016

J. Kyle Davis, M.S., Undergraduate Program Director

1005 Student Recreation & Well-Being Center
757 683-4754
jkdavis@odu.edu

The School of Exercise Science offers both Bachelor of Science (BS) and Master of Science (MS) degrees in Exercise Science. Faculty in the school also teach and supervise students in the Kinesiology and Rehabilitation PhD program and in the Doctorate in Applied Science in Kinesiology program, both administered through the College.

Programs

Bachelor of Science Program

- Exercise Science (BS) (p. 632)

Minor Program

- Exercise Science Minor (p. 636)
- Health and Wellness Minor (p. 636)

Bachelor of Science Exercise Science (BS)

J. Kyle Davis, M.S., Undergraduate Program Director

1005 Student Recreation Center
757 683-4754
jkdavis@odu.edu

This program is designed to prepare students for careers in developing exercise and wellness programs in settings such as hospitals, wellness and rehabilitation centers, sports medicine clinics, sports performance centers, collegiate sport facilities, government agencies, health and fitness centers, and corporate industry. Academic preparation focuses on the scientific aspects of exercise related to asymptomatic, and symptomatic populations. The program also contains pre-requisite coursework and serves to prepare students for graduate studies in exercise science, physical therapy, athletic training, occupational therapy and other allied health fields including ODU's Exercise Science master's degree (<https://www.odu.edu/academics/programs/masters/exercise-science/>).

Major Declaration

To officially declare a major in Exercise Science, students must complete EXSC 225 and the following courses with a C or better : ENGL 110C, MATH 102M or MATH 103M, BIOL 121N, BIOL 122N, CHEM 121N, CHEM 122N, and BIOL 240 or BIOL 250.

Students who have met all major declaration requirements will be referred by their advisor in the Health Sciences Advising Center to the program director for major declaration and assignment to a program advisor. For additional information on the curriculum or major declaration requirements, please contact: Program Director (jkdavis@odu.edu) or the College of Health Sciences Advising Center (hsadvising@odu.edu).

Advanced Placement

Departmental examinations for advanced placement are available for selected courses in the undergraduate programs. Please contact the department chair for further details. Refer also to the Policy on Prior Learning Assessment Credit Options at the Undergraduate Level in this Catalog.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication Skills: Grade of C or better required in both courses

Mathematical Skills: MATH 102M or MATH 103M or MATH 162M; grade of C or better required

Nature of Science: BIOL 121N/BIOL 122N and CHEM 121N/CHEM 122N

Information Literacy and Research: HLTH 120G preferred

Human Behavior: PSYC 201S preferred

Philosophy and Ethics: PHIL 345E preferred

Impact of Technology: Satisfied with EXSC 417 in the major

Upper-Division General Education

- Option A. Disciplinary Minor (a minimum of 12 hours determined by the department or Second Major or Second Degree
- Option B. Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)

- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Health Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Exercise Science Major

General Education

Complete lower-division requirements	30-36
Complete upper-division requirements (minimum of 6 credit hours)	6

Exercise Science

BIOL 240	Fundamentals of Anatomy and Physiology I	4
or BIOL 250	Human Anatomy and Physiology I	
BIOL 241	Fundamentals of Anatomy and Physiology II	4
or BIOL 251	Human Anatomy and Physiology II	
BIOL 121N & BIOL 122N	General Biology I and General Biology I Lab	4
CHEM 121N & CHEM 122N	Foundations of Chemistry I Lecture and Foundations of Chemistry I Laboratory (C or better required as prerequisite for CHEM 123N-CHEM 124N)	4
EXSC 225	Introduction to Exercise Science	3
EXSC 240	Prevention and Care of Injuries Related to Physical Activity	3
EXSC 250	Strength and Conditioning Leadership	3
EXSC 322	Anatomical Kinesiology	3
EXSC 326	Exercise Physiology I	3
EXSC 327	Exercise Physiology II	3
EXSC 366	Exercise Science Seminar	1
EXSC 408	Nutrition for Fitness and Sport	3
EXSC 415	Exercise Testing for Normal and Special Populations	4
EXSC 417	Biomechanics	4
EXSC 428	Exercise Prescription for Chronic Disease	3
EXSC 431W	Wellness Programming and Administration *	3
PHYS 111N	Introductory General Physics	4

Options

Select one of the following:	12-18
Clinical and Research Preparation	
Exercise and Sport Specialist	

Total Credit Hours	104-116

* Grade of C or better required

Options

Clinical and Research Preparation

BIOL 123N	General Biology II	4
& BIOL 124N	and General Biology II Lab	
PHYS 112N	Introductory General Physics	4
CHEM 123N	Foundations of Chemistry II Lecture	4
& CHEM 124N	and Foundations of Chemistry II Laboratory	
STAT 130M	Elementary Statistics	3
EXSC 420	Research Methods in Exercise Science (STAT 130M required as prerequisite)	3

Total Credit Hours 18

Exercise and Sport Specialist

EXSC 368	Internship (*)	12

Total Credit Hours 12

* In order to be eligible to register for EXSC 368, a student must have completed all EXSC courses with a GPA of 2.0 overall and in the major.

All EXSC courses will be used to calculate the major grade point average, which must be 2.00 to graduate.

Electives

Elective credit may be needed to meet the minimum of 120 credits required for the degree. Elective options may be dependent on whether or not the student needs to complete the Lower Division Language and Culture requirement. Please see your advisor for guidance on elective choices.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Exercise Science - Exercise and Sport Specialist Option

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
MATH 102M or MATH 103M or MATH 162M	College Algebra (C or better required) or College Algebra with Supplemental Instruction or Precalculus I	3
BIOL 121N	General Biology I	3
BIOL 122N	General Biology I Lab	1
Oral Communication		3
Elective		1
Credit Hours		14
Spring		
EXSC 225	Introduction to Exercise Science	3
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
Information Literacy and Research (HLTH 120G preferred)		3

Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)		3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior) (PSYC 201S preferred)		3
Credit Hours		16
Sophomore		
Fall		
BIOL 240 or BIOL 250	Fundamentals of Anatomy and Physiology I or Human Anatomy and Physiology I	4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Minor or Elective or Foreign Language (if required)		3
Minor or Upper-Division General Education		3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy) (PHIL 345E preferred)		3
Credit Hours		16
Spring		
BIOL 241 or BIOL 251	Fundamentals of Anatomy and Physiology II or Human Anatomy and Physiology II	4
EXSC 240	Prevention and Care of Injuries Related to Physical Activity	3
EXSC 250	Strength and Conditioning Leadership	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)		3
Minor or Elective or Foreign Language (if required)		3
Credit Hours		16
Junior		
Fall		
Human Creativity		3
EXSC 322	Anatomical Kinesiology	3
EXSC 326	Exercise Physiology I	3
Minor or Upper-Division General Education		3
Elective		3
Credit Hours		15
Spring		
PHYS 111N	Introductory General Physics	4
EXSC 327	Exercise Physiology II	3
EXSC 415	Exercise Testing for Normal and Special Populations	4
EXSC 366	Exercise Science Seminar	1
Elective		3
Credit Hours		15
Senior		
Fall		
EXSC 428	Exercise Prescription for Chronic Disease	3
EXSC 431W	Wellness Programming and Administration (C or better required)	3
EXSC 417	Biomechanics	4

EXSC 408	Nutrition for Fitness and Sport	3
Elective		3
Credit Hours		16
Spring		
EXSC 368	Internship	12
Credit Hours		12
Total Credit Hours		120

Exercise Science - Clinical and Research Preparation Option

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
MATH 102M or MATH 103M or MATH 162M	College Algebra (C or better required) or College Algebra with Supplemental Instruction or Precalculus I	3
BIOL 121N	General Biology I	3
BIOL 122N	General Biology I Lab	1
Oral Communication		3
Credit Hours		13
Spring		
EXSC 225	Introduction to Exercise Science	3
BIOL 123N	General Biology II	3
BIOL 124N	General Biology II Lab	1
Information Literacy and Research (HLTH 120G preferred)		3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)		3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior) (PSYC 201S preferred)		3
Credit Hours		16
Sophomore		
Fall		
BIOL 240 or BIOL 250	Fundamentals of Anatomy and Physiology I or Human Anatomy and Physiology I	4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
STAT 130M	Elementary Statistics	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)		3
Minor or Elective or Foreign Language (if required)		3
Credit Hours		16
Spring		
BIOL 241 or BIOL 251	Fundamentals of Anatomy and Physiology II or Human Anatomy and Physiology II	4
EXSC 240	Prevention and Care of Injuries Related to Physical Activity	3

EXSC 250	Strength and Conditioning Leadership	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)		3
Minor or Elective or Foreign Language (if required)		3
Credit Hours		16
Junior		
Fall		
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
EXSC 322	Anatomical Kinesiology	3
EXSC 326	Exercise Physiology I	3
Minor or Upper-Division General Education		3
Credit Hours		13
Spring		
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1
PHYS 111N	Introductory General Physics (*)	4
*Consider taking a summer science course Sophomore or Junior year to prevent multiple sciences in one semester.		
EXSC 327	Exercise Physiology II	3
Philosophy and Ethics (PHIL 345E preferred)		3
Elective		1
Credit Hours		15
Senior		
Fall		
PHYS 112N	Introductory General Physics	4
EXSC 415	Exercise Testing for Normal and Special Populations	4
EXSC 420	Research Methods in Exercise Science	3
EXSC 408	Nutrition for Fitness and Sport	3
EXSC 366	Exercise Science Seminar	1
Credit Hours		15
Spring		
EXSC 417	Biomechanics	4
EXSC 431W	Wellness Programming and Administration (C or better required)	3
EXSC 428	Exercise Prescription for Chronic Disease	3
Minor or Upper-Division General Education		3
Electives		3
Credit Hours		16
Total Credit Hours		120

Minor

Exercise Science Minor

Requirements

BIOL 240 or BIOL 250 and EXSC 225 are prerequisites for the minor and are not included in the calculation of the grade point average for the minor. Requirements for the minor are:

EXSC 309	Fundamentals of Exercise Physiology	3
EXSC 322	Anatomical Kinesiology	3
Select two of the following:		6
EXSC 240	Prevention and Care of Injuries Related to Physical Activity	
or EXSC 250	Strength and Conditioning Leadership	
EXSC 369	Practicum in Exercise Science	
EXSC 408	Nutrition for Fitness and Sport	
EXSC 415	Exercise Testing for Normal and Special Populations	
EXSC 417	Biomechanics	
EXSC 420	Research Methods in Exercise Science	
EXSC 428	Exercise Prescription for Chronic Disease	
EXSC 431W	Wellness Programming and Administration	
Total Credit Hours		12

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of 100- and 200-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Minor

Health and Wellness Minor

J. Kyle Davis, Health and Wellness Minor Coordinator
1005 Student Recreation Center
757 683-4754
jkdavis@odu.edu

The Health and Wellness interdisciplinary minor explores personal involvement in and commitment to health and wellness and the factors that influence the health status of individuals and society. This interdisciplinary minor fosters an appreciation for personal responsibility for health and strategies to enhance and preserve the individual's and the public's health. Societal health and the factors that impact on the health and wellness of a community and the individual's role in health policy are examined. Students gain an awareness of the cultural, psychological, sociological and ethical issues affecting and effected by the health and wellness of individuals and the society in which they live.

Requirements

Select four courses from the following (chosen from at least two disciplines with a maximum of six credit hours from any one discipline):

HLSC 425	Health Aspects of Aging
HLSC 465	Policy and Politics of Health
CRJS 401	Understanding Violence
CRJS/SOC 421	Deviant Behavior
CRJS/SOC 427	Gender-Based Violence
CRJS/SOC 441	Drugs and Society
EXSC 403	Lifetime Fitness and Wellness
EXSC 408	Nutrition for Fitness and Sport
EXSC 415	Exercise Testing for Normal and Special Populations

EXSC 431W	Wellness Programming and Administration
HLSC 405	Interprofessional Study Abroad on Global Health
HPE 317	Human Growth & Motor Development
HPE 400	Management Skills for Teaching Health and Physical Education
HPE 402	Methods and Materials in Health Education
HPE 409	Physiology of Exercise
HPE 430	Nutrition and Fitness Education
HMSV 341	Introduction to Human Services
HMSV 491	Family Guidance
PHIL 345E	Bioethics
PSYC 306	Health Psychology
PSYC 325	Drugs and Behavior
PSYC 351	Child Psychology
PSYC 353	The Psychology of Adulthood and Aging
PSYC 363	Psychology of Sex
PSYC 405	Psychopathology
PSYC 408	Theories of Personality
PSYC 410	Human Cognition
PSYC 420	Cross-Cultural Psychology
PSYC 424	Physiological Psychology
PSYC 460	Psychology of African Americans
SOC 440	Health, Illness, and Society
SPED 313	Fundamentals of Human Growth and Development: Birth through Adolescence
PUBH 360	Introduction to Global Health

The interdisciplinary minor in Health and Wellness requires 12 credit hours of 300/400-level courses selected from at least two different disciplines with a maximum of six credits from any one discipline. For completion of the interdisciplinary minor, students must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses. At least six hours of upper-level courses must be taken through courses offered by Old Dominion University. Three credit hours may be in the major, if a major course is listed as an option for the interdisciplinary minor. As such, it will be credited toward both the major and the interdisciplinary minor.

Medical Diagnostic & Translational Sciences

Web Site: <http://www.odu.edu/mdts> (<http://www.odu.edu/mdts/>)

Harold Riethman, Chair

The School of Medical Diagnostic and Translational Sciences offers a coordinated program of courses and clinical experiences leading to degrees of Bachelor of Science in Medical Laboratory Science and Bachelor of Science in Nuclear Medicine Technology and a post-baccalaureate certificate in cytotechnology. Students may also pursue a major in cytology through the Bachelor of Science in Medical Laboratory Science degree program.

In addition, the School offers a minor in medical laboratory science and a degree completion program for certified medical laboratory technicians (MLT) pursuing a baccalaureate degree. For those seeking a graduate certificate in molecular diagnostics, as well as the Master of Science in Molecular Diagnostics and Precision Medicine, please refer to the ODU Graduate Catalog.

Programs

Bachelor of Science in Medical Laboratory Science Program

- Medical Laboratory Science (BSMLS) (p. 637)
- Medical Laboratory Science Degree Completion Major (BSMLS) (p. 639)
- Medical Laboratory Science with a Major in Cytology (BSMLS) (p. 641)

Bachelor of Science in Nuclear Medicine Technology Program

- Nuclear Medicine Technology (BSNMT) (p. 643)

Minor Program

- Medical Laboratory Science Minor (p. 641)

Bachelor of Science in Medical Laboratory Science (BSMLS)

Bachelor of Science in Medical Laboratory Science

<http://www.odu.edu/mdts/medical-laboratory-science> (<http://www.odu.edu/mdts/medical-laboratory-science/>)

Program Director:
Rachel Childs, M.S., MLS(ASCP)^{CM}
Ellmer College of Health Sciences
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E-mail: rchilds@odu.edu (rchilds@odu.edu)
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The medical laboratory scientist plays a vital role in the diagnosis and treatment of disease by performing clinical laboratory tests on patients' blood, body fluids, and other specimens. This includes clinical tests within the areas of chemistry, microbiology, hematology, immunology/serology, urinalysis, immunohematology (blood banking), and molecular pathology.

The program has been continually accredited by the National Accrediting Agency for Clinical Laboratory Sciences, 5600 N River Road, Suite 720, Rosemont, IL 60018, 773 714-8880. Due to accreditation, upon successful completion of the program graduates are eligible to take the national certification exam for Medical Laboratory Scientist, administered by the American Society for Clinical Pathology, MLS(ASCP).

Admission

Admission to the University does not constitute admission to the medical laboratory science program. Students are admitted to the program after completion of two years of college study, which includes all program prerequisite courses. All program prerequisite courses must be completed with a grade of C (2.00) or better. Additionally, applicants must be in good academic standing (cumulative GPA 2.0 or greater). The students then enter two years of a combined didactic and clinical phase congruent with the 2 + 2 concept. A grade of C (2.00) or better is required in all medical laboratory science course work for continuance in the program. The program does not offer just the final clinical phase to transfer applicants from 3 + 1 programs. Applications to the program, including all materials, must be submitted no later than February 1 for consideration for admission the following fall. Exemptions may be appealed only through the program director. Prospective students who fail to meet the February 1 deadline for formal admission may be allowed to take on-campus medical laboratory science/medical

technology courses on a space-available basis. Permission must be first granted by the program director in advance of registration.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: grade of C or better required in both courses

Mathematics: satisfied through departmental requirements

Nature of Science: satisfied through departmental requirements

Oral Communication: satisfied through major course requirements

Philosophy and Ethics: PHIL 345E Bioethics preferred; 300/400 level P or E course meets upper-division general education/Option D

Impact of Technology: 300/400 level preferred; any 300/400 level T course EXCEPT DNTH 440T meets upper-division general education/Option D

Upper-Division General Education

- Option A. Approved Disciplinary Minor, 12 hours minimum; also second degree or second major.
- Option B. Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Health Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.

- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Departmental Requirements

Students must complete the following courses with a C or better prior to entering the Medical Laboratory Science/Medical Technology program:

STAT 130M	Elementary Statistics	3
MATH 102M	College Algebra	3
or MATH 103M	College Algebra with Supplemental Instruction	
BIOL 121N & BIOL 122N	General Biology I and General Biology I Lab	4
CHEM 121N & CHEM 122N	Foundations of Chemistry I Lecture and Foundations of Chemistry I Laboratory	4
CHEM 123N & CHEM 124N	Foundations of Chemistry II Lecture and Foundations of Chemistry II Laboratory	4
CHEM 211 & CHEM 212	Organic Chemistry I Lecture and Organic Chemistry I Laboratory	5
BIOL 250	Human Anatomy and Physiology I	4
BIOL 251	Human Anatomy and Physiology II	4
Total Credit Hours		31

Medical Laboratory Science Major

General Education

Complete lower-division requirements	27-33
Complete upper-division requirements	0-6

Departmental Requirements

Complete departmental requirements	31

Medical Laboratory Science

See requirements below	63

Total Credit Hours	121-133

Course	Title	Credit Hours
Third Year		
Fall		
MLS 210	Orientation to Medical Laboratory Science	1
MLS 307	Clinical Methods in Microbiology	1
MLS 308	Clinical Microbiology	2
MLS 311	Hematology	3
MLS 312	Hematology Laboratory	1
MLS 324	Clinical Chemistry I	3
MLS 325	Clinical Chemistry I Methods	1
MLS 330	Clinical Immunology/Serology	2
MLS 331	Clinical Immunology/Serology Laboratory	1
Credit Hours		15
Spring		
MLS 309	Medical Bacteriology	3
MLS 319	Medical Bacteriology Methods	2
MLS 310	Urinalysis and Body Fluids	1
MLS 313	Diagnostic Methods in Urinalysis	1
MLS 326	Immunohematology	3
MLS 336	Immunohematology Laboratory	1

MLS 328	Advanced Hematology and Hemostasis	2
MLS 339	Medical Parasitology and Mycology Laboratory	1
MLS 340	Medical Parasitology, Mycology, and Virology	1
MLS 351	Clinical Chemistry II	3
Credit Hours		18
Summer		
MLS 420	Blood Collection Techniques	2
MLS 454	Clinical Blood Bank Practicum	4
Credit Hours		6
Fourth Year		
Fall		
MLS 440	Statistical Applications and Data Analysis in the Clinical Laboratory	3
MLS 406	Clinical Microbiology Practicum	5
MDTS 401	Molecular Diagnostics Laboratory	3
Clinical Practica 4-5 credits from fourth year spring semester or elective		
Credit Hours		11
Spring		
MLS 404	Clinical Hematology Practicum	4
MLS 452	Clinical Biochemistry Practicum	5
MLS 403W	Management in the Clinical Setting	3
MLS 457	Medical Laboratory Science Seminar	1
Clinical Practica 4-5 credits from fourth year spring semester or elective		
Credit Hours		13
Total Credit Hours		63

Notes: Junior year core courses that are over three years old prior to starting a rotation (practicum course) must be reevaluated by the faculty member at ODU in charge of the specialty, in both theoretical knowledge and technical skills. Reevaluation may result in the need to repeat and/or audit out-of-date courses. This applies to both part-time and returning students.

Following the completion of MLS 420 Blood Collection Techniques, a 2-credit optional, limited enrollment Phlebotomy Internship, MLS 468 is available. Successful completion of both: MLS 420 and MLS 468 satisfies the requirements for Phlebotomy Certification from the American Society for Clinical Pathology, PBT(ASCP). Both classes are also available at graduate level as MLS 520 and MLS 568. Graduate students interested in these classes must contact the MLS Program Director for permission to enroll.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition	3
MATH 102M or MATH 103M	College Algebra or College Algebra with Supplemental Instruction	3
BIOL 121N	General Biology I	3
BIOL 122N	General Biology I Lab	1
Human Creativity		3
CHEM 103 may be needed as prerequisite to CHEM 121N (3 credits)		
Credit Hours		13
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research or Writing, Rhetoric, and Research: Special Topics	3
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
STAT 130M	Elementary Statistics	3
Interpreting the Past		3
Information Literacy		3
Credit Hours		16
Sophomore		
Fall		
MLS 210	Orientation to Medical Laboratory Science	1
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1
BIOL 250	Human Anatomy and Physiology I	4
Literature		3
Human Behavior		3
Credit Hours		15
Spring		
BIOL 251	Human Anatomy and Physiology II	4
CHEM 211	Organic Chemistry I Lecture	3
CHEM 212	Organic Chemistry I Laboratory	2
Impact of Technology (Option D 300/400)		3
Philosophy and Ethics (Option D 300/400)		3
Credit Hours		15
Junior		
Fall		
MLS 307	Clinical Methods in Microbiology	1
MLS 308	Clinical Microbiology	2
MLS 311	Hematology	3
MLS 312	Hematology Laboratory	1
MLS 324	Clinical Chemistry I	3

MLS 325	Clinical Chemistry I Methods	1
MLS 330	Clinical Immunology/Serology	2
MLS 331	Clinical Immunology/Serology Laboratory	1
Credit Hours		14
Spring		
MLS 309	Medical Bacteriology	3
MLS 319	Medical Bacteriology Methods	2
MLS 310	Urinalysis and Body Fluids	1
MLS 313	Diagnostic Methods in Urinalysis	1
MLS 326	Immunohematology	3
MLS 336	Immunohematology Laboratory	1
MLS 328	Advanced Hematology and Hemostasis	2
MLS 340	Medical Parasitology, Mycology, and Virology	1
MLS 339	Medical Parasitology and Mycology Laboratory	1
MLS 351	Clinical Chemistry II	3
Credit Hours		18
Summer		
MLS 420	Blood Collection Techniques	2
MLS 454	Clinical Blood Bank Practicum	4
Credit Hours		6
Senior		
Fall		
MLS 440	Statistical Applications and Data Analysis in the Clinical Laboratory	3
MLS 406	Clinical Microbiology Practicum	5
MDTS 401	Molecular Diagnostics Laboratory	3
Credit Hours		11
Spring		
MLS 404	Clinical Hematology Practicum	4
MLS 452	Clinical Biochemistry Practicum	5
MLS 457	Medical Laboratory Science Seminar	1
MLS 403W	Management in the Clinical Setting	3
Credit Hours		13
Total Credit Hours		121

Bachelor of Science in Medical Laboratory Science Medical Laboratory Science Degree Completion Major (BSMLS)

The Bachelor of Science in Medical Laboratory Science degree completion program (previously medical technology) is available for graduates of accredited associate degree university, hospital-based, or military Medical Laboratory Technician (MLT) programs. MLT certification is required for admission. The curriculum is designed to meet the needs

of both local and non-local practitioners. Program courses are delivered online to accommodate the schedules of working students. ODUGlobal enrollment coordinators for health sciences programs may be reached at healthsciencesonline@odu.edu (%20healthsciencesonline@odu.edu).

Admission to the University does not constitute admission to the medical laboratory science degree completion program. All program prerequisite courses must be completed with a grade of C (2.00) or better. Additionally, applicants must be in good academic standing (cumulative GPA 2.0 or greater).

For consultation and evaluation of eligibility for the degree completion program, contact MLS Program Director:

Rachel Childs, M.S., MLS(ASCP)^{CM}
Ellmer College of Health Sciences
4608 Hampton Blvd, Rm 2126 (Hampton Hall)
Phone: 757-683-3016
E-mail: rchilds@odu.edu

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

- Written Communication: grade of C or better required in both courses
- Mathematics: satisfied through departmental requirements
- Nature of Science: satisfied through departmental requirements
- Oral Communication: satisfied through major course requirements
- Philosophy and Ethics: PHIL 345E preferred; 300/400 level P or E course meets upper division general education/Option D
- Impact of Technology: 300/400 level preferred; any 300/400 level T course EXCEPT DNTH 440T meets upper-division general education/Option D

Upper-Division General Education

- Option A. Approved Disciplinary Minor, 12 hours minimum; also second degree or second major.
- Option B. Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Health Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Departmental Requirements

Students must complete the following courses with a C or better prior to entering the Medical Laboratory Science program:

MATH 102M	College Algebra	3
or MATH 103M	College Algebra with Supplemental Instruction	
STAT 130M	Elementary Statistics	3
BIOL 121N & BIOL 122N	General Biology I and General Biology I Lab	4
CHEM 121N & CHEM 122N	Foundations of Chemistry I Lecture and Foundations of Chemistry I Laboratory	4
CHEM 123N & CHEM 124N	Foundations of Chemistry II Lecture and Foundations of Chemistry II Laboratory	4
CHEM 211 & CHEM 212	Organic Chemistry I Lecture and Organic Chemistry I Laboratory	5
BIOL 250	Human Anatomy and Physiology I	4
BIOL 251	Human Anatomy and Physiology II	4
Total Credit Hours		31

Medical Laboratory Science Degree Completion Major

General Education		
Complete lower-division requirements		27-33
Complete upper-division requirements		0-6
Departmental Requirements		
Complete departmental requirements		31
Medical Laboratory Science Degree Completion		
Electives (including transfer and Prior Learning Assessment Credit from MLT Training Program)		17-23
MLS 309	Medical Bacteriology	3
MLS 310	Urinalysis and Body Fluids	1
MLS 324	Clinical Chemistry I	3
MLS 326	Immunohematology	3
MLS 328	Advanced Hematology and Hemostasis	2
MLS 330	Clinical Immunology/Serology	2
MLS 340	Medical Parasitology, Mycology, and Virology	1
MLS 351	Clinical Chemistry II	3
MLS 402	Survey of Clinical Molecular Techniques	2
MLS 403W	Management in the Clinical Setting	3
MLS 440	Statistical Applications and Data Analysis in the Clinical Laboratory	3
MLS 441	Clinical Hematology Competencies	1
MLS 442	Clinical Microbiology Competencies	1
MLS 443	Clinical Chemistry Competencies	1
MLS 444	Clinical Blood Bank Competencies	1

Note: Junior year core courses that are over three years old prior to graduation must be reevaluated by the faculty member at ODU in charge of the specialty, in both theoretical knowledge and technical skills. Reevaluation may result in the requirement to repeat and/or audit out-of-date courses. This applies to both part-time and returning Degree Completion Program students.

Elective Credit

Elective credit may be needed to meet the minimum 120 credit hours required for the degree.

Minor

Medical Laboratory Science Minor

A minor in medical laboratory science requires a minimum of 12 semester hours of 300/400-level MLS courses. Students may choose courses from a specific laboratory science discipline (hematology, microbiology, clinical chemistry, and immunohematology) or from several disciplines. All prerequisite courses must be completed. Selection of a plan or program of study must be done in consultation with the program director. For completion of the minor, all program prerequisite courses must be completed with a grade of C (2.00) or better and a minimum of six hours in upper-level courses in the minor requirement must be taken through courses offered by Old Dominion University. Substitutes of non-MLS courses require the permission of the program director. Completion of the minor does not confer eligibility to take national certification examinations.

Bachelor of Science in Medical Laboratory Science Medical Laboratory Science with a Major in Cytology (BSMLS)

<https://www.odu.edu/medical-diagnostic-translational-sciences/cytology>
[\(https://www.odu.edu/medical-diagnostic-translational-sciences/cytology/\)](https://www.odu.edu/medical-diagnostic-translational-sciences/cytology/)

Deborah Krzyzaniak, M.S., C.T.(ASCP), S.C.T.(ASCP) Program Director

The School of Medical Diagnostic and Translational Sciences offers a major in cytology through the Bachelor of Science in Medical Laboratory Sciences (BSMLS). The program offers a first and second degree option as well as a post-baccalaureate certificate option.

Cytologists are specially trained medical laboratory professionals who work with pathologists in detecting changes in cell samples from numerous body sites which allows the early diagnosis of cancer. This is done primarily with the use of the microscope to evaluate slide preparation of cell samples for abnormalities in structure, indicating cancer, precancerous lesions, benign tumors, infectious agents and inflammatory processes. They are also trained in specimen preparation, molecular, FISH, flow cytometry techniques, and fine needle aspiration cytology.

The program of study is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), 9355 113th Street, N.W. Seminole, FL. 33775; phone: 727-210-2350; e-mail: mail@caahep.org; website: www.caahep.org (<http://www.caahep.org>), in association with the American Society of Cytopathology (ASC).

Theory is reinforced through an integrated clinical phase that allows the student direct experience in a hospital or lab setting providing additional training in screening techniques and diagnostic procedures. Students are required to obtain a minimum grade of 70 percent or C in all didactic coursework. Clinical coursework requires a minimum passing grade of 80, 85 and 90 percent during the first, second and third internship, respectively.

Graduates are eligible to sit for the national board exam given by the ASCP (American Society of Clinical Pathology) upon successful completion of the program.

Application to the cytology program must be submitted by February 15. Competitive applicants should have an overall GPA of 2.8 or higher.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication Skills: Grade of C or better required in both courses

Oral Communication: Met in the major with CYTO 424 and CYTO 497.

Mathematics: MATH 102M or MATH 103M

Information Literacy and Research: HLTH 120G preferred

Nature of Science: BIOL 121N & BIOL 122N, BIOL 123N & BIOL 124N

Philosophy and Ethics: PHIL 345E recommended; 300/400 level P or E course meets upper division general education/Option D

Impact of Technology: HIST 304T preferred but any 300/400 level T course EXCEPT DNTH 440T meets upper-division general education/Option D

Upper-Division General Education

- Option A. Approved Disciplinary Minor, 12 hours minimum; also second degree or second major.
- Option B. Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Health Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.

- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Departmental Requirements

BIOL 121N	General Biology I	3
BIOL 122N	General Biology I Lab	1
BIOL 123N	General Biology II	3
BIOL 124N	General Biology II Lab	1
CHEM 105N	Introductory Chemistry	3
or CHEM 121N	Foundations of Chemistry I Lecture	
CHEM 106N	Introductory Chemistry Laboratory	1
or CHEM 122N	Foundations of Chemistry I Laboratory	
CHEM 107N	Introductory Organic and Biochemistry	3
or CHEM 123N	Foundations of Chemistry II Lecture	
CHEM 108N	Introductory Organic and Biochemistry Laboratory	1
or CHEM 124N	Foundations of Chemistry II Laboratory	
BIOL 240	Fundamentals of Anatomy and Physiology I	4
or BIOL 250	Human Anatomy and Physiology I	
BIOL 241	Fundamentals of Anatomy and Physiology II	4
or BIOL 251	Human Anatomy and Physiology II	
BIOL 150	Introductory Microbiology	3
BIOL 151	Introductory Microbiology Laboratory	1
Total Credit Hours		28

Students must complete the following courses prior to entering the cytology program: BIOL 121N/BIOL 122N, BIOL 123N/BIOL 124N, BIOL 240 or BIOL 250, BIOL 241 or BIOL 251, CHEM 105N/CHEM 106N or CHEM 121N/CHEM 122N, CHEM 107N/CHEM 108N or CHEM 123N/CHEM 124N, and BIOL 150/BIOL 151.

Cytology Major

General Education

Complete lower-division requirements	30-36
Complete upper-division requirements	0-6

Departmental Requirements

Complete departmental requirements	28

First Semester

CYTO 404	General Pathology	3
CYTO 407	Clinical Histology (Strongly Recommended)	3
MDTS 401	Molecular Diagnostics Laboratory	3
MLS 403W	Management in the Clinical Setting *	3
MLS 310	Urinalysis and Body Fluids (may be taken earlier-see Degree Program Guide)	1

Second Semester

CYTO 403	Gynecological Screening Laboratory	3
CYTO 405	Normal Gynecological Cytology	3
CYTO 415	Abnormal Gynecological Cytology	4
CYTO 430	Cytopreparation & Ancillary Techniques	4
CYTO 444	Genitourinary Cytology	2
CYTO 445	Breast Cytology	2

Third Semester

CYTO 424	Respiratory Cytology	4
CYTO 446	Body Fluids Cytology	3
CYTO 448	Non-Epithelial Cytology	1
CYTO 468	Cytology Internship II	4
CYTO 442	Gastro-Intestinal Cytology	2
CYTO 458	Cytology Internship I	3

Fourth Semester

CYTO 456	Fine Needle Aspiration Cytology I	3
CYTO 457	Fine Needle Aspiration Cytology II	3
CYTO 478	Cytology Internship III	8
CYTO 497	Cytology Senior Seminar	1
CYTO 499	Comprehensive Cytology Review	1

Total Credit Hours	122-134

* C or better required to meet the University Writing Requirement.

Second Degree

A second degree in Medical Laboratory Sciences (BSMLS, Cytology) is available to students who have a Bachelor's degree, with a minimum of 20 credit hours in biology and eight credit hours in chemistry. A minimum GPA of 2.8 is required. The curriculum for the second degree mirrors the requirements for the first degree.

Post-Baccalaureate Certificate Option

A certificate in Cytology is available to students who have a Bachelor's degree, with a minimum of 20 hours of biology and eight hours of chemistry. The certificate in Cytology requires 61-64 credit hours and a minimum GPA of 2.8. Courses included in the certificate mirror the Cytology major requirements.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
MATH 102M or MATH 103M	College Algebra or College Algebra with Supplemental Instruction	3
BIOL 121N	General Biology I	3
BIOL 122N	General Biology I Lab	1
CHEM 105N or CHEM 121N	Introductory Chemistry or Foundations of Chemistry I Lecture	3
CHEM 106N or CHEM 122N	Introductory Chemistry Laboratory or Foundations of Chemistry I Laboratory	1
Credit Hours		14
Spring		
BIOL 123N	General Biology II	3
BIOL 124N	General Biology II Lab	1
CHEM 107N or CHEM 123N	Introductory Organic and Biochemistry or Foundations of Chemistry II Lecture	3
CHEM 108N or CHEM 124N	Introductory Organic and Biochemistry Laboratory or Foundations of Chemistry II Laboratory	1
Literature		3
Information Literacy (HLTH 120G preferred)		3
Credit Hours		14

Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
BIOL 240 or BIOL 250	Fundamentals of Anatomy and Physiology I or Human Anatomy and Physiology I	4
BIOL 150	Introductory Microbiology	3
BIOL 151	Introductory Microbiology Laboratory	1
Human Creativity		3
Credit Hours		14
Spring		
BIOL 241 or BIOL 251	Fundamentals of Anatomy and Physiology II or Human Anatomy and Physiology II	4
Interpreting the Past		3
Human Behavior		3
Philosophy and Ethics (PHIL 345E preferred for Option D)		3
MLS 310	Urinalysis and Body Fluids	1
Credit Hours		14
Junior		
Fall		
CYTO 404	General Pathology	3
CYTO 407	Clinical Histology	3
MDTS 401	Molecular Diagnostics Laboratory	3
MLS 403W	Management in the Clinical Setting (C or better required)	3
Impact of Technology (HIST 304T preferred for Option D)		3
Credit Hours		15
Spring		
CYTO 403	Gynecological Screening Laboratory	3
CYTO 405	Normal Gynecological Cytology	3
CYTO 415	Abnormal Gynecological Cytology	4
CYTO 430	Cytopreparation & Ancillary Techniques	4
CYTO 444	Genitourinary Cytology	2
CYTO 445	Breast Cytology	2
Credit Hours		18
Summer		
CYTO 424	Respiratory Cytology	4
CYTO 446	Body Fluids Cytology	3
CYTO 448	Non-Epithelial Cytology	1
CYTO 468	Cytology Internship II	4
CYTO 442	Gastro-Intestinal Cytology	2
CYTO 458	Cytology Internship I	3
Credit Hours		17

Senior		
Fall		
CYTO 456	Fine Needle Aspiration Cytology I	3
CYTO 457	Fine Needle Aspiration Cytology II	3
CYTO 478	Cytology Internship III	8
CYTO 497	Cytology Senior Seminar	1
CYTO 499	Comprehensive Cytology Review	1
Credit Hours		16
Total Credit Hours		122

Bachelor of Science in Nuclear Medicine Technology

Nuclear Medicine Technology (BSNMT)

<http://www.odu.edu/mdts/nuclear-medicine> (<http://www.odu.edu/mdts/nuclear-medicine/>)

Sara M. Maynard, Program Director
smaynard@odu.edu
2128 Health Sciences Building
757 683-4702

Nuclear medicine technology is the medical specialty that utilizes sealed and unsealed radioactive materials in the diagnosis and treatment of disease. The nuclear medicine technology program at Old Dominion University is designed to prepare individuals as entry-level nuclear medicine technologists. Upon successful completion of the program, graduates are eligible to sit for a national exam for certification as a nuclear medicine technologist.

Nuclear medicine technologists are allied health professionals certified in nuclear medicine technology who, under the direction of an authorized physician user, are committed to applying the art and skill of diagnostic and therapeutic nuclear medicine procedures through the safe and effective use of radionuclides. Responsibilities include but are not limited to: direct patient contact, the preparation and administration of radiopharmaceuticals, patient imaging procedures including computer processing, laboratory testing, patient preparation, quality control and radiation safety. Nuclear medicine technologists can be employed in hospitals and imaging centers.

The program is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology.

Admission

All admission materials must be received by October 15. Interviews are then scheduled for early November. All applicants must be in good academic standing (cumulative GPA of 2.0 or greater).

Continuance Policy

1. A grade of C (2.00) or better is required in all NMED courses to continue in the nuclear medicine technology program.
2. A cumulative grade point average of 2.00 or better is required to continue in the nuclear medicine technology program.
3. A nuclear medicine technology student who leaves the major must apply for readmission to the major.
4. A nuclear medicine technology student who fails a nuclear medicine technology course and is readmitted to the program is allowed to repeat the failed course only once.
5. A student who leaves the major and is readmitted may be required to take additional course work prior to or concurrent with readmission at the discretion of the Program Director.

- A student may be readmitted to the nuclear medicine technology major only once.
- A student seeking readmission to a clinical course is responsible for securing an approved clinical site. Preference for clinical space is always given to currently enrolled students and is at the discretion of the NMED Program Director and Program Clinical Coordinators and in alignment with the Joint Review Committee on Educational Programs in Nuclear Medicine Technology policies.

Note: Policies and procedures are outlined in more detail in the School of Medical Diagnostic & Translational Sciences Nuclear Medicine Technology Program Student Handbook Program Policies. All students accepted into the Nuclear Medicine Technology major are responsible for familiarizing themselves with this handbook upon entry into the major.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: grade of C or better required in both courses

Mathematics: STAT 130M and MATH 102M or MATH 103M

Philosophy and Ethics: PHIL 345E preferred; 300/400 level P or E course meets upper division general education/Option D

Nature of Science: CHEM 105N and CHEM 106N, CHEM 107N and CHEM 108N, and PHYS 101N and PHYS 102N

Impact of Technology: HIST 304T preferred but any 300/400 level T course EXCEPT DNTH 440T meets upper-division general education/Option D

Upper-Division General Education

- Option A. Approved Disciplinary Minor, 12 hours minimum; also second degree or second major.
- Option B. Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Health Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

A variety of clinical facilities in the Hampton Roads area are utilized for clinical education experiences. Students are responsible for providing their own transportation to these sites. Students must meet established programmatic technical standards.

Departmental Requirements

BIOL 240	Fundamentals of Anatomy and Physiology I	4
or BIOL 250	Human Anatomy and Physiology I	
BIOL 241	Fundamentals of Anatomy and Physiology II	4
or BIOL 251	Human Anatomy and Physiology II	
Total Credit Hours		8

Students must complete the following courses (or equivalent) prior to entering the nuclear medicine technology program: BIOL 240 or BIOL 250 and BIOL 241 or BIOL 251, CHEM 105N, CHEM 106N, CHEM 107N and CHEM 108N, PHYS 101N and PHYS 102N, and MATH 102M and STAT 130M.

Nuclear Medicine Technology Major

General Education

Complete lower-division requirements	52-58
Complete upper-division requirements	0-6

Departmental Requirements

Complete departmental requirements	8

Nuclear Medicine Technology

See requirements below	57

Total Credit Hours	117-129

Course	Title	Credit Hours
Third Year		
Fall		
NMED 300	Medical Terminology	3
NMED 331	Fundamental Concepts in Nuclear Medicine Technology	4
Credit Hours		7
Spring		
NMED 332	Nuclear Instrumentation	4
NMED 335	Radiation Health	3
NMED 401	Nuclear Medicine Technology I	4
NURS 393	Clinical Skills for Nonnursing Majors	2
Credit Hours		13
Summer		
NMED 440	Clinical Nuclear Medicine Technology I	8
Credit Hours		8

Fourth Year		
Fall		
NMED 450	Clinical Nuclear Medicine Technology II	8
NMED 402	Nuclear Medicine Technology II	4
NMED 403	Radiopharmacy	3
Credit Hours		15
Spring		
NMED 460	Clinical Nuclear Medicine Technology III	8
NMED 410	Nuclear Medicine and Molecular Imaging	3
NMED 475W	Administration and Management in Nuclear Medicine Technology	3
Credit Hours		14
Total Credit Hours		57

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition	3
CHEM 105N	Introductory Chemistry	3
CHEM 106N	Introductory Chemistry Laboratory	1
MATH 102M or MATH 103M	College Algebra or College Algebra with Supplemental Instruction	3
Information Literacy		3
Credit Hours		13
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research or Writing, Rhetoric, and Research: Special Topics	3
CHEM 107N	Introductory Organic and Biochemistry	3
CHEM 108N	Introductory Organic and Biochemistry Laboratory	1
STAT 130M	Elementary Statistics	3
Interpreting the Past		3
Credit Hours		13
Sophomore		
Fall		
PHYS 101N	Conceptual Physics	4
Literature		3
Oral Communication		3

Human Behavior		3
Credit Hours		13
Spring		
PHYS 102N	Conceptual Physics	4
NMED 300	Medical Terminology	3
Human Creativity		3
Elective (if needed)		3
Credit Hours		13
Summer		
BIOL 240 or BIOL 250	Fundamentals of Anatomy and Physiology I or Human Anatomy and Physiology I	4
BIOL 241 or BIOL 251	Fundamentals of Anatomy and Physiology II or Human Anatomy and Physiology II	4
Credit Hours		8
Junior		
Fall		
NMED 331	Fundamental Concepts in Nuclear Medicine Technology	4
PHIL 345E	Bioethics	3
Impact of Technology (Option D 300/400)		3
Elective (if needed)		0-3
Credit Hours		10-13
Spring		
NMED 332	Nuclear Instrumentation	4
NMED 335	Radiation Health	3
NMED 401	Nuclear Medicine Technology I	4
NURS 393	Clinical Skills for Nonnursing Majors	2
Credit Hours		13
Summer		
NMED 440	Clinical Nuclear Medicine Technology I	8
Credit Hours		8
Senior		
Fall		
NMED 402	Nuclear Medicine Technology II	4
NMED 403	Radiopharmacy	3
NMED 450	Clinical Nuclear Medicine Technology II	8
Credit Hours		15
Spring		
NMED 410	Nuclear Medicine and Molecular Imaging	3
NMED 460	Clinical Nuclear Medicine Technology III	8
NMED 475W	Administration and Management in Nuclear Medicine Technology	3
Credit Hours		14
Total Credit Hours		120-123

Speech-Language Pathology

School of Speech-Language Pathology
Dr. Stacie Raymer, Chair
Dr. Rachel Johnson, Undergraduate Program Director

The School of Speech-Language Pathology offers undergraduate and graduate degrees that prepare professionals to address communication and swallowing disorders and differences that disrupt learning, health, and quality of life for people across the lifespan. As stipulated by our accreditation status, the degrees are offered primarily in face-to-face format. The bachelor's degree offers elective opportunities for early clinical experiences in preparation for master's degree programs in speech-language pathology (offered at Old Dominion University) or clinical doctoral programs in audiology (offered at other universities) where students become licensed and certified for clinical practice.

Programs

Bachelor of Science Program

- Speech-Language Pathology and Audiology (BS) (p. 646)

Minor Program

- Speech-Language Pathology and Audiology Minor (p. 648)

Bachelor of Science Speech-Language Pathology and Audiology (BS)

Dr. Rachel Johnson, Undergraduate Program Director

The Bachelor of Science program in Speech-Language Pathology and Audiology is designed to provide students with the academic experiences needed to understand normal processes involved in speech, language, swallowing, and hearing abilities, and to identify communication and swallowing disorders and differences. Classes also introduce students to clinical procedures for assessment and treatment of communication and swallowing disorders and differences. The minimum number of hours required for the degree is 120 credits. The bachelor's-level students are not eligible for employment as a licensed speech-language pathologist or audiologist in any professional setting. Therefore, the undergraduate program at Old Dominion University serves as a feeder program for students to apply to the graduate program in speech-language pathology where licensure and certification standards will be met. Also, the undergraduate degree prepares students to apply to graduate audiology programs that are offered at other universities and other professional graduate programs. For students who are not committed to pursuing graduate school options, the undergraduate program at Old Dominion University prepares students to pursue national certification as a speech-language pathology assistant.

Admission and Continuance Requirements

Admission

To officially declare a major in Speech-Language Pathology & Audiology, requirements are as follows:

1. Students must have completed at least one year of coursework at ODU with an overall grade point average of at least 2.50; Transfer students must have completed at least one semester of course work at ODU with an overall grade point average of at least 2.50.
2. Students must have completed the following courses: ENGL 110C (C or higher), Mathematical Skills (STAT 130M preferred), Human Behavior (PSYC 201S or SOC 201S preferred), 8 credits of BIOL and CHEM or PHYS Nature of Science requirements, and CSD 350 (C- or higher).
3. Students must have an interview with a program advisor.
4. Students who have met all Speech-Language Pathology & Audiology major admission requirements will be referred by their advisor in the Health Sciences Advising Center to the Speech-Language Pathology & Audiology Undergraduate Program Director for major declaration

and assignment to a program advisor. For additional information on the curriculum or major declaration requirements, please contact: Program Director (r1johnson@odu.edu) or the College of Health Sciences Advising Center (hsadvising@odu.edu) (hsadvising@odu.edu).

Continuance

A cumulative grade point average of 2.50 in all major courses is required for continuing status. Grades below C- in major courses must be retaken to attain a grade of C- or higher. A grade of C or better is required in CSD 449W in order to meet the ODU undergraduate writing requirement.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication Skills: C or better required in both courses.

Mathematical Skills: STAT 130M recommended

The Nature of Science: To meet national certification requirements, students must complete one course in biological sciences selected from BIOL 105N, BIOL 106N, BIOL 110N/BIOL 111N, BIOL 117N/BIOL 118N, BIOL 121N/BIOL 122N and one course in either chemistry or physics selected from CHEM 105N/CHEM 106N, CHEM 121N/CHEM 122N, PHYS 101N, PHYS 111N, PHYS 231N.

Human Behavior: To meet national certification requirements, students must complete either PSYC 201S or SOC 201S.

Upper-Division General Education

- Option A: Approved Disciplinary Minor (a minimum of 12 hours determined by the department), or second degree or second major
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C: An approved Certification Program such as teaching licensure
- Option D: Upper-Division courses (totaling 6 hours) from outside the College of Health Sciences and not required by the major

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of 2.50 in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Speech-Language Pathology and Audiology Major

General Education

Complete lower-division requirements 41-47

Complete upper-division requirements (minimum of 6 credit hours) 6

Speech-Language Pathology and Audiology

CSD 350 Survey in Communication Disorders (Fall, Spring) 3

CSD 351 Anatomy of Speech, Language, and Swallowing (Fall only) 3

CSD 352 Phonetics (Spring only) 3

CSD 446 Neural Bases of Communication and Swallowing Disorders (Fall, Spring) 3

CSD 447 Introduction to Language Disorders in Children (Fall, Spring) 3

CSD 449W Clinical Observation and Writing in Communication Sciences and Disorders (Fall, Spring) 3

CSD 451 Introduction to Speech Sound Disorders (Fall, Summer) 3

CSD 453 Speech and Language Development (Fall, Spring) 3

CSD 458 Speech and Hearing Science (Spring, Summer) 3

CSD 460 Hearing Disorders and Basic Audiometry (Fall only) 3

CSD 461 Aural Rehabilitation I (Spring only) 3

CSD 465 Sign Language and Deaf Culture I (Fall, Spring) 3

CGE 450 Social Justice & Literacy for Immigrant and Refugee Learners 3

ENGL 370 English Linguistics 3

SPED 313 Fundamentals of Human Growth and Development: Birth through Adolescence 3

or PSYC 351 Child Psychology

SPED 400 Foundations of Special Education: Legal Aspects and Characteristics 3

SPED 411 Classroom and Behavioral Management Techniques for Students with Diverse Needs 3

CSD Elective (or other subject areas upon approval) 3

Total Credit Hours 101-107

Major courses in which a grade below C- was earned must be repeated to attain a grade of C- or higher. A grade of C or better must be earned in CSD 449W.

Elective Credit

Elective credit may be needed to meet the requirement of 120 credit hours.

Additional Requirements and Information

Admission, Continuance and Exit Requirements

Admission

Requirements are as follows:

1. Students must have completed one year of course work with an overall grade point average of at least 2.50.
2. Students must have an interview with a program advisor.

Continuance

A cumulative grade point average of 2.50 in all major courses is required for continuing status. Grades below C- in major courses must be retaken to attain a grade of C- or higher. A grade of C or better is required in CSD 449W in order to meet the ODU undergraduate writing requirement.

Exit

Undergraduate majors must have satisfied University and program requirements, complete ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better, and have a grade point average of at least 2.50 in all major courses and at least 2.0 overall.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (C or better required)	3
PSYC 201S or SOC 201S	Introduction to Psychology (PSYC 201S suggested for national accreditation) or Introduction to Sociology	3
Human Creativity		3
Oral Communication		3
Nature of Science (select one of the following):		4
CHEM 105N/106N	Introductory Chemistry	
CHEM 121N/122N	Foundations of Chemistry I Lecture	
PHYS 101N	Conceptual Physics	
PHYS 111N	Introductory General Physics	
PHYS 231N	University Physics I	
Credit Hours		16
Second Semester		
STAT 130M	Elementary Statistics	3
Literature		3
Interpreting the Past		3
Nature of Science (select one of the following)		4
BIOL 105N	Biology for Nonscience Majors I	
BIOL 106N	Biology for Nonscience Majors II	
BIOL 110N-BIOL 111N		
BIOL 117N-BIOL 118N		
BIOL 121N-BIOL 122N		

Elective or Foreign Language (if required)	2-3
Credit Hours	15-16
Sophomore	
First Semester	
Select one of the following (C or better required):	3
ENGL 211C	Writing, Rhetoric, and Research
ENGL 231C	Writing, Rhetoric, and Research: Special Topics
Information Literacy and Research	3
CSD 350	Survey in Communication Disorders
SPED 313 or PSYC 351	Fundamentals of Human Growth and Development: Birth through Adolescence or Child Psychology
Elective or Foreign Language (if required)	2-3

Credit Hours	14-15
Second Semester	
Philosophy and Ethics	3
ENGL 370	English Linguistics
SPED 400	Foundations of Special Education: Legal Aspects and Characteristics
CSD 465	Sign Language and Deaf Culture I
Elective or Minor	3
Credit Hours	15

Junior	
First Semester	
Impact of Technology	3
SPED 411	Classroom and Behavioral Management Techniques for Students with Diverse Needs
CSD 351	Anatomy of Speech, Language, and Swallowing
CSD 453	Speech and Language Development
CSD 460	Hearing Disorders and Basic Audiometry
Credit Hours	15

Second Semester	
CSD 352	Phonetics
CSD 461	Aural Rehabilitation I
CGE 450	Social Justice & Literacy for Immigrant and Refugee Learners
Elective or Minor	3
Elective or Minor	3
Credit Hours	15

Senior	
First Semester	
CSD 446	Neural Bases of Communication and Swallowing Disorders
CSD 451	Introduction to Speech Sound Disorders

CSD 447	Introduction to Language Disorders in Children	3
Minor or Upper-Division General Education		3
Minor or Upper-Division General Education		3
Credit Hours		15
Second Semester		
CSD 449W	Clinical Observation and Writing in Communication Sciences and Disorders (C or better required)	3
CSD 458	Speech and Hearing Science	3
CSD elective (e.g., CSD 469, CSD 466)		3
Elective or Minor		3
Elective or Minor		3
Credit Hours		15
Total Credit Hours		120-122

Minor Speech-Language Pathology and Audiology Minor

To declare your major, please contact the Undergraduate Program Director, Dr. Rachel Johnson.

Requirements

CSD 350	Survey in Communication Disorders	3
CSD 460	Hearing Disorders and Basic Audiometry	3
Electives		
Select four of the following:		12
CSD 451	Introduction to Speech Sound Disorders	
CSD 452	Introduction to Voice and Fluency Disorders	
CSD 453	Speech and Language Development	
CSD 458	Speech and Hearing Science	
CSD 461	Aural Rehabilitation I	
Total Credit Hours		18

For completion of a minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Ellmer School of Nursing

<http://www.odu.edu/nursing> (<http://www.odu.edu/nursing/>)

Rene Love, Dean, Ellmer School of Nursing
Lynn Wiles, Undergraduate Program Director
lwiles@odu.edu

The Ellmer School of Nursing offers programs leading to the degrees of Bachelor of Science in Nursing, Master of Science in Nursing and Doctor of Nursing Practice.

The Ellmer School of Nursing **pre-licensure** undergraduate curriculum admits a cohort of students each fall semester. This is a full-time program where all nursing courses are completed in five consecutive semesters (fall, spring, summer, fall, spring). Upon completion of the program, graduates are eligible to take the national licensure exam (NCLEX) to become registered nurses.

The curriculum incorporates current recommendations for undergraduate nursing education and is designed to get graduates into the workforce and enrolled in graduate nursing programs more quickly. There are 66 upper-division credit hours in the nursing curriculum and the number of total credits required to graduate with a Bachelor of Science in Nursing is 120. Students applying to the pre-licensure curriculum are required to have all lower-division departmental and general education courses fully completed before admission to the nursing major; there are no exceptions to this requirement. The minimum GPA for admission to the pre-licensure program is 3.00.

The Ellmer School of Nursing **concurrent and post-licensure** undergraduate curriculum admits a cohort of students each semester. The RN to BSN and Concurrent curriculum is offered using a year-round schedule with part-time and full-time options. The **Linked BSN to MSN** program is designed for associate degree prepared Registered Nurses who are pursuing MSN degrees in Advanced Practice Nursing Roles. The program allows select students, working closely with faculty advisors, to complete graduate coursework while they are still undergraduates.

Post-licensure students are already registered nurses who are returning to complete their BSN degree.

Concurrent students are enrolled in an associate degree nursing program (AAS/ADN) and desire to take BSN courses concurrently. Concurrent students typically take one-two RN-BSN courses in addition to their courses at their pre-licensure program.

Linked BSN to MSN students can count up to 9 credit hours of graduate nursing coursework toward both their undergraduate and master's degrees in nursing. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

For additional information on the curriculum or admission requirements, please contact:

- Chief Academic Advisor for the Undergraduate Nursing Program, Suzanne Van Orden, svanorde@odu.edu

Programs

Bachelor of Science in Nursing Programs

- Nursing - Concurrent Program (BSN) (p. 649)
- Nursing Post-Licensure Major (BSN) (p. 652)
- Nursing Pre-Licensure Major (BSN) (p. 654)

Linked BSN to MSN

The linked BSN (Bachelor of Science in Nursing) to MSN (Master of Science in Nursing) is designed for well-qualified students seeking an efficient pathway to an MSN degree in Advanced Practice Nursing Roles. Up to 9 credits of graduate coursework may be counted toward both the undergraduate and master's degrees in nursing. This program allows for

select post-licensure students, working closely with faculty advisors, to complete graduate coursework while they are still undergraduates.

Admission Requirements

Applicants will apply to the RN/BSN to MSN option by May 1st of each year and must meet all current requirements for admission to the Nursing Post-licensure Major (BSN) program as currently outlined in catalog. Further, applicants must meet all current requirements for admission to the MSN as currently stated in the catalog with the exception of the requirement for completion of a Baccalaureate degree in nursing or related science field.

Admission Procedures

Students who meet the admission requirements should consult with the graduate program director to discuss their eligibility and to establish a proposed plan of study for graduate courses to be taken as an undergraduate. Students must first apply and be accepted to the Nursing Post-licensure Major (BSN) program. Once accepted, students will work directly with the Graduate Program Director to be considered for admission to the Linked BSN to MSN program. The application to the Linked BSN to MSN will include three letters of recommendation, with at least one from a former faculty member and at least one from a former employer while in the RN role and a 500-700 word essay that addresses the applicant's goals and reasons for seeking certification as an advanced practice nurse. Some MSN tracks may have additional requirements.

Requirements for the Linked BSN to MSN Program

Students accepted into this curriculum may use nine graduate credits to count toward both the BSN and MSN degrees as follows:

- NURS 709 to meet BSN NURS 363 and MSN core
- NURS 771 to meet BSN NURS 305 and MSN core
- NURS 800 to meet required BSN NURS ELECTIVE and MSN core

To continue in the BSN to MSN curriculum, a student must earn a grade of B or above in each graduate-level course. A student who earns a grade of B- or C+ in a graduate course will not be able to continue in the MSN curriculum as an undergraduate student, but will be allowed to count that graduate course toward the BSN degree requirements. A student who earns a grade of C or below in a graduate course will not be allowed to continue in the MSN curriculum as an undergraduate student, and will be required to take the corresponding undergraduate course to complete the BSN degree requirements.

Students must earn a minimum of 120 credits for the undergraduate degree. The 9 credits listed above of graduate level course work would count toward the 120 credits and toward the MSN degree. Further, students must complete all required credits for the MSN concentration sought as currently listed in the catalog for the concentration.

Bachelor of Science in Nursing Nursing - Concurrent Program (BSN)

Bachelor of Science in Nursing

Lynn Wiles, Undergraduate Program Director
Suzanne Van Orden, Chief Academic Advisor

Concurrent Enrollment Option

The concurrent enrollment option presents an opportunity for individuals to obtain a BSN in a timely manner while remaining in their local community completing their AAS/ADN courses. Students who are enrolled in an AAS/ADN program typically take 1-2 ODU RN-BSN courses each semester in addition to their courses. As part of ODUglobal, the ODU nursing courses are offered in an on-line program of study.

The concurrent scheduling option is for students who have completed all lower-division departmental and general education courses for the BSN and are enrolled in an RN program at a partner institution. Advisors work with students to develop an individual plan of study to fulfill the

requirements. Following graduation from the AAS/ADN program and successful completion of the NCLEX RN licensure exam, the student will be awarded 33 nursing transfer credits toward completion of the Bachelor of Science in Nursing degree. Fall, Spring and Summer enrollment is available.

The Concurrent Enrollment option contributes to the BSN prepared workforce as well as prepares RNs for graduate programs by creating a seamless progression from the AAS to the BSN. Graduates of the baccalaureate program in professional nursing are generalists prepared to care for culturally diverse individuals and groups across the lifespan in a complex global community. Upon completion of the innovative, technology-enhanced program, graduates are knowledgeable about current trends in health care, assume responsibility for their professional growth, and are prepared for graduate study in nursing. The program is fully accredited by the Commission on Collegiate Nursing Education (CCNE) and approved by the Virginia State Board of Nursing.

The BSN is awarded upon successful completion of the following:

1. The Associate Degree in Nursing program
2. Passing NCLEX
3. Completion of BSN coursework

Admission

Admission to the School of Nursing is a competitive process. Applicants for admission to the baccalaureate program in nursing should apply initially to the Office of Admissions of Old Dominion University to seek admission to the University. Admission to the University does not constitute admission to the School of Nursing.

Applicants for admission to the undergraduate nursing program must complete prerequisite courses with a grade of “C” or better prior to being admitted to the School of Nursing. Transfer students may complete the prerequisite courses at another college or university but are responsible for having a transfer credit evaluation completed by the transfer evaluation unit in the Office of Admissions to determine that transfer courses are equivalent and acceptable to University requirements.

Applicants must complete a School of Nursing Supplemental Application to be considered for admission to the undergraduate nursing program. The School of Nursing Supplemental Application may be obtained directly from the School of Nursing Academic Advising Office or the School of Nursing website: <https://www.odu.edu/nursing> (<https://www.odu.edu/nursing/>)

In summary the applicant must:

1. Apply and be admitted to the University as a degree-seeking undergraduate student.
2. Submit a School of Nursing Supplemental Application directly to the School of Nursing with photocopies of all previous college transcripts attached. Submit all items in the same envelope. Do not mail transcripts in separate envelopes to the School of Nursing.
3. Have a transfer of credit evaluation completed by the transfer evaluation unit in the Office of Admissions.
4. Letter of admission and/or current enrollment in an associate degree program.

Transfer of Nursing Credits

Concurrent and RN-BSN students seeking to transfer NURSING credits from another NLNAC or CCNE accredited BSN program must submit photocopies of all nursing course syllabi for which they desire transfer credit approval. The School of Nursing Admission's Committee and nursing faculty will review the transfer course content for comparability with ODU nursing courses and determine if advanced placement in the BSN curriculum is appropriate.

Because of the dynamic nature of the nursing profession, currency of both nursing content and clinical skills is essential. Patient safety is of critical concern and is compromised when a student has out-of-date knowledge and/or less than competent nursing care skills. Transfer of nursing credits into the BSN curriculum may be affected if there has been a lapse of time greater

than one year since previous nursing enrollment or by availability of clinical placements.

Continuance Policies

1. The student must be in good standing / currently enrolled in their ADN program.
2. A grade of C (2.00) or better is required in all nursing courses to continue in the nursing program.
3. An average of 80% or better on objective tests within a nursing course is required to earn a grade of C (2.00). A student who earns an average less than 80% on objective tests for a nursing course is awarded a grade of D or F and will not be considered in good academic standing in the major.
4. A cumulative grade point average of 2.00 or better is required to continue in the nursing program.
5. A nursing student who fails a course at ODU or in their ADN program will be dismissed from the concurrent program at ODU. Upon completion of the ADN, the student will be eligible to resume the post-licensure BSN curriculum.
6. A student who leaves the major and is readmitted may be required to take additional course work prior to or concurrent with readmission.

Note: Policies and procedures are outlined in more detail in the School of Nursing Student Handbook. All students accepted into the nursing major are responsible for familiarizing themselves with this handbook upon entry into the major.

Requirements

The concurrent curriculum is offered in both a full-time and part-time format. As part of ODU Global, courses are offered in an on-line program of study. Most students enroll on a part-time basis. Students may start the major in the fall, spring or summer semester.

Non-nursing courses must be completed with a grade of C (2.00) or better. (A grade of C- will not transfer to Old Dominion University.)

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

See the General Education section of this Catalog for specific course numbers in Human Creativity, Philosophy and Ethics, Interpreting the Past, Literature and the possible exemption for foreign languages.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the School of Nursing and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Nursing Concurrent Major

General Education		
Complete lower-division requirements		46-52
Complete upper-division requirements (minimum of 6 credit hours)		3-6
Nursing Concurrent Major		
NURS 305	Health Assessment	3
NURS 306	Theoretical Foundation of Professional Nursing Practice	3
NURS 363	Principles of Practice: Research as Foundation for Practice *	3
NURS 401	Introduction to Professional Development for Baccalaureate Nursing Practice ***+	4
NURS 402	Role Development for the Baccalaureate Nurse as Educator +	3
NURS 403	Transition to Baccalaureate Nursing Practice ***+.	4
NURS 412	Ethics, Law, Economics & Health Policy: Application to Quality Nursing Practice	2
NURS 417	Nursing Informatics	2
NURS 490W	Nursing Leadership	3
NURS 492	Community Health Nursing	3
Select one of the following:		3
NURS 455	Genetics in Nursing	
NURS 456	Global Health Perspectives	
NURS 457	Palliative Care	
NURS 459	Concepts in Primary Care	
HLSC 405	Interprofessional Study Abroad on Global Health	
NURS 398	Clinical Nursing Concepts I (or NURS 380 and NURS 381) *****	17
NURS 498	Clinical Nursing Concepts II (or NURS 382 and NURS 383) *****	16
Total Credit Hours		115-124

* NURS 363 must be taken in the 1st or 2nd semester of nursing courses.

- ** NURS 401 must be taken in the first semester of nursing courses.
- *** NURS 403 must be taken in the last semester of nursing courses.
- **** Advanced Placement Credits awarded with RN licensure
- ***** Advanced Placement Credits awarded with RN licensure
- + NURS 401, 402, and 403 must be taken in different semesters.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition	3
CHEM 105N	Introductory Chemistry	3
CHEM 106N	Introductory Chemistry Laboratory	1
SOC 201S	Introduction to Sociology	3
Human Creativity		3
Credit Hours		13
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research or Writing, Rhetoric, and Research: Special Topics	3
PSYC 203S	Lifespan Development	3
BIOL 150	Introductory Microbiology	3
BIOL 151	Introductory Microbiology Laboratory	1
Interpreting the Past		3
Credit Hours		13
Sophomore		
Fall		
BIOL 240 or BIOL 250	Fundamentals of Anatomy and Physiology I or Human Anatomy and Physiology I	4
STAT 130M	Elementary Statistics	3
Literature		3
Impact of Technology (Option D 300/400)		3
Elective if needed		2
Credit Hours		15
Spring		
BIOL 241 or BIOL 251	Fundamentals of Anatomy and Physiology II or Human Anatomy and Physiology II	4
Philosophy and Ethics (Option D 300/400)		3
Electives if needed		8
Credit Hours		15
Junior		
Fall		
NURS 305	Health Assessment	3

NURS 401	Introduction to Professional Development for Baccalaureate Nursing Practice	4
AAS degree program at partner institution		8-12
Credit Hours		15-19
Spring		
NURS 306	Theoretical Foundation of Professional Nursing Practice	3
NURS 363	Principles of Practice: Research as Foundation for Practice	3
AAS degree program at partner institution		8-12
Credit Hours		14-18
Summer		
NURS 402	Role Development for the Baccalaureate Nurse as Educator	3
NURS 412	Ethics, Law, Economics & Health Policy: Application to Quality Nursing Practice	2
NURS 490W	Nursing Leadership	3
Credit Hours		8
Senior		
Fall		
NURS 417	Nursing Informatics	2
NURS 492	Community Health Nursing	3
AAS degree program at partner institution		8-12
Credit Hours		13-17
Spring		
NURS 403	Transition to Baccalaureate Nursing Practice	4
Nursing Elective		2
AAS degree program at partner institution		8-12
Credit Hours		14-18
Total Credit Hours		120-136

Bachelor of Science in Nursing Nursing Post-Licensure Major (BSN)

Bachelor of Science in Nursing

Lynn Wiles, Undergraduate Program Director
Suzanne Van Orden, Chief Academic Advisor

The post-licensure curriculum is designed for registered nurses who are returning to complete their BSN. The post-licensure curriculum is offered in both a full-time and part-time format. As part of ODUGlobal, courses are offered in an on-line program of study.

Graduates of the baccalaureate program in professional nursing are generalists prepared to care for culturally diverse individuals and groups across the lifespan in a complex global community. Upon completion of the innovative, technology-enhanced program, graduates are knowledgeable about current trends in health care, assume responsibility for their professional growth, and are prepared for graduate study in nursing. The program is fully accredited by the Commission on Collegiate Nursing Education (CCNE) and approved by the Virginia State Board of Nursing.

Admission

Admission to the School of Nursing is a competitive process. Applicants for admission to the baccalaureate program in nursing should apply initially to

the Office of Admissions of Old Dominion University to seek admission to the University. Admission to the University does not constitute admission to the School of Nursing.

Applicants for admission to the undergraduate nursing program must complete prerequisite courses with a grade of “C” or better prior to being admitted to the School of Nursing. Transfer students may complete the prerequisite courses at another college or university but are responsible for having a transfer credit evaluation completed by the transfer evaluation unit in the Office of Admissions to determine that transfer courses are equivalent and acceptable to University requirements.

Applicants must complete a School of Nursing Supplemental Application to be considered for admission to the undergraduate nursing program. The School of Nursing Supplemental Application may be obtained directly from the School of Nursing Academic Advising Office or the School of Nursing website: <https://www.odu.edu/nursing> (<https://www.odu.edu/nursing/>)

In summary the applicant must:

1. Apply and be admitted to the University as a degree-seeking undergraduate student.
2. Submit a School of Nursing Supplemental Application directly to the School of Nursing with photocopies of all previous college transcripts attached. Submit all items in the same envelope. Do not mail transcripts in separate envelopes to the School of Nursing.
3. Have a transfer of credit evaluation completed by the transfer evaluation unit in the Office of Admissions.
4. Have an unencumbered RN license.

Transfer of Nursing Credits

Concurrent and RN-BSN students seeking to transfer NURSING credits from another NLNAC or CCNE accredited BSN program must submit photocopies of all nursing course syllabi for which they desire transfer credit approval. The School of Nursing Admission's Committee and nursing faculty will review the transfer course content for comparability with ODU nursing courses and determine if advanced placement in the BSN curriculum is appropriate.

Because of the dynamic nature of the nursing profession, currency of both nursing content and clinical skills is essential. Patient safety is of critical concern and is compromised when a student has out-of-date knowledge and/or less than competent nursing care skills. Transfer of nursing credits into the BSN curriculum may be affected if there has been a lapse of time greater than one year since previous nursing enrollment or by availability of clinical placements.

Continuance Policies

1. A grade of C (2.00) or better is required in all nursing courses to continue in the nursing program.
2. An average of 80% or better on objective tests within a nursing course is required to earn a grade of C (2.00). A student who earns an average less than 80% on objective tests for a nursing course is awarded a grade of D or F and will not be considered in good academic standing in the major.
3. A cumulative grade point average of 2.00 or better is required to continue in the nursing program.
4. A nursing student who fails a nursing course and is readmitted to the nursing program is allowed to repeat the failed course only once.
5. A student who leaves the major and is readmitted may be required to take additional course work prior to or concurrent with readmission.
6. A student may be readmitted to the nursing major only once.

Note: Policies and procedures are outlined in more detail in the School of Nursing Student Handbook. All students accepted into the nursing major are responsible for familiarizing themselves with this handbook upon entry into the major.

Requirements

The post-licensure curriculum for registered nurses is offered in both a full-time and part-time format. As part of ODU Global, courses are offered in an

on-line program of study. Most students enroll on a part-time basis. Students may start the major in the fall, spring or summer semester.

Non-nursing courses must be completed with a grade of C (2.00) or better. (A grade of C- will not transfer to Old Dominion University.)

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication requirement is met in the major

Information Literacy and Research requirement is met in the major

Mathematics: STAT 130M

Human Behavior: PSYC 203S and SOC 201S

Nature of Science: CHEM 105N, CHEM 106N, BIOL 150, BIOL 151, BIOL 240 or BIOL 250, BIOL 241 or BIOL 251

Impact of Technology: upper-division T course from outside the College of Health Sciences

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the School of Nursing and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.

- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Nursing Post-Licensure Major

General Education

Complete lower-division requirements 46-52

Complete upper-division requirements 3-6

Nursing Post-Licensure Major

NURS 305	Health Assessment	3
NURS 306	Theoretical Foundation of Professional Nursing Practice	3
NURS 363	Principles of Practice: Research as Foundation for Practice *	3
NURS 401	Introduction to Professional Development for Baccalaureate Nursing Practice ***+	4
NURS 402	Role Development for the Baccalaureate Nurse as Educator +	3
NURS 403	Transition to Baccalaureate Nursing Practice ***+	4
NURS 412	Ethics, Law, Economics & Health Policy: Application to Quality Nursing Practice	2
NURS 417	Nursing Informatics	2
NURS 490W	Nursing Leadership	3
NURS 492	Community Health Nursing	3
Select one of the following:		3
NURS 455	Genetics in Nursing	
NURS 456	Global Health Perspectives	
NURS 457	Palliative Care	
NURS 459	Concepts in Primary Care	
HLSC 405	Interprofessional Study Abroad on Global Health	
NURS 398	Clinical Nursing Concepts I (or NURS 380 and NURS 381) ****	17
NURS 498	Clinical Nursing Concepts II (or NURS 382 and NURS 383) *****	16
Total Credit Hours		115-124

- * NURS 363 must be taken in the 1st or 2nd semester of nursing courses.
- ** NURS 401 must be taken in the first semester of nursing courses.
- *** NURS 403 must be taken in the last semester of nursing courses.
- **** Advanced Placement Credits awarded with RN licensure
- ***** Advanced Placement Credits awarded with RN licensure
- + NURS 401, 402, and 403 must be taken in different semesters.

Elective credit may be need to meet the minimum 120 credit hours required for the degree.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition	3
CHEM 105N	Introductory Chemistry	3
CHEM 106N	Introductory Chemistry Laboratory	1
SOC 201S	Introduction to Sociology	3
Human Creativity		3
Credit Hours		13
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research or Writing, Rhetoric, and Research: Special Topics	3
PSYC 203S	Lifespan Development	3
BIOL 150	Introductory Microbiology	3
BIOL 151	Introductory Microbiology Laboratory	1
Interpreting the Past		3
Credit Hours		13
Sophomore		
Fall		
BIOL 240 or BIOL 250	Fundamentals of Anatomy and Physiology I or Human Anatomy and Physiology I	4
STAT 130M	Elementary Statistics	3
Literature		3
Impact of Technology (Option D 300/400)		3
Elective if needed		2
Credit Hours		15
Spring		
BIOL 241 or BIOL 251	Fundamentals of Anatomy and Physiology II or Human Anatomy and Physiology II	4
Philosophy and Ethics (Option D 300/400)		3
Electives if needed		8
Credit Hours		15
Junior		
Fall		
NURS 305	Health Assessment	3
NURS 401	Introduction to Professional Development for Baccalaureate Nursing Practice	4
AAS degree program at partner institution		8-12
Credit Hours		15-19
Spring		
NURS 306	Theoretical Foundation of Professional Nursing Practice	3
NURS 363	Principles of Practice: Research as Foundation for Practice	3
AAS degree program at partner institution		8-12
Credit Hours		14-18

Summer		
NURS 402	Role Development for the Baccalaureate Nurse as Educator	3
NURS 412	Ethics, Law, Economics & Health Policy: Application to Quality Nursing Practice	2
NURS 490W	Nursing Leadership	3
Credit Hours		8
Senior		
Fall		
NURS 417	Nursing Informatics	2
NURS 492	Community Health Nursing	3
AAS degree program at partner institution		8-12
Credit Hours		13-17
Spring		
NURS 403	Transition to Baccalaureate Nursing Practice	4
Nursing Elective		2
AAS degree program at partner institution		8-12
Credit Hours		14-18
Total Credit Hours		120-136

Bachelor of Science in Nursing Nursing Pre-Licensure Major (BSN)

Bachelor of Science in Nursing

Lynn Wiles, Undergraduate Program Director
Suzanne Van Orden, Chief Academic Advisor

The pre-licensure baccalaureate curriculum is designed to accommodate the needs of students desiring to become registered nurses. The pre-licensure nursing curriculum admits a cohort of students each fall semester. This is a full-time program where all nursing courses are completed in five consecutive semesters (fall, spring, summer, fall, spring). Upon completion of the program, graduates are eligible to take the national licensure exam (NCLEX) to become registered nurses.

Graduates of the baccalaureate program in professional nursing are generalists prepared to care for culturally diverse individuals and groups across the lifespan in a complex global community. Upon completion of the innovative, technology-enhanced program, graduates are knowledgeable about current trends in health care, assume responsibility for their professional growth, and are prepared for graduate study in nursing. The program is fully accredited by the Commission on Collegiate Nursing Education (CCNE) and approved by the Virginia State Board of Nursing.

Intended Pre-licensure Nursing Students - Health Sciences Advising Center

Students who qualify for regular admission to the University and who intend to apply for admission to the pre-licensure nursing program are considered Intended Health Sciences students until admitted to nursing. They will be assigned an advisor in the Health Sciences Advising Center while completing general education and prerequisite requirements needed to apply to their intended major. Intended health sciences students receive individualized advising support designed to prepare them for success in their chosen health sciences major.

Contact:

3rd Floor New Health Sciences Building
1019 W. 41st Street

Regulations for Continuance as an Intended Pre-licensure Nursing Major

Students are eligible to continue as an Intended Nursing major as long as they meet both of the following:

1. Meet the continuance regulations of the University.
2. Make reasonable progress toward matriculation into the pre-licensure nursing major.

At the end of each semester (fall, spring, and summer), the Health Sciences Advising Center reviews the records of all students who do not meet minimum admissions requirements for their intended major (see admissions information in the specific program sections of the Catalog and on the website.) A student who has ceased reasonable progress toward admission into the pre-licensure nursing program will be notified in writing via the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business.

Students identified as not making reasonable progress toward their intended degree program will be referred to an advisor in the Student Success Center and/or the Center for Major Exploration for assistance in selecting a new intended major.

Pre-licensure Nursing Program Admission

Acceptance to the University does not constitute or guarantee acceptance into the pre-licensure nursing major. A separate application must be submitted to be considered for acceptance into the pre-licensure nursing major. Application information, qualifications, deadlines, and advisors are listed in the specific program sections of the Catalog and on the website. Admission to the School of Nursing is a competitive process.

Students who wish to enter the pre-licensure nursing major must be admitted to ODU and submit a School of Nursing Supplemental Application by February 15. Late or incomplete pre-licensure applications will not be considered. The pre-licensure program admits students for the fall semester only. Students are notified by the program director of their acceptance and any other program specific requirements such as physicals, immunizations, technical standards, etc.

Continuance in the pre-licensure nursing major requires strong academic achievement, including successful demonstration of knowledge and use of practical and critical thinking skills in laboratory and in clinical rotations. Criminal background checks and routine drug screenings are requirements enforced by the School of Nursing's clinical partners. Any student deemed unacceptable for clinical rotation due to results from a criminal background check /drug screen will not be allowed to complete the program of study.

Applicants for admission to the undergraduate nursing program must complete prerequisite courses with a grade of "C" or better prior to being admitted to the School of Nursing. Transfer students may complete the prerequisite courses at another college or university but are responsible for having a transfer credit evaluation completed by the transfer evaluation unit in the Office of Admissions to determine that transfer courses are equivalent and acceptable to University requirements.

Applicants must complete a School of Nursing Supplemental Application to be considered for admission to the undergraduate nursing program. The School of Nursing Supplemental Application may be obtained directly from the School of Nursing Academic Advising Office or the School of Nursing website: <https://www.odu.edu/nursing> (<https://www.odu.edu/nursing/>)

In summary the applicant must:

1. Apply and be admitted to the University as a degree-seeking undergraduate student.
2. Submit a School of Nursing Supplemental Application directly to the School of Nursing with photocopies of all previous college transcripts

attached. Submit all items in the same envelope. Do not mail transcripts in separate envelopes to the School of Nursing.

3. A minimum of 30 credit hours that apply to the BSN must be completed before applying to the program. If admitted, all required lower-division departmental and general education courses must be completed prior to the enrollment date of the nursing curriculum.
4. Transfer students must have a transfer of credit evaluation completed by the transfer evaluation unit in the Office of Admissions.

The School of Nursing is committed to an equitable, inclusive, and diverse learning community. A balance of applicant experiences, attributes, and academic metrics is used to assess applicants. Academic metrics will be applied across the entire qualified candidate pool with the intent of creating a richly diverse student body. Pre-licensure applicant review considers the following criteria:

- Grade point average (GPA) of identified courses
- Pre-admissions aptitude testing (i.e., HESI)
- Measure of applicant experiences/attributes related to potential for success (i.e., work/volunteer experience, ODU prerequisites).
- Personal statements may be obtained through writing prompts and/or interviews.

Guaranteed Entry Program for High School Students

The nursing program offers a guaranteed entry program. This program is designed for highly qualified high school students who are committed to completing a Bachelor of Science in Nursing at Old Dominion University. Applicants must meet and maintain eligibility requirements as defined by the program. For more information, contact the pre-nursing advisor at 683-5137. <https://www.odu.edu/health-sciences-advising/health-sciences-pathways/special> (<https://www.odu.edu/health-sciences-advising/health-sciences-pathways/special/>)

General Pre-Licensure Policies

1. All pre-licensure students are required to have an initial physical exam completed and submitted by the first week of courses in the major.
2. Returning prelicensure students (second year, third year) must have an annual PPD and returning physical form completed and submitted by the first week of courses in the fall semester.
3. All prelicensure students must provide written documentation of Cardio-Pulmonary Resuscitation certification (professional level course) each year by the first week of courses in the semester.
4. Professional liability insurance is required for all clinical courses. The University covers this requirement for students enrolled in required clinical courses for the activities associated with those courses.
5. Due to the intimate nature of nursing practice with vulnerable populations, criminal background/sex offender status checks are required of all prelicensure students.
6. The School of Nursing technical standards and performance requirements are located on the School's website and student handbook.
7. The School of Nursing computer competency requirements are located on the School's website and student handbook.

Continuance Policies

1. A grade of C (2.00) or better is required in all nursing courses to continue in the nursing program.
2. An average of 80% or better on objective tests within a nursing course is required to earn a grade of C (2.00). A student who earns an average less than 80% on objective tests for a nursing course is awarded a grade of D or F and will not be considered in good academic standing in the major.
3. A nursing student who fails a nursing course and is readmitted to the nursing program is allowed to repeat the failed course only once.
4. A student who leaves the major and is readmitted may be required to take additional course work prior to or concurrent with readmission.
5. A student may be readmitted to the nursing major only once.

Note: Policies and procedures are outlined in more detail in the School of Nursing Student Handbook. All students accepted into the nursing major are responsible for familiarizing themselves with this handbook upon entry into the major.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Oral Communication requirement is met in the major

Information Literacy and Research requirement is met in the major

Mathematics: STAT 130M

Human Behavior: PSYC 203S and SOC 201S

Nature of Science: CHEM 105N, CHEM 106N, BIOL 150, BIOL 151, BIOL 240 or BIOL 250, BIOL 241 or BIOL 251

Impact of Technology: upper-division T course from outside the College of Health Sciences

Students must complete the entire curriculum of 120-126 credits (depending upon foreign language exemption) to meet degree requirements. Nursing courses are taken in the order listed. Students applying to the nursing major should complete all of the non-nursing courses prior to beginning the major. Courses must be completed with a grade of C (2.00) or better (not a C-) for transfer credit to Old Dominion University. A minimum GPA of 3.0 is required for consideration for admission to the pre-licensure program. A grade of B or better makes the applicant more competitive.

Nursing courses are taught in fall, spring and summer semesters. Summer enrollment is required.

Each semester in the program students are assessed a non-refundable program fee of \$375. This fee is posted to the student's account to be paid with tuition. The fee covers a variety of program-related expenses outside of tuition and books.

Upper-Division General Education

- Option A. Approved Minor, 12-24 hours; also second degree or second major.
- Option B. Interdisciplinary Minor, 12 hours specified by the department, 3 of which may be in the major area of study.
- Option C. An approved certification program such as teaching licensure

- Option D. Two Upper-Division Courses from outside the School of Nursing and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Nursing Pre-licensure Major

General Education

Complete lower-division requirements 46-52

Complete upper-division requirements 3-6

Nursing Pre-Licensure Major

Complete the nursing pre-licensure major requirements below 66

Total Credit Hours 115-124

All Nursing courses must be completed as scheduled in the terms in the plan of study.

Course	Title	Credit Hours
First Year		
Fall		
NURS 304	Principles of Practice: Foundations of Health Assessment	3
NURS 310	Principles of Practice: Introduction to Nutrition/ Normal Nutrition	1
NURS 314	Principles of Practice: Foundational Concepts	3
NURS 316	Principles of Practice: Foundations of Practice	3
NURS 317	Principles of Practice: Clinical Foundations of Practice	1
NURS 430	Principles of Practice: Contemporary Issues in Nursing Care of the Older Adult	2
Credit Hours		13
Spring		
NURS 311	Principles of Practice: Nutrition of Nursing Practice	1
NURS 322	Health Continuum: Adult Health I	4
NURS 323	Health Continuum: Clinical Management Adult Health I	2
NURS 352	Health Continuum: Behavioral Issues, Altered Cognition and Coping	2
NURS 353	Clinical Management of Patients with Behavioral Issues, Altered Cognition and Coping	1

NURS 363	Principles of Practice: Research as Foundation for Practice	3
NURS 373	Principles of Practice: Pharmacology for Nursing Practice I	2
Credit Hours		15
Summer		
NURS 332 or NURS 422	Health Continuum: The Growing Family or Health Continuum: Children of the Family	2
NURS 333	Health Continuum: Clinical Management of the Growing Family or NURS 421	1
NURS 376	Principles of Practice: Pharmacology Across the Continuum	1
NURS 440	Health Continuum Recovery	2
NURS 441	Health Continuum: Clinical Management of Recovery	2
NURS 462	Nursing in the Health Care System Community I	1
NURS 463	Nursing in the Health Care System: Community Interactions I	1
Credit Hours		10
Second Year		
Fall		
NURS 410	Health Continuum: Adult Health II	4
NURS 421	Health Continuum: Clinical Management of Children of the Family or NURS 333	2
NURS 422	Health Continuum: Children of the Family or NURS 332	2
NURS 453	Health Continuum: Clinical Management Adult Health Nursing II	2
NURS 472	Nursing in the Health Care System: Community II	1
NURS 473	Nursing in the Health Care System: Community Interactions II	1
NURS 474	Principles of Practice: Pharmacology for Nursing Practice II	2
Credit Hours		14
Spring		
NURS 412	Ethics, Law, Economics & Health Policy: Application to Quality Nursing Practice	2
NURS 417	Nursing Informatics	2
NURS 480W	Nursing in the Health Care System: Leadership	3
NURS 481	Principles of Practice: Role Transition	5
Nursing Elective		2
Credit Hours		14
Total Credit Hours		66

Elective credit may be needed to meet the minimum 120 credit hours required for the degree.

Honors Program for Pre-Licensure Nursing Majors

The School of Nursing has elected to offer departmental honors to interested and qualified undergraduate students. The honors curriculum reflects the school's commitment to scholarship, leadership, clinical practice and community service.

Application to the Honors Program occurs at the end of the first semester in the upper-division courses. Acceptance is limited to approximately 10% of the class size and students will be considered based on:

1. A minimum GPA of 3.50
2. Faculty recommendation

Applications will be distributed to pre-licensure students at the end of the first semester in nursing courses. Honors advisors will obtain faculty recommendations for the applicants.

Students who are selected for the Honors Program must complete the following requirements in addition to regular course and clinical requirements.

1. Completion of required departmental honors courses
 - a. NURS 387 in place of NURS 363.
 - b. NURS 491 in place of NURS 481.
2. Design and implement a community service project encompassing 25 or more volunteer hours. This is above and beyond the clinical hours in community health or participation in Student Nursing Association projects.
3. Complete a leadership project in NURS 491 Role Transition.

Bachelor of Science in Nursing (BSN)

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition	3
CHEM 105N	Introductory Chemistry	3
CHEM 106N	Introductory Chemistry Laboratory	1
SOC 201S	Introduction to Sociology	3
Human Creativity		3
Credit Hours		13
Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research or Writing, Rhetoric, and Research: Special Topics	3
PSYC 203S	Lifespan Development	3
BIOL 150	Introductory Microbiology	3
BIOL 151	Introductory Microbiology Laboratory	1
Interpreting the Past		3
Credit Hours		13
Sophomore		
Fall		
BIOL 240 or BIOL 250	Fundamentals of Anatomy and Physiology I or Human Anatomy and Physiology I	4

STAT 130M	Elementary Statistics	3
Literature		3
Impact of Technology (Option D 300/400)		3
Credit Hours		13
Spring		
BIOL 241 or BIOL 251	Fundamentals of Anatomy and Physiology II or Human Anatomy and Physiology II	4
Philosophy and Ethics (Option D 300/400)		3
Electives (if needed)		8
Credit Hours		15
Junior		
Fall		
NURS 304	Principles of Practice: Foundations of Health Assessment	3
NURS 310	Principles of Practice: Introduction to Nutrition/ Normal Nutrition	1
NURS 314	Principles of Practice: Foundational Concepts	3
NURS 316	Principles of Practice: Foundations of Practice	3
NURS 317	Principles of Practice: Clinical Foundations of Practice	1
NURS 430	Principles of Practice: Contemporary Issues in Nursing Care of the Older Adult	2
Credit Hours		13
Spring		
NURS 311	Principles of Practice: Nutrition of Nursing Practice	1
NURS 322	Health Continuum: Adult Health I	4
NURS 323	Health Continuum: Clinical Management Adult Health I	2
NURS 352	Health Continuum: Behavioral Issues, Altered Cognition and Coping	2
NURS 353	Clinical Management of Patients with Behavioral Issues, Altered Cognition and Coping	1
NURS 363	Principles of Practice: Research as Foundation for Practice	3
NURS 373	Principles of Practice: Pharmacology for Nursing Practice I	2
Credit Hours		15
Summer		
NURS 332 or NURS 422	Health Continuum: The Growing Family or Heath Continuum: Children of the Family	2
NURS 333 or NURS 421	Health Continuum: Clinical Management of the Growing Family or Health Continuum: Clinical Management of Children of the Family	1

NURS 376	Principles of Practice: Pharmacology Across the Continuum	1
NURS 440	Health Continuum Recovery	2
NURS 441	Heath Continuum: Clinical Management of Recovery	2
NURS 462	Nursing in the Health Care System Community I	1
NURS 463	Nursing in the Health Care System: Community Interactions I	1
Credit Hours		10
Senior		
Fall		
NURS 410	Health Continuum: Adult Health II	4
NURS 421 or NURS 333	Health Continuum: Clinical Management of Children of the Family or Health Continuum: Clinical Management of the Growing Family	2
NURS 422 or NURS 332	Heath Continuum: Children of the Family or Health Continuum: The Growing Family	2
NURS 453	Health Continuum: Clinical Management Adult Health Nursing II	2
NURS 472	Nursing in the Health Care System: Community II	1
NURS 473	Nursing in the Health Care System: Community Interactions II	1
NURS 474	Principles of Practice: Pharmacology for Nursing Practice II	2
Credit Hours		14
Spring		
NURS 412	Ethics, Law, Economics & Health Policy: Application to Quality Nursing Practice	2
NURS 417	Nursing Informatics	2
NURS 480W	Nursing in the Health Care System: Leadership	3
NURS 481	Principles of Practice: Role Transition	5
Nursing Elective		2
Credit Hours		14
Total Credit Hours		120

Joint School of Public Health

Li-Wu Chen, PhD, MHSA, Founding Dean
Brian C. Martin, PhD, MBA, Associate Dean for Academic Affairs
Felicia Mebane, PhD, MSPH, Associate Dean for Community Engagement and Outreach (NSU)
Elizabeth A. Brown, PhD, MPH, CPH, BSPH Program Director
Maria Kronenburg, PhD, MBA, BSPH Health Services Administration Program Director
Jeff Moody, MSPH, BSEH Program Director

4608 Hampton Blvd
Norfolk, VA 23508
757-683-4259

School Mission

The Joint School of Public Health (JSPH) is a collaborative partnership between Old Dominion University and Norfolk State University to offer experiential learning and research opportunities across multiple campuses. The first of its kind in Virginia, students learn through hands-on experience, classroom learning, and community engagement to prepare for the public health jobs of the future.

The school's mission is to improve the health and well-being of populations, in the Commonwealth of Virginia and beyond, through transformative education, research, scholarship, service, practice experiences and community partnerships.

Program Application, Acceptance, and Continuance

The JSPH has developed undergraduate programs that prepare individuals to meet the public health needs of the region, the state, and the nation. These programs include the Bachelor of Science in Public Health (BSPH) degree, the Bachelor of Science in Public Health – Health Services Administration (BSPH-HSA) major, the Bachelor of Science in Environmental Health (BSEH) degree, and the undergraduate Certificate in Occupational Safety.

Students entering undergraduate programs in the JSPH should meet the minimum university admission requirements (see <https://www.odu.edu/admission/undergraduate> (<https://www.odu.edu/admission/undergraduate>)).

Students who qualify for regular admission to the University and who intend to apply for admission to a public health major are considered Intended Joint School of Public Health students until admitted to their intended major. They will be assigned an advisor in the Health Sciences Advising Center/ODU Global Health Sciences while completing general education and prerequisite requirements needed to apply to their intended major. Intended Joint School of Public Health students receive individualized advising support designed to prepare them for success in their chosen public health major.

Contact:
Health Sciences Advising Center
3113 Health Sciences Building
757-683-5137
HSAadvising@odu.edu (hsadvising@odu.edu)

Contact:
ODU Global Health Sciences
800-968-2638
healthsciencesonline@odu.edu

Students are eligible to continue as Intended Joint School of Public Health majors if they meet both of the following:

1. Meet the continuance regulations of the University.
2. Make reasonable progress toward matriculation into a Joint School of Public Health major program.

At the end of each semester (fall, spring, and summer), the Health Sciences Advising Center/ODU Online Health Sciences reviews the records of all students who do not meet minimum admissions requirements for their intended major (see admissions information in the specific program sections of the Catalog and on the program web site). A student who has ceased reasonable progress toward admission into a JSPH degree program will be

notified in writing via the student's Old Dominion University e-mail address, in accordance with the Electronic Communication Policy for Official University Business.

Students who have met all major admissions requirements will be referred by their advisor in the Health Sciences Advising Center/ ODU Global Health Sciences to the appropriate program director for major declaration, program admission, and assignment to a program advisor. For additional information on the curriculum or admission requirements, please see specific program sections of the Catalog and the program web site.

Students identified as not making reasonable progress toward their intended JSPH degree program will be referred to an advisor in the Student Success Center and/or the Center for Orientation, Retention, and Exploration (CORE) for assistance in selecting a new intended major.

Departments

- Department of Epidemiology, Biostatistics, & Environmental Health (p. 669)
- Department of Health Behavior, Policy, & Management (p. 673)

Bachelor of Science Program

- Environmental Health (BS) (p. 669)

Bachelor of Science in Public Health Programs

- Public Health (BSPH) (p. 659)
- Public Health with a Major in Health Services Administration (BSPH) (p. 663)
- Public Health with a Major in Health Services Administration (Professional) (BSPH) (p. 666)

Minor Programs

- Community Health Minor (p. 668)
- Environmental Health Minor (p. 672)
- Environmental Issues and Management Minor (p. 672)
- Occupational Safety Minor (p. 673)
- Public Health Minor (p. 669)

Certificate Program

- Occupational Safety Certificate (p. 673)

Programs

Bachelor of Science in Public Health Programs

- Public Health (BSPH) (p. 659)
- Public Health with a Major in Health Services Administration (BSPH) (p. 663)
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Minor Programs

- Community Health Minor (p. 668)
- Public Health Minor (p. 669)

Bachelor of Science in Public Health Public Health (BSPH)

Webpage: <https://www.odu.edu/public-health/academics/undergraduate>
Program Email: bsph@odu.edu (<http://outlook.odu.edu>)
Program Director: Dr. Elizabeth A. Brown

The Bachelor of Science in Public Health (Public Health major) is in the new Joint School of Public Health (<https://www.odu.edu/public-health/>), which is a collaborative partnership between Old Dominion University and Norfolk State University, and housed under the newly formed Macon & Joan Brock Virginia Health Sciences (<https://www.odu.edu/virginia->

health-sciences/). Graduates of the Public Health major will possess knowledge and skills necessary to prevent disease, prolong life, and promote health. Graduates will also have the skills to be leaders in their community where they can showcase their ability to describe data related to social determinants of health (factors that impact health and health equity), determine interventions needed for diverse communities, and demonstrate the ability to collect, manage, and analyze data. Graduates will be able to serve as leaders in various capacities at the local, state, or federal level. Students will have skills valuable to health departments, non-profit organizations, hospitals, and even the military. Graduates may consider furthering their education with a Master of Public Health while others may pursue clinical programs (e.g., medicine, nursing, dental, or physician assistant), occupational therapy, physical therapy, etc.

The curriculum for the Public Health major incorporates rigorous coursework in epidemiology and biostatistics, social and behavioral aspects of health, the United States healthcare delivery system, bioethics, natural sciences, health policy, and environmental health issues, among other areas. The program also provides students with courses in basic research methods necessary for assessment, analysis, communication, research, problem solving, and critical thinking abilities in the emerging emphasis on evidence-based health care and public health. Students will have the opportunity to gain practical public health exposure and mentoring in clinical, research, or community settings.

The Public Health major is available in a flexible format with some courses offered online and some in person. The program can also be completed fully online for students who are interested in an autonomous online learning environment.

Major Declaration: Public Health Program

To officially declare a major in Public Health, students must complete the following courses with a grade of C or better: PUBH 200, ENGL 110C, MATH 162M, STAT 130M, BIOL sequence**, and CHEM sequence.**

1. Students who have met all major declaration requirements and meet the minimum cumulative GPA (2.00) requirement will be referred by their advisor in the Health Sciences Advising Center/ODU Global Health Sciences advisor to the program director for major declaration and assignment to a program advisor. For additional information, please contact the Program Director (bsph@odu.edu (<http://outlook.odu.edu/>)) or Health Sciences Advising Center (hsadvising@odu.edu (<http://www.odu.edu/hs/advising/>)).
2. Students must be accepted to the program before enrolling in any 400-level required course.

**The BSPH-Public Health Program may accept lower-level science options for BIOL 121N/BIOL 122N and BIOL 123N/BIOL 124N and CHEM 121N/CHEM 122N and CHEM 123N/CHEM 124N. Grade C or higher required. For additional information, please contact the Program Director (bsph@odu.edu (<http://outlook.odu.edu/>)) or Health Sciences Advising Center (hsadvising@odu.edu (<http://www.odu.edu/hs/advising/>)).

Continuance and Readmission Policy

In addition to the Old Dominion University continuance policies in this catalog, the following policies are specific to all declared majors in the Public Health major:

1. A grade of C (2.00) or better is required in all required major courses to continue in the program.
2. A student who earns a grade of C- or lower in a required major course will not be considered in good academic standing in the major and must retake the course in the next semester the course is offered.
3. A cumulative grade point average of 2.00 or better is required to continue in the Public Health program.

Students who fail to meet the continuance requirements for the major will revert to intended degree, and an advising hold will be placed back on their

account. A meeting with the program director will be required to create a success plan before a student may enroll in additional Public Health courses.

To be readmitted to the Public Health major:

1. Students must meet with the program director to create a success plan.
2. Students must successfully complete all major courses with a grade of C or higher, maintain a cumulative grade point average of 2.0 or better, and meet the program director again before the major will be redeclared. Students are responsible for contacting the program director when all readmission requirements have been met.
3. A student who is readmitted to the major may be required to take additional course work prior to or concurrent with readmission.

Internship (Capstone Experience)

The internship (capstone experience) PUBH 468 is a three-credit course that serves as the capstone experience for students pursuing the Bachelor of Science in Public Health. The internship is a planned, supervised, and evaluated 200-hour experience under the direction of the internship coordinator. (Note: Students enrolled in the linked BSPH to MPH program are required to perform 120 hours as those students take graduate-level courses and are required to complete an Applied Practice Experience/practicum in the graduate program.) The policies, guidelines, and processes followed by the coordinator and students are delineated in the Internship Manual provided to students when they enroll in the program. The internship provides the opportunity for students to integrate their academic work into experiential learning to gain additional experience in the field or community of the student's choice. The experience will allow a student to gain basic job entry or advanced skills by working with experienced public health or healthcare professionals in a public or private organization. Students may select the internship site, or they may seek guidance from faculty about possible sites.

Students may be eligible for internship upon senior standing in the major (at least 90 credits) and completion of all required prerequisites. Senior standing is imperative for success in the internship course as the foundational skills and concepts are achieved during the span of entire coursework at ODU. Internships must be sought and undertaken in an organization, agency, department, or community that provides planning and/or services that are relevant to the core areas of public health. Any student who plans to organize an internship without the appropriate foundation may be at a disadvantage in the organizations in which internships are undertaken. All public health students will complete an internship related to public health. The internship experience and corresponding internship course both address the relevance of developing skills and competencies as required for the future of public health practitioners. **Students must complete an internship learning contract and receive final approval from the internship coordinator by the following deadline: August 1 (fall internship), December 1 (spring internship), and May 1 (summer internship).**

As part of the course assessment, students are required to develop an electronic portfolio (ePortfolio). The ePortfolio is a collection of work completed by the student during the internship and can be used to present the student's "professional" or digital self to others. In addition to submitting an ePortfolio, students must submit a comprehensive attendance record that covers the entire internship period.

Students who have five or more years of supervisory or management experience in a public health field can apply for a Prior Learning ePortfolio Challenge, which could replace the internship course. A cover letter and resume will be required for initial review. Please contact the BSPH internship coordinator to discuss this option.

Some internship sites may require the student to complete a criminal background check, drug screening, computer-based training, Cardiopulmonary Resuscitation (CPR) training, proof of vaccination status, and/or other relevant responsibilities needed to train in public health organizations prior to beginning the internship.

Students who do not pass the internship in the first attempt will have the opportunity to repeat the course one additional time. If they are unsuccessful

on their final attempt, they will be unable to earn the Bachelor of Science in Public Health.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: grade of C or better required in both courses

Mathematics: MATH 162M required

Human Behavior: met by PSYC 201S or SOC 201S in foundations coursework

Philosophy and Ethics: PHIL 345E preferred

The Nature of Science: BIOL 121N/BIOL 122N and BIOL 123N/BIOL 124N required**

Impact of Technology: met in the major by PUBH 485

Information Literacy and Research: HLTH 120G preferred

Upper-Division General Education

Students may choose one of the following options to fulfill their upper-division general education requirement.

- Option A: A University-approved disciplinary minor, second degree or second major, with advisor approval.
- Option B: A University-approved interdisciplinary minor.
- Option C: An approved certification program such as teaching licensure.
- Option D: Six hours of upper division courses outside the College of Health Sciences.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Public Health Major

To declare a major in Public Health, students must complete the following with grades of C or better:

PUBH 200, ENGL 110C, MATH 162M, STAT 130M, BIOL sequence**, and CHEM sequence.**

Students must be a declared major to enroll in 400-level BSPH major courses.

All courses required for the major must be completed with a grade of C or better.

**The BSPH-Public Health Program may accept lower-level science options for BIOL 121N/BIOL 122N and BIOL 123N/BIOL 124N and CHEM 121N/CHEM 122N and CHEM 123N/CHEM 124N. Grade C or higher required. For additional information, please contact the Program Director (bsph@odu.edu (<http://outlook.odu.edu/>)) or Health Sciences Advising Center (hsadvising@odu.edu (<http://www.odu.edu/hs/advising/>)).

General Education

Complete lower-division requirements 35-41

Complete upper-division requirements (minimum of 3 credit hours; 3-6 3 credits for Option D may be met by PHIL 345E)

Public Health Prerequisite

PUBH 200 Principles of Public Health * 3

Public Health Sciences Foundation

STAT 130M Elementary Statistics * 3

CHEM 121N & CHEM 122N Foundations of Chemistry I Lecture and Foundations of Chemistry I Laboratory ** 4

CHEM 123N & CHEM 124N Foundations of Chemistry II Lecture and Foundations of Chemistry II Laboratory ** 4

PSYC 201S Introduction to Psychology *** 3
or SOC 201S Introduction to Sociology

BIOL 240 Fundamentals of Anatomy and Physiology I * 4

or BIOL 250 Human Anatomy and Physiology I
BIOL 241 Fundamentals of Anatomy and Physiology II * 4

or BIOL 251 Human Anatomy and Physiology II

Public Health Core

ENVH 301 Principles of Environmental Health Science * 3

PUBH 320 Health Equity and Disability Culture * 3

PUBH 335 Population Health * 3

PUBH 390 The U.S. Healthcare Delivery System * 3

PUBH 445 Health Services Research Methods * 3

PUBH 450 Public and Community Health Administration * 3

PUBH 485 Public Health Informatics **** 3

PUBH 468 Internship * 3

Public Health Major

PUBH 360 Introduction to Global Health * 3

PUBH 403W Social and Behavioral Aspects of Public Health * 3

PUBH 415 One Health-One Medicine * 3

PUBH 421 Leadership in Public Health * 3

PUBH 422	Health, Culture and Diversity-Reducing Disparities in Public Health *	3
PUBH 405 or PUBH 475	Interprofessional Study Abroad in Public Health * Healthcare Marketing	3
ENVH 448	Epidemiology and Biostatistics *	3
Total Credit Hours		108-117

*	Grade of C or better required
**	The BSPH-Public Health Program may accept lower-level science options for BIOL 121N/BIOL 122N, BIOL 123N/BIOL 124N, CHEM 121N/CHEM 122N, and CHEM 123N/CHEM 124N. Grade of C or higher required. For additional information, please contact the Program Director (bsph@odu.edu) or Health Sciences Advising Center (hsadvising@odu.edu).
***	PSYC 201S or SOC 201S meets the Human Behavior Way of Knowing in lower-division General Education; Grade of C or better required.
****	PUBH 485 meets the General Education Impact of Technology requirement; Grade of C or better required.

Electives

Electives may be needed to achieve the minimum 120 credit hours required for the baccalaureate degree. Some electives that can be considered are: DASC 300, PUBH 318, PUBH 405, PUBH 425, PUBH 465, ENVH 401, ENVH 406, SOC 440, etc.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition *	3
BIOL 121N	General Biology I **	3
BIOL 122N	General Biology I Lab **	1
MATH 162M	Precalculus I *	3
PUBH 200	Principles of Public Health *	3
Information Literacy & Research (HLTH 120G preferred)		3
Credit Hours		16
Spring		
Literature		3
Oral Communication		3
BIOL 123N	General Biology II **	3
BIOL 124N	General Biology II Lab **	1
STAT 130M	Elementary Statistics *	3
PUBH 320	Health Equity and Disability Culture *	3
Credit Hours		16
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research * or Writing, Rhetoric, and Research: Special Topics	3

CHEM 121N	Foundations of Chemistry I Lecture **	3
CHEM 122N	Foundations of Chemistry I Laboratory **	1
PSYC 201S or SOC 201S	Introduction to Psychology *** or Introduction to Sociology	3
ENVH 301	Principles of Environmental Health Science *	3
PUBH 335	Population Health *	3
Credit Hours		16
Spring		
Human Creativity		3
Interpreting the Past		3
CHEM 123N	Foundations of Chemistry II Lecture **	3
CHEM 124N	Foundations of Chemistry II Laboratory **	1
PUBH 360	Introduction to Global Health *	3
PUBH 390	The U.S. Healthcare Delivery System *	3
Credit Hours		16
Junior		
Fall		
BIOL 240 or BIOL 250	Fundamentals of Anatomy and Physiology I * or Human Anatomy and Physiology I	4
PUBH 415	One Health-One Medicine (Only offered during fall semester) *	3
Elective OR Upper-Division General Education		3
Philosophy & Ethics (PHIL 345E preferred)		3
Elective OR Upper-Division General Education		3
Credit Hours		16
Spring		
BIOL 241 or BIOL 251	Fundamentals of Anatomy and Physiology II * or Human Anatomy and Physiology II	4
ENVH 448	Epidemiology and Biostatistics (Only offered during spring semester) *	3
PUBH 445	Health Services Research Methods *	3
PUBH 450	Public and Community Health Administration *	3
Elective OR Upper-Division General Education		3
Credit Hours		16
Senior		
Fall		
PUBH 403W	Social and Behavioral Aspects of Public Health (Only offered during fall semester) *	3
PUBH 485	Public Health Informatics ****	3
PUBH 405 or PUBH 475	Interprofessional Study Abroad in Public Health * or Healthcare Marketing	3
Elective OR Upper-Division General Education		3
Credit Hours		12

Spring

PUBH 421	Leadership in Public Health (Only offered during spring semester) *	3
PUBH 422	Health, Culture and Diversity- Reducing Disparities in Public Health *	3
PUBH 468	Internship *	3
Elective OR Upper-Division General Education		3
Credit Hours		12
Total Credit Hours		120

* Grade of C or better required

** The BSPH-Public Health Program may accept lower-level science options for BIOL 121N/BIOL 122N, BIOL 123N/BIOL 124N, CHEM 121N/CHEM 122N, and CHEM 123N/CHEM 124N. Grade of C or higher required. For additional information, please contact the Program Director (bsph@odu.edu) or Health Sciences Advising Center (hsadvising@odu.edu).

*** PSYC 201S or SOC 201S meets the Human Behavior Way of Knowing in lower-division General Education; Grade of C or better required.

**** PUBH 485 meets the General Education Impact of Technology requirement; Grade of C or better required.

Linked Bachelor of Science in Public Health (BSPH) to Master of Public Health (MPH) Program

Overview

The linked Bachelor of Science in Public Health (BSPH) to Master of Public Health (MPH) Program provides qualified ODU undergraduate students with the opportunity to earn a Master of Public Health degree while taking up to 12 credits in the MPH Program as an undergraduate BSPH student. The linked program is designed for highly-motivated students with the desire to continue their education after the BSPH degree. It is especially relevant for individuals seeking to work (or currently working) in the public health, health services, or non-profit sectors. Successful applicants must have demonstrated both a mature attitude and superior academic achievement.

Eligibility

BSPH students in the Public Health, Health Services Administration (HSA), and Health Services Administration-Professional (HSA-P) majors are eligible for the linked BSPH to MPH Program. Additional eligibility requirements are below:

- Students in a major under the BSPH degree
 - Note: Students in the HSA or HSA-P majors may need to take additional public health-related courses (see Required Coursework below)
- Students with a 3.5 grade point average (GPA) or higher in their major

Required Coursework

BSPH students interested in the linked BSPH to MPH Program should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the linked program work in close consultation with the BSPH Co-Directors and MPH Director to develop an individualized plan of study based on the required coursework.

Students in the BSPH-HSA or BSPH-HSA-P majors, who are interested in the linked program, are required to take the following electives: (1) PUBH 422 Health, Culture and Diversity-Reducing Disparities in Public Health and (2) ENVH 448 Epidemiology and Biostatistics. Students must make a C or higher in the courses. Students should make note of the course prerequisites.

Process

Eligible BSPH students may take MPH-level courses as early as four semesters prior to their graduation and count up to 12* graduate credit hours toward their undergraduate degree. Once in the linked program, BSPH students must maintain a 3.0 GPA or above throughout the program. Undergraduate students who fail to maintain a 3.0 GPA may revert to the regular BSPH degree and count up to 12 hours of completed graduate coursework toward the undergraduate degree.

After receiving the undergraduate degree, the student must officially apply to the MPH Program through the ODU Graduate School. A student will continue with the MPH program, taking MPH courses until completing the required 43 credit hours. Students in the linked program must earn a minimum of 151 credit hours (120 credit hours for the undergraduate degree and 31 credit hours for the graduate degree).

**For additional information, please contact the MPH Program Director at mph@odu.edu.*

BSPH to MPH Program Admission Information

Eligible BSPH students who are interested in the linked BSPH to MPH Program must complete the following requirements:

- Complete general education requirements before the end of Junior year.
- Declare major under the BSPH degree at Old Dominion University (ODU).
- Have a 3.5 GPA (or higher) in the major.
- Complete required coursework (for HSA and HSA-P majors)
- Request a course review and interview from the MPH Director after completing a minimum of 60 credits and before completing 105 credits.
- Apply to the MPH program via Graduate Admissions no later than the June 15 of your final undergraduate year. The application includes submitting a personal statement, two letters of recommendation, etc. Please review additional application requirements set by the ODU MPH Program.

Bachelor of Science in Public Health Public Health with a Major in Health Services Administration (BSPH)

Webpage: <http://www.odu.edu/commhealth/academics/undergraduate>
(<http://www.odu.edu/commhealth/academics/undergraduate/>)

Program Email: [HealthAdminMajor@odu.edu]

Program Director: Dr. Maria Kronenburg

The Bachelor of Science in Public Health (BSPH) degree with a major in Health Services Administration (HSA) aims to provide students with current, relevant information and experiences that will enable them to function as entry-level health service administrators in local, state, and national arenas. Additionally, the program will prepare persons seeking advanced study in preparation for the MHA, MPH, MPP, MPA, and MS degrees and the foundation for PhD or MD educational career paths.

Graduates of the Bachelor of Science in Public Health with a major in the Health Services Administration Program will possess the knowledge and skills necessary to enhance the administration and the delivery of health services through health care management and policy education. These graduates will serve as leaders for health care organizations in the public, private, and military organizations. The curriculum for the Health Services Administration major integrates a multidisciplinary approach that includes global and public health, health care finance, health services research, epidemiology, health care policy and management. Students will have the opportunity to gain practical health care management experience and drive innovation in health care policy.

Graduates of the program will be ready to serve as invaluable leaders in health care services.

The Health Services Administration major is available fully online, with the option to complete some courses on campus.

Major Declaration: Health Services Administration Program

To officially declare a major in Health Services Administration (HSA), students must complete the following courses with a grade of C or better: PUBH 200, PUBH 320, PUBH 335, PUBH 390, and STAT 130M.

1. Students who have met all major declaration requirements and meet the minimum cumulative GPA (2.00) requirement will be referred by their advisor in the Health Sciences Advising Center/ODU Global Health Sciences advisor to the program director for major declaration and assignment to a program advisor. For additional information, please contact the Program Director at: HealthAdminMajor@odu.edu or the Health Sciences Advising Center (hsadvising@odu.edu (<http://www.odu.edu/hs/advising/>)).
2. Students must be accepted to the program before enrolling in any 400-level required course.

Continuance and Readmission Policy

In addition to the Old Dominion University continuance policies in this catalog, the following policies are specific to all declared majors in the Health Services Administration (HSA) Program:

1. A grade of C (2.00) or better is required in all required major courses to continue in the program.
2. A student who earns a grade of C- or lower in a required major course will not be considered in good academic standing in the major and must retake the course in the next semester the course is offered.
3. A cumulative grade point average of 2.00 or better is required to continue in the HSA program.

Students who fail to meet the continuance requirements for the major will revert to intended degree, and an advising hold will be placed back on their account. A meeting with the program director will be required to create a success plan before a student may enroll in additional courses.

To be readmitted to the HSA program:

1. Students must meet with the program director to create a success plan.
2. Students must successfully complete all major courses with a grade of C or higher, maintain a cumulative grade point average of 2.0 or better, and meet the program director again before the major will be redeclared. Students are responsible for contacting the program director when all readmission requirements have been met.
3. A student who is readmitted to the major may be required to take additional course work prior to or concurrent with readmission.

Internship

The PUBH 468 internship is designed to provide students with practical experiences in a health setting. This allows students to apply their academic knowledge to real-life situations within an organization or community context that focuses on health activities. During the internship, students will acquire practical skills by completing assignments that challenge them to utilize the competencies learned in their coursework. They will also gain a deeper understanding of the political, economic, social, and organizational factors that influence health services administration.

The PUBH 468 internship is a crucial component of the BSPH degree, serving as a culminating experience. To be eligible for the internship, BSPH-HSA students must fill out an internship learning contract for approval and have completed at least 90 credits and half of the major coursework. Internships must be planned and approved in advance by the program internship coordinator. The internship course may be taken concurrently with other courses within the credit hour limits for the term. **A learning contract must be submitted for approval prior to the following internship deadlines: May 1 for summer, August 1 for fall, and December 1 for spring.**

Internships should occur with sites that are relevant to health services administration, such as agencies, departments, or community-based organizations. Some internship facilities may require background checks, drug screenings, trainings, certifications (like CPR), proof of vaccinations, or other mandatory compliance requirements.

Students with at least five years of relevant supervisory, administrative, or management experience in health services administration may be eligible for the Prior Learning Challenge to fulfill the internship requirement. A cover letter and resume are required for initial review. For further information or to discuss the Prior Learning option, please contact the program internship coordinator.

Careful planning and coordination with the program internship coordinator are essential for a successful internship experience. Students should select internship placements that align with their career goals and provide valuable learning opportunities.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: grade of C or better required in both courses

Mathematics: STAT 130M required; must be completed with a grade of C or better prior to major declaration.

Information Literacy and Research: HLTH 120G preferred

Philosophy and Ethics: met in the major by PHIL 345E

Impact of Technology: met in the major by PUBH 485

Upper-Division General Education

Completion of the MGMT courses required for the major with a grade of C or higher results in a minor in management and meets upper-division general education.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Health Services Administration Major

To officially declare a major in Health Services Administration, students must complete the following courses with a grade of C or better: PUBH 200, PUBH 320, PUBH 335, PUBH 390, and STAT 130M.

Students must be a declared major prior to starting 400-level major courses. All courses required for the major must be completed with a grade of C or better.

General Education

Complete lower-division requirements 32-38

Complete upper-division requirements (met in the major with a C or better in required MGMT courses)

Public Health Prerequisite

PUBH 200 Principles of Public Health ** 3

Public Health Core

ENVH 301 Principles of Environmental Health Science ** 3

PUBH 320 Health Equity and Disability Culture ** 3

PUBH 335 Population Health ** 3

PUBH 390 The U.S. Healthcare Delivery System ** 3

PUBH 445 Health Services Research Methods ** 3

PUBH 450 Public and Community Health Administration ** 3

PUBH 485 Public Health Informatics ** 3

PUBH 468 Internship ** 3

Health Services Administration Major

PUBH 425 Health Aspects of Aging ** 3

PUBH 430W Community Health Resources and Health Promotion ** 3

PUBH 440 Finance and Budgeting in Healthcare ** 3

PUBH 461 Managerial Epidemiology ** 3

PUBH 465 Policy and Politics of Health ** 3

PUBH 475 Healthcare Marketing ** 3

or PUBH 405 Interprofessional Study Abroad in Public Health

PUBH 480 Health Ethics and the Law ** 3

PHIL 345E Bioethics ** 3

Management Courses

MGMT 325 Contemporary Organizations and Management ** 3

Select four MGMT 300/400 level electives from the following ** 12

ENTR 301 Fundamentals of Entrepreneurship **

MGMT 330 Organizational Behavior **

MGMT 340 Human Resource Management **

MGMT 350 Employee Relations Problems and Practices **

MGMT 360 Labor Management Relations **

MGMT 410 Leadership in Organizations **

MGMT 417 Employment Law **

MGMT 418 Advanced Human Resource Management: Contemporary Issues **

MGMT 424 Technology and Innovation Management **

MGMT 452 Negotiations and Change Management **

** Grade of C or better required.

Electives

Elective credits may be needed to achieve the minimum 120 credit hours required for the degree. Electives can be from any college. Some electives that can be considered are PUBH 421, PUBH 422, and ENVH 448.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition **	3
PUBH 200	Principles of Public Health **	3
Information Literacy and Research (HLTH 120G preferred)		3
Human Creativity		3
Nature of Science I		4

Credit Hours		16
Spring		
STAT 130M	Elementary Statistics **	3
PUBH 320	Health Equity and Disability Culture **	3
Human Behavior		3
Literature		3
Nature of Science II		4

Credit Hours		16
Sophomore		
Fall		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research ** or Writing, Rhetoric, and Research: Special Topics	3
ENVH 301	Principles of Environmental Health Science **	3
PUBH 335	Population Health **	3
Interpreting the Past		3
Elective		3

Credit Hours		15
Spring		
Oral Communication		3
PHIL 345E	Bioethics **	3
PUBH 390	The U.S. Healthcare Delivery System **	3
Elective		3
Elective		3

Credit Hours		15

Junior		
Fall		
PUBH 425	Health Aspects of Aging **	3
PUBH 445	Health Services Research Methods **	3
PUBH 450	Public and Community Health Administration **	3
MGMT 325	Contemporary Organizations and Management **	3
Elective		3
Credit Hours		15
Spring		
PUBH 430W	Community Health Resources and Health Promotion **	3
PUBH 461	Managerial Epidemiology **	3
PUBH 465	Policy and Politics of Health **	3
MGMT 300/400 Elective **		3
MGMT 300/400 Elective **		3
Credit Hours		15
Senior		
Fall		
PUBH 440	Finance and Budgeting in Healthcare **	3
PUBH 475 or PUBH 405	Healthcare Marketing ** or Interprofessional Study Abroad in Public Health	3
PUBH 480	Health Ethics and the Law **	3
PUBH 485	Public Health Informatics **	3
MGMT 300/400 Elective **		3
Credit Hours		15
Spring		
PUBH 468	Internship **	3
MGMT 300/400 Elective **		3
Elective		3
Elective		3
Elective		1
Credit Hours		13
Total Credit Hours		120

**Grade of C or better required.

Bachelor of Science in Public Health Public Health with a Major in Health Services Administration (Professional) (BSPH)

Webpage: <http://www.odu.edu/commhealth/academics/undergraduate>
(<http://www.odu.edu/commhealth/academics/undergraduate/>)

Program Email: [HealthAdminMajor@odu.edu]

Program Director: Dr. Maria Kronenburg

The Bachelor of Science in Public Health with a major in Health Services Administration (HSA) (Professional) is designed to offer advanced educational experiences to students who are health professionals and/or who have completed a certification or Associate of Science degree in a health-related discipline, have credentials to practice in their field, and have experience as a health care provider. This program also builds on the expertise of practicing health professionals and allows them the opportunity

to enhance their formal learning. The program focuses on upper-level course work and general education in conjunction with an area of career enhancement chosen by the individual student.

Additionally, the program will prepare persons seeking advanced study in preparation for the MHA, MPH, MPP, MPA, and MS degrees and the foundation for PhD or MD educational career paths.

Graduates of the Bachelor of Science in Public Health with a major in Health Services Administration will possess the knowledge and skills necessary to enhance the administration and the delivery of health services through health care management and policy education. These graduates will serve as leaders for health care organizations in the public, private, and military organizations. The curriculum for the Health Services Administration major integrates a multidisciplinary approach that includes global and public health, health care finance, health services research, epidemiology, health care policy and management. Students will have the opportunity to gain practical health care management experience and drive innovation in health care policy.

Graduates of the program will be ready to serve as invaluable leaders in health care services.

The Health Services Administration (Professional) major is available fully online, with the option to complete some courses on campus.

Admission to the Health Services Administration (Professional) Program

1. Students who have met all major declaration requirements and meet the minimum cumulative GPA (2.00) requirement will be referred by their advisor in the Health Sciences Advising Center/ODU Global Health Sciences advisor to the program director for major declaration and assignment to a program advisor. For additional information, please contact the Program Director at: HealthAdminMajor@odu.edu or the Health Sciences Advising Center (hsadvising@odu.edu (<http://www.odu.edu/hs/advising/>)).
2. Students must be accepted to the program before enrolling in any 400-level required course.

Continuance and Readmission Policy

In addition to the Old Dominion University continuance policies in this catalog, the following policies are specific to all declared majors in the Health Services Administration (HSA) Program:

1. A grade of C (2.00) or better is required in all required major courses to continue in the program.
2. A student who earns a grade of C- or lower in a required major course will not be considered in good academic standing in the major and must retake the course in the next semester the course is offered.
3. A cumulative grade point average of 2.00 or better is required to continue in the HSA program.

Students who fail to meet the continuance requirements for the major will revert to intended degree, and an advising hold will be placed back on their account. A meeting with the program director will be required to create a success plan before a student may enroll in additional courses.

To be readmitted to the HSA program:

1. Students must meet with the program director to create a success plan.
2. Students must successfully complete all major courses with a grade of C or higher, maintain a cumulative grade point average of 2.0 or better, and meet the program director again before the major will be redeclared. Students are responsible for contacting the program director when all readmission requirements have been met.
3. A student who is readmitted to the major may be required to take additional course work prior to or concurrent with readmission.

Internship

The internship (PUBH 468) is designed and implemented to ensure that students achieve the following objectives:

1. Practical experience in a health setting via exposure to an organization and/or community context that generates health activities.
2. Acquisition of practical skills via related field assignments that challenge students to utilize knowledge of competencies learned from the academic curriculum and improved understanding of the political, economic, social and organizational context within which health services administrative activities operate.

BSPH-HSA-Professional students must apply for approval to enroll in the Internship course. Internship is a planned, supervised and evaluated exercise that serves as a culminating experience for students pursuing the BSPH degree. A student may be eligible for the internship upon senior standing in the major (at least 90 credits completed and at least half of the major courses completed). Internships must be planned and approved in advance by the program internship coordinator. The internship course may be taken with other courses or up to the minimum full-time credit hours for the term.

The internship learning contract must be submitted for approval prior to the internship paperwork deadline: May 1 deadline to register for summer semester; August 1 deadline to register for the fall semester; January 1 deadline to register for the spring semester.

Internships should be sought and undertaken in an organization, agency, department or community that provides planning and/or services that are relevant to the core areas of health services administration. Any student who plans to organize an internship without the appropriate foundation may be at a disadvantage in the organizations in which internships are undertaken. All students must complete an internship within their major of Health Services Administration. The internship experience and course address the relevance of developing skills and competencies.

Some internship sites may require the student to complete a criminal background check, drug screenings, computer-based training, CPR certifications, proof of vaccination status, and/or any other pre-existing mandatory compliance requirements prior to beginning the internship.

Students who have five or more years of supervisory, administrative, or management experience in a related field can apply for a Prior Learning ePortfolio Challenge which could replace the internship course. A cover letter and resume will be required for the initial review. Please contact the program internship coordinator or program director to discuss this option.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3

The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: grade of C or better required in both courses

Mathematics: STAT 130M required; must be completed with a grade of C or better prior to major declaration.

Information Literacy and Research: HLTH 120G preferred

Philosophy and Ethics: met in the major by PHIL 345E

Impact of Technology: met in the major by PUBH 485

Upper-Division General Education

Completion of the MGMT courses required for the major with a grade of C or higher results in a minor in management and meets upper-division general education.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Health Services Administration (Professional) Major

Current/active licensure (through state board) and/or certification (exam-based proficiency) as a clinical health professional and an Associate of Applied Science degree make a student eligible for the Health Services Administration Professional major. The following programs are some that have been accepted: Radiation Technology, Medical Dosimetry, Nuclear Medicine Technology, Radiologic Technology, Nursing, Occupational Therapy, Occupational Therapy Assistant, Dental Hygiene, Emergency Medical Technology, Medical Laboratory Technology, Cytotechnology, Paramedic, Respiratory Therapy, and Physical Therapy Assistant or military experience such as Hospital Corpsman. Consult the Program Director for specific information on program eligibility.

For students approved as eligible for the Health Services Administration Professional major, PUBH 200 will be taken in the first semester after admission to ODU as a co-requisite with 300-level major courses.

Lower-division general education courses and STAT 130M must be completed prior to major declaration. STAT 130M must be completed with a grade of C or better. Students must be admitted to the program by the Program Director prior to starting 400-level major courses. All courses required for the major must be completed with a grade of C or better.

Up to 23 professional elective credits may be awarded upon program admission and review of transcripts and other provided documentation to the Program Director; the number of credits is determined by training hours completed. These experiential hours are included in the overall number of hours needed for graduation. These hours are applied to the number of elective hours needed to meet the graduation requirement of 120 hours. In summary, up to 23 experiential credit hours can be awarded, leaving 97

hours needed to complete the Health Services Administration Professional major.

General Education

Complete lower-division requirements 35-41

Complete upper-division requirements (met in the major with a C or better in required MGMT courses)

Public Health Prerequisite

PUBH 200 Principles of Public Health ** 3

Public Health Core

ENVH 301 Principles of Environmental Health Science ** 3

PUBH 320 Health Equity and Disability Culture ** 3

PUBH 335 Population Health ** 3

PUBH 390 The U.S. Healthcare Delivery System ** 3

PUBH 445 Health Services Research Methods ** 3

PUBH 450 Public and Community Health Administration ** 3

PUBH 485 Public Health Informatics ** 3

PUBH 468 Internship ** 3

Health Services Administration Major

PUBH 430W Community Health Resources and Health Promotion ** 3

PUBH 440 Finance and Budgeting in Healthcare ** 3

PUBH 461 Managerial Epidemiology ** 3

PUBH 480 Health Ethics and the Law ** 3

PHIL 345E Bioethics ** 3

Management Courses

MGMT 325 Contemporary Organizations and Management ** 3

Select four MGMT 300/400 level electives from the following ** 12

ENTR 301 Fundamentals of Entrepreneurship **

MGMT 330 Organizational Behavior **

MGMT 340 Human Resource Management **

MGMT 350 Employee Relations Problems and Practices **

MGMT 360 Labor Management Relations **

MGMT 410 Leadership in Organizations **

MGMT 417 Employment Law **

MGMT 418 Advanced Human Resource Management: Contemporary Issues **

MGMT 424 Technology and Innovation Management **

MGMT 452 Negotiations and Change Management **

MGMT 462 Comparative International Management **

Total Credit Hours 92-98

** Grade of C or better required.

Electives

Elective credit may be needed to achieve the minimum 120 hours required for the degree. Electives can be from any college. Some electives that can be considered are PUBH 421, PUBH 422, and ENVH 448.

Degree Program Guide*

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
First Year		
First Semester		
PUBH 200	Principles of Public Health	3
PUBH 320	Health Equity and Disability Culture	3
PUBH 335	Population Health	3
PUBH 390	The U.S. Healthcare Delivery System	3
STAT 130M	Elementary Statistics	3
Credit Hours		15
Second Semester		
PUBH 430W	Community Health Resources and Health Promotion	3
PUBH 445	Health Services Research Methods	3
PUBH 450	Public and Community Health Administration	3
ENVH 301	Principles of Environmental Health Science	3
MGMT 325	Contemporary Organizations and Management	3
Credit Hours		15
Second Year		
First Semester		
PUBH 440	Finance and Budgeting in Healthcare	3
PUBH 461	Managerial Epidemiology	3
PHIL 345E	Bioethics	3
MGMT Elective		3
MGMT Elective		3
Credit Hours		15
Second Semester		
PUBH 485	Public Health Informatics	3
PUBH 468	Internship	1-3
PUBH 480	Health Ethics and the Law	3
MGMT Elective		3
MGMT Elective		3
Credit Hours		13-15
Total Credit Hours		58-60

* This guide begins after most lower-division requirements are completed. C or better required in all courses. See advisor for additional information.

Minor
Community Health Minor

The minor in community health is designed to prepare students in the ever-changing world of healthcare and health behavior as practitioners and offers courses in such areas as population health, health equity, environmental health, health promotion, health policy, and health administration. The goal of the minor is to emphasize healthcare administration, operations and public health preparedness, as well as communication and critical thinking. It is possible to complement the minor with courses in management, environmental health, or occupational health. The minor is especially attractive to students in other majors such as psychology, nursing, dental

hygiene, engineering, occupational and technical studies, and business who may reasonably anticipate public health, health administration, and community health as core components of their duties. The minor prepares the students for an experience at internship sites in public health or the healthcare industry.

Requirements

PUBH 200 with a grade of C or higher is a prerequisite for the minor and is not included in the calculation of the grade point average for the minor. Requirements for the minor are as follows:

Select four of the following:		12
PUBH 320	Health Equity and Disability Culture	
PUBH 335	Population Health	
PUBH 430W	Community Health Resources and Health Promotion	
PUBH 450	Public and Community Health Administration	
PUBH 465	Policy and Politics of Health	
ENVH 301	Principles of Environmental Health Science	

For completion of the minor, a student must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Minor Public Health Minor

Webpage: <http://www.odu.edu/commhealth/academics/undergraduate>
(<http://www.odu.edu/commhealth/academics/undergraduate/>)

Program Email: [bsph@odu.edu (<http://outlook.odu.edu/>)]

Program Director: Dr. Elizabeth A. Brown

The minor in public health offers students an understanding of core areas and principles of public health, specifically global health and health disparities. The minor focuses on culture and diversity among different physical and social communities. The minor may be an ideal fit for students in various majors including biology, nursing, dental hygiene, sociology, political science, exercise science, etc. Graduates with a minor in public health will possess knowledge and skills necessary to prevent disease, prolong life, and promote health.

Requirements

PUBH 200 with a grade of C or higher is a prerequisite for the minor and must be completed before enrolling in any 300- or 400-level required course.

It is not included in the calculation of the grade point average for the minor. Requirements for the minor are as follows:

PUBH 335	Population Health	3
PUBH 360	Introduction to Global Health	3
PUBH 415	One Health-One Medicine	3
PUBH 422	Health, Culture and Diversity-Reducing Disparities in Public Health	3
Total Credit Hours		12

For completion of the minor, students must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University.

Department of Epidemiology, Biostatistics, & Environmental Health

Department website: <https://www.odu.edu/epidemiology-biostatistics-environmental-health> (<https://www.odu.edu/epidemiology-biostatistics-environmental-health/>)

Jim Blando, PhD
Associate Professor
Chair
jblando@odu.edu

Jeff Moody, MSPH
Senior Lecturer
BSEH Program Director
j1moody@odu.edu

The Department of Epidemiology, Biostatistics, and Environmental Health plays a central role in advancing public health. Our environmental health faculty apply physics and chemistry to measure and assess environmental risks and their potential impact on humans and ecosystems. The epidemiology faculty study disease patterns in populations, while our biostatistics faculty use advanced mathematical methods to analyze data and draw insights critical to public health. Together, these disciplines address key global challenges such as climate change, pandemics, pollution, food insecurity, clean water, and sustainability.

The Department of Epidemiology, Biostatistics, and Environmental Health houses the BS Environmental Health degree and Undergraduate Certificate in Occupational Safety.

Bachelor of Science Program

- Environmental Health (BS) (p. 669)

Minor Programs

- Environmental Health Minor (p. 672)
- Environmental Issues and Management Minor (p. 672)
- Occupational Safety Minor (p. 673)

Certificate Program

- Occupational Safety Certificate (p. 673)

Bachelor of Science Environmental Health (BS)

Jeff Moody, MSPH, Program Director
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www.odu.edu/commhealth/academics/bs_enviro/ (http://www.odu.edu/commhealth/academics/bs_enviro/)

Environmental health is the study and management of factors that can adversely affect the environment and the health and well-being of humans. The curriculum in environmental health, which is accredited by the National Environmental Health Science and Protection Accreditation Council, encompasses a variety of disciplines in the preparation of environmental health professionals, industrial hygienists, and occupational safety and health specialists.

Environmental health professionals manage environmental health and safety programs, work with communities to address environmental hazards, conduct environmental hazard and accident investigations, provide safety training, conduct safety audits, perform Job Hazard Analysis, work to foster sustainability, and lead emergency preparedness and response services. Industrial hygienists conduct evaluations and monitor harmful agents and health hazards (such as: noise and vibration, chemicals, gases and vapors, radiation, heat, and biohazards) in the work environment and recommend controls to minimize the health risk to workers in the

occupational environment. In simple terms they anticipate, recognize, evaluate and control occupational exposures. On the environmental side, environmental health professionals engage in education, consultation, and enforcement relating to local, state and federal environmental health laws, regulations, and standards. They work on air and water quality, food safety, management of hazardous and infectious materials, housing, disease vectors, institutional environments, and other environmental health issues. Environmental health professionals manage environmental health and safety programs for companies, government agencies, academic institutions, non-profit organizations, health departments, and military installations.

The program requires three credit hours of internship field practice within an environmental or occupational health facility or industrial site. A variety of internship sites are available in the Hampton Roads area for these experiences. Internship sites throughout the U.S. and overseas are also available. Internships are available any semester but are typically completed in the summer between the junior and senior year. Most internships are paid and many out of area internships offer a stipend to cover expenses.

Upon graduation, students are eligible to sit for the professional licensing examination in environmental health, e.g., NEHA REHS/RS and CSFP. With work experience, students are eligible to take the certification examinations in industrial hygiene as Certified Industrial Hygienist (CIH) and/or in safety as Associate Safety Professional (ASP) and then a Certified Safety Professional (CSP).

A broad spectrum of employment opportunities are available to graduates. Alumni employment success has been outstanding, with graduates finding employment in agencies such as the USDA, EPA, OSHA, NASA, FDA, and DOD. Many work in private industries, manufacturing plants, the oil industry, consulting firms, health departments, waste and wastewater plants, civil service, and other organizations.

Admission

Students may be admitted to the program on the satisfactory completion of 60 semester hours of recommended study of required prerequisite courses and with the approval of the program director. Applications to the program, including all materials, may be submitted any time during the academic year for consideration for admission. Permission must be granted by the program director prior to applying to the program if the student has fewer than the 60 semester hours of required prerequisite courses.

If you have questions on the Program, contact the BSEH Program Director: Jeff Moody, MSPH (bseh@odu.edu).

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3

The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

To declare a major in Environmental Health, students must complete the following: ENGL 110C, CHEM 121N/CHEM 122N, CHEM 123N/CHEM 124N, COMM 101R, ENVH 301, MATH 162M, STAT 130M, and the Nature of Science Biology sequence.

Oral Communication: COMM 101R

Mathematics: MATH 162M

Information Literacy and Research: HLTH 120G preferred

Philosophy and Ethics: PHIL 345E preferred; meets upper-division general education.

Nature of Science - Select one of the following Biology sequences:

- BIOL 110N/BIOL 111N and BIOL 117N/BIOL 118N OR
- BIOL 121N/BIOL 122N and BIOL 123N/BIOL 124N

Impact of Technology (upper-division T course outside the College of Health Sciences; meets upper-division general education)

Upper-Division General Education

- Option A. Approved Disciplinary Minor, 12-24 hours minimum; also second degree or second major.
- Option B. Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Health Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Environmental Health Major

General Education

Complete lower-division requirements	41-47
Complete upper-division requirements (0-15 credits depending on elective choice and choice of Option)	0-15

Departmental Requirements

STAT 130M	Elementary Statistics *	3
BIOL 150	Introductory Microbiology *	3
BIOL 151	Introductory Microbiology Laboratory *	1
BIOL 240	Fundamentals of Anatomy and Physiology I *	4
or BIOL 250	Human Anatomy and Physiology I	
CHEM 121N & CHEM 122N	Foundations of Chemistry I Lecture and Foundations of Chemistry I Laboratory +*	4

CHEM 123N & CHEM 124N	Foundations of Chemistry II Lecture and Foundations of Chemistry II Laboratory +*†	4
CHEM 211 & CHEM 212	Organic Chemistry I Lecture and Organic Chemistry I Laboratory *	5
PHYS 101N or PHYS 102N or PHYS 111N or PHYS 112N or PHYS 231N or PHYS 232N	Conceptual Physics Conceptual Physics Introductory General Physics Introductory General Physics University Physics I University Physics II	4
Environmental Health Major		
ENVH 301	Principles of Environmental Health Science	3
ENVH 402W	Environmental and Occupational Health Administration and Law **	3
ENVH 403	Environmental and Occupational Health Internship I	3
ENVH 406	Principles of Occupational Safety and Health	3
ENVH 420	Communicable Diseases	3
ENVH 422	Water and Wastewater Technology	3
ENVH 441	Industrial Hygiene	3
ENVH 443	Principles of Toxicology	3
ENVH 448	Epidemiology and Biostatistics	3
ENVH 466	Environmental and Occupational Risk Assessment and Decision Analysis	3
ENVH 499	Environmental and Occupational Health Senior Seminar	1
ENVH Electives- Select 12 credits of the following: ***		12
ENVH 401	Occupational Health	
ENVH 407	Occupational Safety Standards, Laws and Regulations	
ENVH 421	Food Safety	
ENVH 423	Vector-Borne Diseases and Their Control	
ENVH 425	Occupational Safety and Health Program Management	
ENVH 426	Physical Hazards and Their Control	
ENVH 440	Principles of Ergonomics	
ENVH 442	Industrial Hygiene Sampling Methods	
ENVH 445	Air Pollution and Its Control	
ENVH 470	Industrial Environmental Management	
Elective credit may be needed to meet the minimum requirement of 120 credit hours		6
Total Credit Hours		118-139

+	CHEM 103 may be required as a prerequisite.
*	Must be completed prior to acceptance into the environmental health program.
**	Grade of C or better required in the writing intensive course.
***	Consult with advisor for areas of specialization.
†	A grade of C or better required before taking CHEM 211 and CHEM 212.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly

encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
BIOL 121N or BIOL 110N	General Biology I or Environmental Science for Non-Majors	3
BIOL 122N or BIOL 111N	General Biology I Lab or Environmental Science Lab for Non-Majors	1
MATH 162M	Precalculus I	3
Information Literacy		3
CHEM 103 may be needed as prerequisite to CHEM 121N		0-3

Credit Hours 13-16

Spring		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
BIOL 123N or BIOL 117N	General Biology II or Introduction to Human Biology	3
BIOL 124N or BIOL 118N	General Biology II Lab or Introduction to Human Biology Lab	1
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
STAT 130M	Elementary Statistics	3

Credit Hours 14

Sophomore		
Fall		
ENVH 301	Principles of Environmental Health Science	3
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1
Human Behavior		3
BIOL 150	Introductory Microbiology	3
BIOL 151	Introductory Microbiology Laboratory	1

Credit Hours 14

Spring		
CHEM 211	Organic Chemistry I Lecture	3
CHEM 212	Organic Chemistry I Laboratory	2
COMM 101R	Public Speaking	3
ENVH 420	Communicable Diseases	3
Interpreting the Past		3

Credit Hours 14

Junior			
Fall			
BIOL 240 or BIOL 250	Fundamentals of Anatomy and Physiology I or Human Anatomy and Physiology I	4	
ENVH 402W	Environmental and Occupational Health Administration and Law (C or better required)	3	
ENVH 406	Principles of Occupational Safety and Health	3	
Select one of the following:		4	
PHYS 101N	Conceptual Physics		
PHYS 102N	Conceptual Physics		
PHYS 111N	Introductory General Physics		
PHYS 112N	Introductory General Physics		
PHYS 231N	University Physics I		
PHYS 232N	University Physics II		
Credit Hours		14	
Spring			
ENVH 422	Water and Wastewater Technology	3	
ENVH 448	Epidemiology and Biostatistics	3	
Impact of Technology (Option D 300/400)		3	
Philosophy and Ethics (Option D 300/400)		3	
Literature		3	
Credit Hours		15	
Summer			
ENVH 403	Environmental and Occupational Health Internship I	3	
Human Creativity		3	
Credit Hours		6	
Senior			
Fall			
ENVH 441	Industrial Hygiene	3	
ENVH Elective		3	
ENVH Elective		3	
ENVH Elective		3	
Elective if needed		3	
Credit Hours		15	
Spring			
ENVH 443	Principles of Toxicology	3	
ENVH 466	Environmental and Occupational Risk Assessment and Decision Analysis	3	
ENVH 499	Environmental and Occupational Health Senior Seminar	1	
ENVH Elective		3	
Elective		3	
Elective if needed		2	
Credit Hours		15	
Total Credit Hours		120-123	

Minor Environmental Health Minor

Jeff Moody, MSPH, Coordinator

A minor in environmental health requires a minimum of 12 semester hours of environmental health courses. The minor is designed to enhance the knowledge of students and help them understand the influences and impact of environmental factors on human health. Students majoring in environmental health are not eligible for this minor.

Requirements

Requirements for the environmental health minor are as follows.

ENVH 301	Principles of Environmental Health Science	3
ENVH 420	Communicable Diseases	3
ENVH 421	Food Safety	3
ENVH 423	Vector-Borne Diseases and Their Control	3
Total Credit Hours		12

For completion of the minor, students must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University. Twelve semester hours of science courses are preferred. Students majoring in environmental health are not eligible for this minor.

Minor Environmental Issues and Management Minor

Jeff Moody, MSPH, Coordinator

Continuing environmental degradation is a worldwide problem threatening the quality of life and its viability. The problem can only be understood and addressed by drawing upon the resources of multidisciplinary approaches. The multidisciplinary perspective center of this minor focuses on the human dimensions of the human-environment equation and includes geographical and ecological approaches, scientific and technological methodologies, planning and public policy issues, and health, ethical, political, economic, and legal considerations.

Requirements

The interdisciplinary minor in environmental issues and management requires 12 credit hours of 300/400-level courses selected from at least two different disciplines with a maximum of six credits from any one discipline. For completion of the interdisciplinary minor, students must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses. At least six hours of upper-level courses must be taken through courses offered by Old Dominion University. Three credit hours may be in the major, if a major course is listed as an option for the interdisciplinary minor. As such, it will be credited toward both the major and the interdisciplinary minor.

Course options are as follows:

CEE 350	Environmental Pollution and Control	3
CEE 458	Sustainable Development	3
ECON 435	Health Economics: A Global Perspective	3
ECON 447W	Natural Resource and Environmental Economics	3
ENVH 301	Principles of Environmental Health Science	3
ENVH 402W	Environmental and Occupational Health Administration and Law	3
ENVH 420	Communicable Diseases	3

ENVH 421	Food Safety	3
ENVH 422	Water and Wastewater Technology	3
GEOG 305	World Resources	3
GEOG 306T	Hazards: Natural and Technological	3
GEOG 400W	Seminar in Geography	3
GEOG 420	Marine Geography	3
GEOG 422W	Coastal Geography	3
OEAS 302	Environmental Geology	3
OEAS 310	Global Earth Systems	4
PAS 300	Foundations of Public Service	3
PHIL 344E	Environmental Ethics	3
PHIL 345E	Bioethics	3
POLS 300	Introduction to Public Policy	3
POLS 335	Environmental Politics	3
POLS 401	Global Environmental Policy	3
PRTS 405	Outdoor Recreation	3
SOC 309	Population and Society	3
SOC 320	Social Inequality	3
SOC 325	Social Welfare	3
SOC 440	Health, Illness, and Society	3
SOC/CRJS 444	Community Justice	3

Minor

Occupational Safety Minor

Jeff Moody, MSPH, Coordinator

The minor in occupational safety is designed to prepare students to meet safety standards and guidelines in such areas as business, education and industry with the goal of managing operations to minimize financial losses resulting from accidents, health claims, legal actions and property damage. It is especially attractive to students in majors such as engineering, occupational and technical studies, and business who may reasonably anticipate assignment of safety as an additional duty. Students majoring in environmental health are not eligible for this minor.

Requirements

The minor in occupational safety requires 12 credit hours as follows:

ENVH 406	Principles of Occupational Safety and Health	3
ENVH 407	Occupational Safety Standards, Laws and Regulations	3
ENVH 425	Occupational Safety and Health Program Management	3
ENVH 426	Physical Hazards and Their Control	3
Total Credit Hours		12

For completion of the minor students must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of prerequisite courses and complete a minimum of six hours in upper-level courses in the minor requirement through courses offered by Old Dominion University. Students majoring in environmental health are not eligible for this minor.

Certificate

Occupational Safety Certificate

Jeff Moody, MSPH, Coordinator

The certificate program in occupational safety is designed to prepare students to meet safety standards and guidelines in such areas as business, education, and industry with the goal of managing operations to minimize financial losses resulting from accidents, health claims, legal actions, and property damage. It is especially attractive to students in majors such as engineering, occupational and technical studies, and business who may

reasonably anticipate assignment of safety as an additional duty, or to individuals already employed in the environmental health and safety field.

Courses in the certificate program are normally taken through the non-degree program. Students majoring in environmental health are not eligible for the certificate. Students later accepted into the Bachelor of Science degree in environmental health may apply certificate credits toward that degree.

Students in a degree program other than environmental health may apply certificate credits toward their degree or minor.

Requirements

For completion of the undergraduate Certificate in Occupational Safety, students must have a minimum cumulative grade point average of 2.00 in all courses specified as a requirement for the certificate. Students must complete a minimum of six semester hours in upper-level courses required for the certificate through courses offered by Old Dominion University. Courses in the certificate program may be taken through degree or non-degree programs, and may be applied to degree requirements at the undergraduate level in environmental health. After successful completion of the program, a Certificate in Occupational Safety will be awarded. Students majoring in environmental health are not eligible for this certificate.

A total of 15 semester hours is required, comprised of three core courses and six hours of electives. All courses, with the exception of ENVH 406 and the lab course (ENVH 442), are provided online. Permission of the instructor is required for acceptance of any transfer prerequisites for the courses. Please contact the certificate coordinator for questions about prerequisite requirements.

Core Courses

ENVH 406	Principles of Occupational Safety and Health	3
ENVH 407	Occupational Safety Standards, Laws and Regulations	3
ENVH 425	Occupational Safety and Health Program Management	3
Select two of the following:		6
ENVH 401	Occupational Health	
ENVH 426	Physical Hazards and Their Control	
ENVH 440	Principles of Ergonomics	
ENVH 441	Industrial Hygiene	
ENVH 442	Industrial Hygiene Sampling Methods	

Total Credit Hours 15

Department of Health Behavior, Policy, & Management

Department website: <https://www.odu.edu/health-behavior-policy-management> (<https://www.odu.edu/health-behavior-policy-management/>)

Brian C. Martin, PhD, MBA

Professor

Interim Chair

Associate Dean for Academic Affairs

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The Department of Health Behavior, Policy, and Management is dedicated to shaping future leaders in health behavior, policy, management, and research. We tackle critical population and organizational challenges through a blend of innovative education, cutting-edge research, and practical application. Our health behavior experts are committed to advancing public health by addressing the root causes of health issues. Meanwhile, our health policy and management specialists focus on creating evidence-based solutions to systemic challenges, preparing the next generation of healthcare administrators, policymakers, and researchers to ensure accessible, high-quality care for all.

College of Sciences

Web Site: <http://sci.odu.edu>

Gail Dodge, Dean
Joshua Wallach, Associate Dean for Undergraduate Studies
Lesley Greene, Associate Dean for Graduate Studies
Jingdong Mao, Associate Dean for Research
Wayne Hynes, Associate Dean for Faculty Affairs

The College of Sciences degree programs are designed to prepare students for careers in the sciences or to lay broad foundations for specialized training in these fields of knowledge.

The college is comprised of the Departments of Biological Sciences, Chemistry and Biochemistry, Computer Science, Mathematics and Statistics, Ocean and Earth Sciences, Physics, and Psychology. The Departments of Biological Sciences, Chemistry and Biochemistry, Computer Science, Mathematics and Statistics, Ocean and Earth Sciences, and Physics cooperate with the Darden College of Education and Professional Studies to provide the necessary courses for certification to teach in the Commonwealth.

Undergraduate Degree Requirements for all Majors in the College of Sciences

Core Requirements

Fulfilling the University General Education Requirements for a specific program satisfies the degree requirements for the College of Sciences. Refer to the University General Education section of this Catalog for details about which courses satisfy the skills, ways of knowing, and upper-division requirements of the General Education program.

Additional major requirements are listed under the various departmental programs.

General Requirements

1. Students wishing to take a major or a minor in the College of Sciences must declare with the appropriate department.
2. The College of Sciences allows a maximum of four hours of activity credit to be applied toward any degree granted by the college. Activity credit beyond the four-hour maximum may be permitted in unusual circumstances with the written approval of the dean of the college. Activity credit required by a student's major department will not be counted toward the credit limitation. (See the Catalog section on Activity Credits for the definitions and other restrictions on activity course credits.)

College of Sciences Degree Programs

Subject	BS	MS	PhD
Biology	X	X	X ¹
Biochemistry	X	X ²	X ³
Chemistry	X	X	X
Clinical Psychology			X ⁴
Computer Engineering		X ⁵	X ⁵
Computer Science X		X	X
Computer Science (Computer Information Sciences)		X ⁶	
Mathematics	X	X ⁷	X ⁷
Ocean and Earth Science	X	X	
Oceanography			X

Physics	X	X	X
Psychology	X	X	X ⁸

- 1 Ecological sciences. Training opportunities are available with faculty in the Departments of Biological Sciences, Chemistry and Biochemistry, and Ocean and Earth Sciences.
- 2 Emphasis area within chemistry master's degree program.
- 3 Emphasis area within chemistry Ph.D. program.
- 4 Doctor of Philosophy (Ph.D.) offered through the Virginia Consortium Program in Clinical Psychology, sponsored by Norfolk State University and Old Dominion University.
- 5 Offered jointly with the College of Engineering and Technology.
- 6 Offered jointly with the Strome College of Business.
- 7 Computational and applied mathematics, with emphases in applied mathematics and statistics/biostatistics.
- 8 Health psychology, human factors psychology, and industrial/organizational psychology.

Old Dominion University/Eastern Virginia Medical School Early Assurance Program in Medicine

The Early Assurance Program in Medicine is designed to encourage highly qualified students to receive a BS from Old Dominion University and an M.D. from Eastern Virginia Medical School. Students apply during their sophomore semester at Old Dominion University. Upon successful completion of the program requirements and graduation from Old Dominion University, a student accepted into the ODU/EVMS Early Assurance Program in Medicine will be guaranteed admission to Eastern Virginia Medical School. Additional information and admission requirements can be found at the following address: <https://www.odu.edu/sci/academics/advising/bmsmd> (<https://www.odu.edu/sci/academics/advising/bmsmd/>).

Policy for the Awarding of Bachelor's Degrees To Students Attending Professional School in Medically Related Fields

Old Dominion University students attending an accredited medical, dental, pharmacy, or veterinary school without a bachelor's degree shall be given the opportunity of receiving the bachelor's degree in accordance with the prescribed criteria as follows:

1. The student applying for the degree must complete a minimum of 90 semester hours of undergraduate credit prior to attending professional school.
2. The student must fulfill the General Education requirements of the University and the College of Sciences.
3. Thirty of the last thirty-six hours prior to professional school must be taken at Old Dominion University. A minimum of 12 hours at the 300/400 level in the major program must be taken at Old Dominion University.
4. This policy is applicable to any bachelor's degree offered by Old Dominion University. It must be kept in mind, however, that all departmental requirements must be met either prior to professional school or by using courses taken during the first year of professional school. This latter course of action requires written petition to and approval by the appropriate departmental chair. In either case the student must complete at least two-thirds of the major requirements for the degree prior to attending professional school.
5. The degree is to be awarded only after completion of one year of professional school with acceptable academic performance (to be determined by a letter from the professional school stating that the student is eligible to matriculate for the second year).
6. The student would apply for the bachelor's degree on completion of one year of professional school. Certification by the appropriate department chair is required as usual.

Prehealth Advisement–Prehealth Advisory Committee

Students seeking careers in medicine, dentistry, osteopathy, optometry, podiatry, veterinary medicine, or pharmacy should request advisement as early as possible from the Prehealth Advisory Committee, as well as from their major or other academic advisor. This is to obtain general information of value in gaining acceptance to the professional school of choice, such as how and when to apply for admission, preparation for preprofessional tests and interviews, obtaining letters of evaluation and recommendation, and choosing among the many different schools and professions. Advice is also given on course selection, although only the academic advisor can formally approve these selections.

Students seeking admission to medical, dental and other medically related professional schools should confer with the Prehealth Advisory Committee in their junior year concerning the preparation of letters of evaluation by the Committee.

To receive prehealth advisement, please contact Reneldo Randall, Chair of the Prehealth Advisory Committee located in MGB 236, (757) 683-6790.

Departments

- Biological Sciences (p. 676)
- Chemistry and Biochemistry (p. 694)
- Computer Science (p. 712)
- Mathematics and Statistics (p. 725)
- Ocean and Earth Sciences (p. 741)
- Physics (p. 757)
- Psychology (p. 772)

Programs

Bachelor of Science Programs

- Biochemistry (BS) (p. 695)
- Biochemistry with a Major in Biochemistry-Research (BS) (p. 696)
- Biochemistry with a Major in Secondary Chemistry Education (6-12) (BS) (p. 699)
- Biology (BS) (p. 676)
- Biology with a Major in Biology-One Health (BS) (p. 679)
- Biology with a Major in Biomedical Sciences (BS) (p. 682)
- Biology with a Major in Biomedical Sciences-Pre Health (BS) (p. 685)
- Biology with a Major in Marine Biology (BS) (p. 688)
- Biology with a Major in Secondary Biology Education (6-12) (BS) (p. 691)
- Chemistry (BS) (p. 701)
- Chemistry with a Major in Chemical Forensic Science (BS) (p. 703)
- Chemistry with a Major in Chemistry Pre-Med (BS) (p. 705)
- Chemistry with a Major in Chemistry-Research (BS) (p. 707)
- Chemistry with a Major in Secondary Chemistry Education (6-12) (BS) (p. 709)
- Mathematics with a Major in Actuarial Mathematics (BS) (p. 726)
- Mathematics with a Major in Applied Mathematics (BS) (p. 729)
- Mathematics with a Major in Big Data Analytics (BS) (p. 732)
- Mathematics with a Major in Secondary Mathematics Education (6-12) (BS) (p. 734)
- Mathematics with a Major in Statistics/Biostatistics (BS) (p. 738)
- Ocean and Earth Science with a Major in Environmental Sciences (BS) (p. 741)
- Ocean and Earth Science with a Major in Geology (BS) (p. 744)
- Ocean and Earth Science with a Major in Marine Science Technology (BS) (p. 746)

- Ocean and Earth Science with a Major in Middle School Science Education (6-8) (BS) (p. 749)
- Ocean and Earth Science with a Major in Oceanography (BS) (p. 751)
- Ocean and Earth Science with a Major in Secondary Earth Science Education (6-12) (BS) (p. 754)
- Physics (BS) (p. 757)
- Physics and Master of Business Administration (BS, MBA) (p. 770)
- Physics with a Major in Astrophysics (BS) (p. 760)
- Physics with a Major in Physics and Electrical Engineering (BS, BSEE) (p. 764)
- Physics with a Major in Physics-Professional (BS) (p. 762)
- Physics with a Major in Secondary Physics Education (6-12) (BS) (p. 767)
- Psychology (BS) (p. 772)

Bachelor of Science in Computer Science Programs

- Computer Science (BSCS) (p. 715)
- Computer Science with a Major in Secondary Computer Science Education (6-12) (BSCS) (p. 720)

Minor Programs

- Biology Minor (p. 694)
- Chemistry Minor (p. 712)
- Computer Science Minor (p. 725)
- Mathematics-Actuarial Mathematics Minor (p. 740)
- Mathematics-Applied Mathematics Minor (p. 740)
- Mathematics-Statistics/Biostatistics Minor (p. 741)
- Ocean and Earth Science Minor (p. 756)
- Physics Minor (p. 760)
- Psychology Minor (p. 775)
- Web Programming Minor (p. 725)

Certificate Programs

- Human Factors Certificate (p. 775)
- Spatial Analysis of Coastal Environments Certificate (p. 757)

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the

bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Research and Service Centers

Center for Coastal Physical Oceanography

The Commonwealth Center for Coastal Physical Oceanography focuses research efforts on major physical processes in the coastal ocean. These processes include continent scale currents, exchange with the open ocean, and effects of global change. Techniques focus on computer modeling and analysis of existing data bases. The center provides advanced computer resources, technical support, and funding for faculty, research associates, and students. Visitors are encouraged to use the facility during either short- or long-term stays.

Center for Accelerator Science

The Center for Accelerator Science, established in partnership with Thomas Jefferson National Accelerator Facility (Jefferson Lab), aims to meet the nation's need for scientists who will advance the sciences and technologies of particle accelerators and light sources for use in basic science, applied science and industry.

Biological Sciences

Holly Gaff, Chair
Brian Olechnowski, Chief Departmental Advisor
Clayton Wright, Undergraduate Program Director

Department website: <https://www.odu.edu/biological-sciences/academics>
(<https://www.odu.edu/biological-sciences/academics/>)

The Department of Biological Sciences offers a Bachelor of Science degree with the following majors: Biology, Biology One Health, Biomedical Sciences, Biomedical Sciences Pre-Health, Marine Biology, and Secondary Biology Education (6-12). Biology majors have the opportunity to take many courses across the wide range of biology. The Biology major provides students with a good foundation in biology. Biology One Health studies the interaction between humans, animals, and the environment. Marine Biology is the study of marine organisms and their environment. Secondary Biology Education prepares students to teach science in high school. The Biomedical Sciences major is more focused and is for students who want to focus on medical microbiology and immunology. The Biomedical Sciences major is a good choice for students planning careers in biomedical research, biotech and health professions. Biomedical Sciences Pre-Health prepares students who want to go to a professional school such as medical or dental school.

Some majors choose a minor in Conservation Leadership. This is an interdisciplinary minor that focuses on species conservation and sustainability issues. We also offer a minor in Biology.

Advanced Placement

Advanced placement credit is awarded to students who earn qualifying scores on AP and IB subject examinations. See the equivalency charts here: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib>)

ib/). Official score reports should be sent to the Office of Admissions prior to registration for evaluation.

Programs

Bachelor of Science Programs

- Biology (BS) (p. 676)
- Biology with a Major in Biology-One Health (BS) (p. 679)
- Biology with a Major in Biomedical Sciences (BS) (p. 682)
- Biology with a Major in Biomedical Sciences-Pre Health (BS) (p. 685)
- Biology with a Major in Marine Biology (BS) (p. 688)
- Biology with a Major in Secondary Biology Education (6-12) (BS) (p. 691)

Minor Program

- Biology Minor (p. 694)

Bachelor of Science Biology (BS)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Mathematics: Select MATH 205 or MATH 211; C or better required

Information Literacy and Research: CS 121G, CS 126G, or OEAS 130G required

Nature of Science: met by CHEM 121N-CHEM 122N and CHEM 123N-CHEM 124N

Upper-Division General Education Requirements

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department) or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division (300-level or above) courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Biology Core

Required Biology Core Courses (C or better required in each course)

BIOL 121N & BIOL 122N	General Biology I and General Biology I Lab	4
BIOL 123N & BIOL 124N	General Biology II and General Biology II Lab	4
Upon completion of the above sequences, students must complete the following core courses, some of which are prerequisites or corequisites for upper-level biology courses (see course descriptions for individual courses):		
BIOL 291	Ecology	3
BIOL 292	Evolution	3
BIOL 293	Cell Biology	3
BIOL 294	Genetics	3
Total Credit Hours		20

Writing Intensive Requirement

In addition to the core courses, all majors must complete at least one writing intensive (W) course at Old Dominion University and earn a grade of C or better: BIOL 401W, BIOL 405W, BIOL 415W, BIOL 423W, BIOL 430W, BIOL 432W, BIOL 436W, BIOL 437W, BIOL 466W, BIOL 468W, BIOL 471W, BIOL 481W, or BIOL 488W. This course should be taken during the junior or senior year after completion of the required prerequisites. The W course selected will count towards the upper-division Biology electives. BIOL 405W requires a sponsor and approval of the topic.

Upper-Division Biology Elective Courses

Students must choose at least 30 elective hours at the 300-level or above from the courses offered by the Department of Biological Sciences. Some non-laboratory course options include BIOL 302, BIOL 311, BIOL 331, BIOL 346, BIOL 355, BIOL 403, BIOL 416, BIOL 445, BIOL 446, and BIOL 494.

A minimum of three of the courses must have a structured laboratory/field component. Some examples of these courses include BIOL 301, BIOL 309, BIOL 313, BIOL 314, BIOL 401W, BIOL 404, BIOL 415W, BIOL 420, BIOL 422, BIOL 424, BIOL 426, BIOL 441, BIOL 454, BIOL 455, BIOL 461, and BIOL 481W.

To be clear, BIOL 367 (Cooperative Education), BIOL 368 (Internship) and BIOL 369 (Practicum) courses cannot be used to satisfy the laboratory/field requirement. Additionally, transfer courses will not meet the laboratory/field component unless approved by the Biology curriculum committee. Transfer courses should be submitted to the College of Sciences Advising Office for consideration.

Students may use no more than six credits of unstructured courses to satisfy the requirement (see below). Elective courses must be passed with a grade of

C (2.0) or better unless they are specified as Pass/Fail courses, in which case they must be passed (P).

Experiential Learning

Students may take advantage of several non-classroom experiences ("Unstructured Courses") offered by the Department of Biological Sciences and may receive elective credit for these experiences. These include BIOL 367 (Cooperative Education), BIOL 368 (Internship), BIOL 369 (Practicum), BIOL 497 (Undergraduate Research) and BIOL 498 (Independent Study). BIOL 367, BIOL 368, BIOL 369 and BIOL 498 cannot be used to satisfy the lab/field requirement but can be used to satisfy one of the required elective courses. A passing grade (P) is required. See individual course descriptions and the chief departmental advisor for more information about these opportunities.

Non-Biology Course Requirements

Required Non-Biology Courses (C or better required in each course)		
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1
CHEM 211	Organic Chemistry I Lecture	3
Select one of the following:		4
PHYS 111N	Introductory General Physics	
OEAS 110N	Earth Science	
OEAS 111N	Physical Geology	
Select one of the following:		3
STAT 130M	Elementary Statistics	
STAT 310	Introductory Data Analysis	
Total Credit Hours		18

Biology Major

General Education	
Complete lower-division requirements	33-40
Complete upper-division requirements (minimum of 6 credit hours)	6
Biology	
Complete the biology core	20
Complete upper-level biology elective courses (minimum of 30 credit hours to include writing intensive course)	30
Complete non-biology courses	18
Total Credit Hours	107-114

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours for the degree.

Honors Program in Biology

A. Honors Research

Undergraduates with junior or senior standing and a GPA of 3.00 or better are eligible to participate in Honors Research. After consultation with the CDA (Chief Departmental Advisor), students select a professor who agrees to oversee the research project. Students then enroll in two courses, BIOL 487 and BIOL 488W. The courses may be taken in any sequence: fall-spring, spring-summer, summer-summer, summer-fall. Normally both semesters are required but a student may receive credit for only one semester. The research project, time commitment by the student and the basis for the grade are mutually determined by the student and professor. Because first-semester research results are often preliminary, the grade for BIOL 487 is based on a review paper and/or research proposal, which provides the student with an overview of the field. The second semester is graded on the final research paper and a seminar presented to the honors committee and interested faculty. Professors should encourage students to publish results and present papers at scientific meetings when

appropriate. Students should also be urged to apply for funds from agencies that provide seed money to undergraduates. The program director can provide information on scientific societies that sponsor meetings and/or offer small grants. Successful completion of both courses with a C (2.0) or better will allow the student to use BIOL 488W as a lab course in meeting his/her requirements.

B. Bachelor's Degree with Honors in Biological Sciences and Honors Designation for Biology courses

Students maintaining an overall GPA of at least 3.25 and of 3.50 in biology can receive a "Bachelor's Degree with Honors in Biological Sciences" subject to satisfaction of the minimum University standards for the Honors degree and completion of one of the following two options:

Option 1: Successful completion of two semesters of biological research taken as BIOL 487 / BIOL 488W (Honors Research).

Option 2: Successful completion of three upper-division courses in Biological Sciences and achievement of the "Honors" designation in each.

Students petitioning for designation of an upper-division biology course as "Honors" must have a minimum overall GPA of 3.25 and a GPA of at least 3.50 in biology.

To receive the "Honors" designation for a course, students must achieve a final course score of at least 95% or the equivalent of an "A" on the University grade scale.

Faculty are encouraged to assign and work with students on other activities deemed appropriate for an "Honors" course designation and utilize the results of these activities in the assignment of a course grade.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (C or better required)	3
MATH 162M	Precalculus I	3
BIOL 121N	General Biology I	3
BIOL 122N	General Biology I Lab	1
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
Credit Hours		14
Second Semester		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MATH 205 or MATH 211	Calculus for Life Sciences or Calculus I	3-4
BIOL 123N	General Biology II	3
BIOL 124N	General Biology II Lab	1
CHEM 123N	Foundations of Chemistry II Lecture	3

CHEM 124N	Foundations of Chemistry II Laboratory	1
Credit Hours		14-15
Sophomore		
First Semester		
BIOL 291	Ecology	3
BIOL 292	Evolution	3
CHEM 211	Organic Chemistry I Lecture	3
STAT 130M or STAT 310	Elementary Statistics or Introductory Data Analysis	3
CS 121G or CS 126G or OEAS 130G	Introduction to Information Literacy and Research for Scientists or Honors: Introduction to Information Literacy and Research or Research Skills and Information Literacy for the Natural Sciences	3
Credit Hours		15
Second Semester		
BIOL 293	Cell Biology	3
BIOL 294	Genetics	3
Select one of the following:		4
PHYS 111N	Introductory General Physics	
OEAS 110N	Earth Science	
OEAS 111N	Physical Geology	
Human Behavior		3
Literature		3
Credit Hours		16
Junior		
First Semester		
300/400-level Biology elective		4
300/400-level Biology elective		3
Interpreting the Past		3
Language and Culture I		0-3
Elective		4
Credit Hours		14-17
Second Semester		
300/400-level Biology elective		4
300/400-level Biology elective		4
Philosophy		3
Impact of Technology		3
Language & Culture II		0-3
Credit Hours		14-17
Senior		
First Semester		
Biology Writing Intensive (W) course (C or better required)		3
300/400-level Biology elective		4
300/400-level Biology elective		4
Upper-Division General Education course or Minor		3
Oral Communication		3
Credit Hours		17

Second Semester	
300/400-level Biology elective	4
Human Creativity	3
Upper-Division General Education course or Minor	3
Minor or Elective	3
Minor or Elective	3
Credit Hours	16
Total Credit Hours	120-127

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Biology with a Major in Biology-One Health (BS)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6

Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Mathematics: Select MATH 205 or MATH 211; C or better required

Information Literacy and Research: CS 121G, CS 126G or OEAS 130G required

Nature of Science: met by CHEM 121N-CHEM 122N and CHEM 123N-CHEM 124N

Writing Intensive Requirement: met in the major with BIOL 436W and BIOL 437W

Upper-Division General Education Requirements

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department) or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division (300-level or above) courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Biology Core

Required Biology Core Courses (C or better required in each course)

BIOL 121N & BIOL 122N	General Biology I and General Biology I Lab	4
BIOL 123N & BIOL 124N	General Biology II and General Biology II Lab	4

Upon completion of the above sequences, students must complete the following core courses, some of which are prerequisites or corequisites for upper-level biology courses (see course descriptions for individual courses):		
BIOL 291	Ecology	3
BIOL 292	Evolution	3
BIOL 293	Cell Biology	3
BIOL 294	Genetics	3
Total Credit Hours		20

One Health Major

General Education

Complete lower-division requirements	33-39
Complete upper-division requirements (minimum of 6 credit hours)	6

One Health

Biology Core

Complete biology core requirements	20

One Health Major *

BIOL 302	Introduction to immunology	3
BIOL 316	General Microbiology	3
BIOL 317	General Microbiology Laboratory	2
or BIOL 318	Online General Microbiology Laboratory	
BIOL 436W	Infectious Disease Epidemiology	3
BIOL 437W	One Health: People, Animals and the Environment	3

Upper-Division Biology Elective Courses *

Students must choose at least 16 elective hours from the following courses. Two of the elective courses must have a laboratory/field component. Students must pass all Biology electives with a C (2.0) or better (P=Passing for courses graded Pass/Fail).	16

BIOL 300	Fundamental Biomolecules
BIOL 301	Practice of Science-Biology **
BIOL 322	Ethnobotany
BIOL 401W	Entomology **
BIOL 404	Conservation Biology and Sustainable Development **
BIOL 408	Introduction to Pharmacology
BIOL 423W	Cellular and Molecular Biology
BIOL 430W	Microbial Pathogenesis
BIOL 440	Methods in Immunological Research **
BIOL 453	Molecular Ecology **
BIOL 454	Research in Pathogen Biology I: Laboratory Investigation **
BIOL 455	Research in Pathogen Biology II: Analysis **
BIOL 457	General Virology
BIOL 462	Microbial Genetics
BIOL 470T	Diseases that Changed our World
BIOL 481W	Forensic and Medical Entomology **
BIOL 482	Human and Veterinary Parasitology

Experiential Learning

A maximum of 6 credits can be applied toward Upper Division Biology Electives. All experiences must be One Health-related experiences. Documented prior approval is required. A passing grade (P) is required.

BIOL 367	Cooperative Education
BIOL 368	Internship
BIOL 369	Practicum
BIOL 487	Honors Research in Biology **
BIOL 488W	Honors Research in Biology **

BIOL 497 Undergraduate Research (Counts towards lab credit if 3 credits are earned.) **

BIOL 498 Independent Study

Non-Biology Degree Requirements (18 credits; C or better required in each course)

CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1
CHEM 211	Organic Chemistry I Lecture	3
PHYS 111N	Introductory General Physics	4
or OEAS 110N	Earth Science	
or OEAS 111N	Physical Geology	
STAT 130M	Elementary Statistics	3
or STAT 310	Introductory Data Analysis	

Total Credit Hours 107-113

* C or better required.

** Course has lab/field component.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours for the degree.

Honors Program in Biology

A. Honors Research

Undergraduates with junior or senior standing and a GPA of 3.00 or better are eligible to participate in Honors Research. After consultation with the CDA (Chief Departmental Advisor), students select a professor who agrees to oversee the research project. Students then enroll in two courses, BIOL 487 and BIOL 488W. The courses may be taken in any sequence: fall-spring, spring-summer, summer-summer, summer-fall. Normally both semesters are required but a student may receive credit for only one semester. The research project, time commitment by the student and the basis for the grade are mutually determined by the student and professor. Because first-semester research results are often preliminary, the grade for BIOL 487 is based on a review paper and/or research proposal, which provides the student with an overview of the field. The second semester is graded on the final research paper and a seminar presented to the honors committee and interested faculty. Professors should encourage students to publish results and present papers at scientific meetings when appropriate. Students should also be urged to apply for funds from agencies that provide seed money to undergraduates. The program director can provide information on scientific societies that sponsor meetings and/or offer small grants. Successful completion of both courses with a C (2.0) or better will allow the student to use BIOL 488W as a lab course in meeting his/her requirements.

B. Bachelor's Degree with Honors in Biological Sciences and Honors Designation for Biology courses

Students maintaining an overall GPA of at least 3.25 and of 3.50 in biology can receive a "Bachelor's Degree with Honors in Biological Sciences" subject to satisfaction of the minimum University standards for the Honors degree and completion of one of the following two options:

Option 1: Successful completion of two semesters of biological research taken as BIOL 487 / BIOL 488W (Honors Research).

Option 2: Successful completion of three upper-division courses in Biological Sciences and achievement of the "Honors" designation in each.

Students petitioning for designation of an upper-division biology course as "Honors" must have a minimum overall GPA of 3.25 and a GPA of at least 3.50 in biology.

To receive the "Honors" designation for a course, students must achieve a final course score of at least 95% or the equivalent of an "A" on the University grade scale.

Faculty are encouraged to assign and work with students on other activities deemed appropriate for an "Honors" course designation and utilize the results of these activities in the assignment of a course grade.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (C or better required)	3
MATH 162M	Precalculus I	3
BIOL 121N & BIOL 122N		4
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
Credit Hours		14
Second Semester		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MATH 163	Precalculus II	3
BIOL 123N & BIOL 124N		4
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1
Credit Hours		14
Sophomore		
First Semester		
BIOL 291	Ecology	3
BIOL 292	Evolution	3
MATH 205	Calculus for Life Sciences	3
CHEM 211	Organic Chemistry I Lecture	3
CS 121G or CS 126G or OEAS 130G	Introduction to Information Literacy and Research for Scientists or Honors: Introduction to Information Literacy and Research or Research Skills and Information Literacy for the Natural Sciences	3
Credit Hours		15
Second Semester		
BIOL 293	Cell Biology	3
BIOL 294	Genetics	3
STAT 130M or STAT 310	Elementary Statistics or Introductory Data Analysis	3
Select one of the following:		4

PHYS 111N	Introductory General Physics	
OEAS 110N	Earth Science	
OEAS 111N	Physical Geology	
Oral Communication		3
Credit Hours		16
Junior		
First Semester		
BIOL 302	Introduction to immunology	3
300/400-level Biology elective		4
Literature		3
Elective or Language-Culture I		3
Philosophy & Ethics		3
Credit Hours		16
Second Semester		
BIOL 316	General Microbiology	3
BIOL 317 or BIOL 318	General Microbiology Laboratory or Online General Microbiology Laboratory	2
300/400-level Biology elective		4
Elective or Language-Culture II		3
Impact of Technology		3
Credit Hours		15
Senior		
First Semester		
BIOL 436W	Infectious Disease Epidemiology ((C or better required))	3
300/400 Level Biology elective		4
Upper-Division General Education course		3
Human Behavior		3
Interpreting the Past		3
Credit Hours		16
Second Semester		
BIOL 437W	One Health: People, Animals and the Environment	3
300/400 Level Biology elective		4
Upper-Division General Education course		3
Human Creativity		3
Elective (if needed)		1
Credit Hours		14
Total Credit Hours		120

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course

of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Biology with a Major in Biomedical Sciences (BS)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Mathematics: MATH 205 or MATH 211; C or better required

Information Literacy and Research: CS 121G, CS 126G, or OEAS 130G required

Nature of Science: met by CHEM 121N-CHEM 122N and CHEM 123N-CHEM 124N

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department), or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Biology Core

Required Biology Core Courses (C or better required in each course)

BIOL 121N & BIOL 122N	General Biology I and General Biology I Lab	4
BIOL 123N & BIOL 124N	General Biology II and General Biology II Lab	4
Upon completion of the above sequences, students must complete the following core courses:		
BIOL 293	Cell Biology	3
BIOL 294	Genetics	3
Select one of the following:		8
BIOL 240 & BIOL 241	Fundamentals of Anatomy and Physiology I and Fundamentals of Anatomy and Physiology II	
BIOL 250 & BIOL 251	Human Anatomy and Physiology I and Human Anatomy and Physiology II	

Total Credit Hours 22

Biomedical Sciences Major

General Education

Complete lower-division requirements	33-39
Complete upper-division requirements (minimum of 6 credit hours)	6

Biology Core

Complete biology core requirements	22

Biology Upper-Division Required Courses (C or better required in each course)

BIOL 300 or CHEM 441	Fundamental Biomolecules or Biochemistry Lecture	3
BIOL 302	Introduction to immunology	3
BIOL 316	General Microbiology	3
BIOL 317	General Microbiology Laboratory	2

or BIOL 318	Online General Microbiology Laboratory
Writing Intensive Requirement	
Choose a Writing Intensive (W) course from the following Upper-Division Biology Electives or BIOL 405W, which requires the approval of topic/sponsor or a biomedical-specific course section. BIOL 405W will NOT count towards the upper-division Biology electives.	
Upper-Division Biology Elective Courses	
Students must choose 16 elective credit hours from the following Biology elective courses. At least one of the courses must be BIOL 416, BIOL 440, BIOL 454, or BIOL 476. Two laboratory-based courses (**) are required in the 16 elective credit hours. Students must pass all Biology electives with a C or better (P=Passing for courses graded Pass/Fail).	16
Select at least one of the following:	
BIOL 416	Clinical Immunology
BIOL 440	Methods in Immunological Research **
BIOL 454	Research in Pathogen Biology I: Laboratory Investigation **
BIOL 476	Cancer Immunology and Immunotherapy
Select from the following to complete the Upper-Division Biology Elective Credits	
BIOL 301	Practice of Science-Biology **
BIOL 306	Human Genetics
BIOL 309	Foundations of Pathophysiology **
BIOL 313	Introduction to Neuroanatomy **
BIOL 314	Developmental Biology **
BIOL 355	Stem Cell Biology
BIOL 403	Medical Microbiology
BIOL 407	The Pharmacology and Neurobiology of How Recreational Drugs Work
BIOL 408	Introduction to Pharmacology
BIOL 423W	Cellular and Molecular Biology
BIOL 425	Cancer Biology
BIOL 426	Histology **
BIOL 430W	Microbial Pathogenesis
BIOL 436W	Infectious Disease Epidemiology
BIOL 437W	One Health: People, Animals and the Environment
BIOL 449	Microbial Impact on Human Health
BIOL 455	Research in Pathogen Biology II: Analysis **
BIOL 457	General Virology
BIOL 460	Frontiers in Nanoscience and Nanotechnology
BIOL 461	Human Cadaver Dissection **
BIOL 462	Microbial Genetics
BIOL 463	Cell Signaling in Host Pathogen Interactions
BIOL 464	Biomedical Applications of Low Temperature Plasmas
BIOL 465	Biotechnology
BIOL 470T	Diseases that Changed our World
BIOL 475	Neurobiology
BIOL 481W	Forensic and Medical Entomology **
BIOL 482	Human and Veterinary Parasitology
BIOL 490	Advanced Human Physiology
Experiential Learning	
A maximum of 6 credits can be applied toward Upper-Division Biology credit hours. These courses require documented prior approval.	
BIOL 367	Cooperative Education
BIOL 368	Internship

BIOL 369	Practicum	
BIOL 487	Honors Research in Biology	**
BIOL 488W	Honors Research in Biology	**
BIOL 497	Undergraduate Research	Counts towards lab credit if 3 credits are earned.
BIOL 498	Independent Study	
Non-Biology Degree Requirements (C or better required in each course.)		
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1
CHEM 211	Organic Chemistry I Lecture	3
CHEM 212	Organic Chemistry I Laboratory	2
PHYS 111N	Introductory General Physics	4
STAT 130M	Elementary Statistics	3
or STAT 310	Introductory Data Analysis	
Total Credit Hours		108-114

** Lab-based course.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours for the degree.

Honors Program in Biology

A. Honors Research

Undergraduates with junior or senior standing and a GPA of 3.00 or better are eligible to participate in Honors Research. After consultation with the CDA (Chief Departmental Advisor), students select a professor who agrees to oversee the research project. Students then enroll in two courses, BIOL 487 and BIOL 488W. The courses may be taken in any sequence: fall-spring, spring-summer, summer-summer, summer-fall. Normally both semesters are required but a student may receive credit for only one semester. The research project, time commitment by the student and the basis for the grade are mutually determined by the student and professor. Because first-semester research results are often preliminary, the grade for BIOL 487 is based on a review paper and/or research proposal, which provides the student with an overview of the field. The second semester is graded on the final research paper and a seminar presented to the honors committee and interested faculty. Professors should encourage students to publish results and present papers at scientific meetings when appropriate. Students should also be urged to apply for funds from agencies that provide seed money to undergraduates. The program director can provide information on scientific societies that sponsor meetings and/or offer small grants. Successful completion of both courses with a C (2.0) or better will allow the student to use BIOL 488W as a lab course in meeting his/her requirements.

B. Bachelor's Degree with Honors in Biological Sciences and Honors Designation for Biology courses

Students maintaining an overall GPA of at least 3.25 and of 3.50 in biology can receive a "Bachelor's Degree with Honors in Biological Sciences" subject to satisfaction of the minimum University standards for the Honors degree and completion of one of the following two options:

Option 1: Successful completion of two semesters of biological research taken as BIOL 487 / BIOL 488W (Honors Research).

Option 2: Successful completion of three upper-division courses in Biological Sciences and achievement of the "Honors" designation in each.

Students petitioning for designation of an upper-division biology course as "Honors" must have a minimum overall GPA of 3.25 and a GPA of at least 3.50 in biology.

To receive the "Honors" designation for a course, students must achieve a final course score of at least 95% or the equivalent of an "A" on the University grade scale.

Faculty are encouraged to assign and work with students on other activities deemed appropriate for an "Honors" course designation and utilize the results of these activities in the assignment of a course grade.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (C or better required)	3
MATH 162M	Precalculus I	3
BIOL 121N	General Biology I	3
BIOL 122N	General Biology I Lab	1
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
Credit Hours		14
Second Semester		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MATH 205	Calculus for Life Sciences	3
BIOL 123N	General Biology II	3
BIOL 124N	General Biology II Lab	1
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1
Credit Hours		14
Sophomore		
First Semester		
BIOL 240 or BIOL 250	Fundamentals of Anatomy and Physiology I or Human Anatomy and Physiology I	4
BIOL 293	Cell Biology	3
STAT 130M or STAT 310	Elementary Statistics or Introductory Data Analysis	3
CHEM 211	Organic Chemistry I Lecture	3
CHEM 212	Organic Chemistry I Laboratory	2
Credit Hours		15

Second Semester		
BIOL 241 or BIOL 251	Fundamentals of Anatomy and Physiology II or Human Anatomy and Physiology II	4
BIOL 294	Genetics	3
PHYS 111N	Introductory General Physics	4
Human Behavior		3
Credit Hours		14
Junior		
First Semester		
BIOL 300 or CHEM 441	Fundamental Biomolecules or Biochemistry Lecture	3
BIOL 302	Introduction to immunology	3
CS 121G or CS 126G or OEAS 130G	Introduction to Information Literacy and Research for Scientists or Honors: Introduction to Information Literacy and Research or Research Skills and Information Literacy for the Natural Sciences	3
Oral Communication		3
Elective or Language and Culture I (May be waived, see requirement details)		3
Credit Hours		15
Second Semester		
BIOL 316	General Microbiology	3
BIOL 317 or BIOL 318	General Microbiology Laboratory or Online General Microbiology Laboratory	2
300/400-level Biology elective		3-4
Human Creativity		3
Literature		3
Elective or Language and Culture II (May be waived, see requirement details)		3
Credit Hours		17-18
Senior		
First Semester		
Biology Writing Intensive (W) course (C or better required)		3
BIOL 440 or BIOL 416 or BIOL 454 or BIOL 476	Methods in Immunological Research or Clinical Immunology or Research in Pathogen Biology I: Laboratory Investigation or Cancer Immunology and Immunotherapy	4
Upper-Division General Education course		3
Interpreting the Past		3
Elective		3
Credit Hours		16
Second Semester		
300/400-level Biology elective		3-4
300/400-level Biology elective		3-4
Upper-Division General Education course		3
Philosophy & Ethics		3

Impact of Technology	3
Credit Hours	15-17
Total Credit Hours	120-123

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Biology with a Major in Biomedical Sciences-Pre Health (BS)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3

Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Mathematics: MATH 205 or MATH 211; C or better required

Information Literacy and Research: CS 121G, CS 126G, or OEAS 130G required

Nature of Science: met by CHEM 121N-CHEM 122N and CHEM 123N-CHEM 124N

Human Behavior: met by SOC 201S and PSYC 201S

Upper-Division General Education Requirements

The Professional Education core satisfies this requirement for the secondary education concentration.

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department) or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division (300-level or above) courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Biology Core

Required Biology Core Courses (C or better required in each course)

BIOL 121N & BIOL 122N	General Biology I and General Biology I Lab	4
BIOL 123N & BIOL 124N	General Biology II and General Biology II Lab	4
BIOL 293	Cell Biology	3
BIOL 294	Genetics	3
Select one of the following:		8
BIOL 240 & BIOL 241	Fundamentals of Anatomy and Physiology I and Fundamentals of Anatomy and Physiology II	

BIOL 250 & BIOL 251	Human Anatomy and Physiology I and Human Anatomy and Physiology II	
Total Credit Hours		22

Biomedical Sciences-Pre Health Major

General Education

Complete lower-division requirements	30-36
Complete upper-division requirements (minimum of 6 credit hours)	6

Biology Core

Complete the biology core	22

Upper-Division Required Biology Courses (C or better required in each course)

BIOL 302	Introduction to immunology	3
BIOL 316	General Microbiology	3
BIOL 317	General Microbiology Laboratory	2
or BIOL 318	Online General Microbiology Laboratory	

Writing Intensive Requirement

Choose a Writing Intensive (W) course from the following Upper-Division Biology Electives or BIOL 405W, which requires the approval of topic/sponsor or a biomedical-specific course section. BIOL 405W will NOT count towards the upper-division Biology electives.

Upper-Division Biology Elective Courses

Students must choose 16 elective credit hours from the following Biology elective courses. At least one of the courses must be BIOL 416, BIOL 440, BIOL 454, or BIOL 476. Two laboratory-based courses (**) are required in the 16 elective credit hours. Students must pass all Biology electives with a C or better (P=Passing for courses graded Pass/Fail).

Select at least one of the following:

BIOL 416	Clinical Immunology
BIOL 440	Methods in Immunological Research **
BIOL 454	Research in Pathogen Biology I: Laboratory Investigation **
BIOL 476	Cancer Immunology and Immunotherapy

Select from the following to complete the Upper-Division Biology elective credits:

BIOL 301	Practice of Science-Biology **
BIOL 306	Human Genetics
BIOL 309	Foundations of Pathophysiology **
BIOL 313	Introduction to Neuroanatomy **
BIOL 314	Developmental Biology **
BIOL 355	Stem Cell Biology
BIOL 403	Medical Microbiology
BIOL 408	Introduction to Pharmacology
BIOL 423W	Cellular and Molecular Biology
BIOL 425	Cancer Biology
BIOL 426	Histology **
BIOL 430W	Microbial Pathogenesis
BIOL 436W	Infectious Disease Epidemiology
BIOL 437W	One Health: People, Animals and the Environment
BIOL 449	Microbial Impact on Human Health
BIOL 455	Research in Pathogen Biology II: Analysis **
BIOL 457	General Virology
BIOL 460	Frontiers in Nanoscience and Nanotechnology
BIOL 461	Human Cadaver Dissection **
BIOL 462	Microbial Genetics
BIOL 463	Cell Signaling in Host Pathogen Interactions

BIOL 464	Biomedical Applications of Low Temperature Plasmas
BIOL 465	Biotechnology
BIOL 470T	Diseases that Changed our World
BIOL 475	Neurobiology
BIOL 481W	Forensic and Medical Entomology **
BIOL 482	Human and Veterinary Parasitology
BIOL 490	Advanced Human Physiology

Experiential Learning

A maximum of 6 credits can be applied toward Upper-Division Biology credit hours. These courses require documented prior approval.

BIOL 367	Cooperative Education
BIOL 368	Internship
BIOL 369	Practicum
BIOL 487	Honors Research in Biology **
BIOL 488W	Honors Research in Biology **
BIOL 497	Undergraduate Research Counts towards lab credit if 3 credits are earned.
BIOL 498	Independent Study

Non-Biology Degree Requirements (C or better required in each course)

SOC 201S	Introduction to Sociology	3
PSYC 201S	Introduction to Psychology	3
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1
CHEM 211	Organic Chemistry I Lecture	3
CHEM 212	Organic Chemistry I Laboratory	2
CHEM 213	Organic Chemistry II Lecture	3
CHEM 214	Organic Chemistry II Laboratory	2
CHEM 441	Biochemistry Lecture	3
PHYS 111N	Introductory General Physics	4
PHYS 112N	Introductory General Physics	4
STAT 130M	Elementary Statistics	3
or STAT 310	Introductory Data Analysis	

Total Credit Hours	120-126

** Lab-based course.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours for the degree.

Honors Program in Biology

A. Honors Research

Undergraduates with junior or senior standing and a GPA of 3.00 or better are eligible to participate in Honors Research. After consultation with the CDA (Chief Departmental Advisor), students select a professor who agrees to oversee the research project. Students then enroll in two courses, BIOL 487 and BIOL 488W. The courses may be taken in any sequence: fall-spring, spring-summer, summer-summer, summer-fall. Normally both semesters are required but a student may receive credit for only one semester. The research project, time commitment by the student and the basis for the grade are mutually determined by the student and professor. Because first-semester research results are often preliminary, the grade for BIOL 487 is based on a review paper and/or research proposal, which provides the student with an overview of the field. The second semester is graded on the final research paper and a seminar presented to the honors committee and interested faculty. Professors should encourage

students to publish results and present papers at scientific meetings when appropriate. Students should also be urged to apply for funds from agencies that provide seed money to undergraduates. The program director can provide information on scientific societies that sponsor meetings and/or offer small grants. Successful completion of both courses with a C (2.0) or better will allow the student to use BIOL 488W as a lab course in meeting his/her requirements.

B. Bachelor's Degree with Honors in Biological Sciences and Honors Designation for Biology courses

Students maintaining an overall GPA of at least 3.25 and of 3.50 in biology can receive a "Bachelor's Degree with Honors in Biological Sciences" subject to satisfaction of the minimum University standards for the Honors degree and completion of one of the following two options:

Option 1: Successful completion of two semesters of biological research taken as BIOL 487 / BIOL 488W (Honors Research).

Option 2: Successful completion of three upper-division courses in Biological Sciences and achievement of the "Honors" designation in each.

Students petitioning for designation of an upper-division biology course as "Honors" must have a minimum overall GPA of 3.25 and a GPA of at least 3.50 in biology.

To receive the "Honors" designation for a course, students must achieve a final course score of at least 95% or the equivalent of an "A" on the University grade scale.

Faculty are encouraged to assign and work with students on other activities deemed appropriate for an "Honors" course designation and utilize the results of these activities in the assignment of a course grade.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (C or better required)	3
BIOL 121N & BIOL 122N		4
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
MATH 205 or MATH 211	Calculus for Life Sciences or Calculus I	3
Credit Hours		14
Second Semester		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
BIOL 123N & BIOL 124N		4
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1
PSYC 201S	Introduction to Psychology	3
Credit Hours		14

Sophomore

First Semester

BIOL 240 or BIOL 250	Fundamentals of Anatomy and Physiology I or Human Anatomy and Physiology I	4
BIOL 293	Cell Biology	3
CHEM 211	Organic Chemistry I Lecture	3
CHEM 212	Organic Chemistry I Laboratory	2
STAT 130M or STAT 310	Elementary Statistics or Introductory Data Analysis	3
Credit Hours		15

Second Semester

BIOL 241 or BIOL 251	Fundamentals of Anatomy and Physiology II or Human Anatomy and Physiology II	4
BIOL 294	Genetics	3
CHEM 213	Organic Chemistry II Lecture	3
CHEM 214	Organic Chemistry II Laboratory	2
Human Creativity		3
Credit Hours		15

Junior

First Semester

BIOL 302	Introduction to immunology	3
PHYS 111N	Introductory General Physics	4
Literature		3
Language and Culture I (May be waived, see requirement details)		0-3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)		3
Credit Hours		13-16

Second Semester

BIOL 316	General Microbiology	3
BIOL 317 or BIOL 318	General Microbiology Laboratory or Online General Microbiology Laboratory	2
PHYS 112N	Introductory General Physics	4
Oral Communication		3
Language and Culture II (May be waived, see requirement details)		0-3
SOC 201S	Introduction to Sociology	3
Credit Hours		15-18

Senior

First Semester

Biology 300/400-level Writing Intensive (W) course (C or better required)		3
BIOL 440 or BIOL 416 or BIOL 454 or BIOL 476	Methods in Immunological Research or Clinical Immunology or Research in Pathogen Biology I: Laboratory Investigation or Cancer Immunology and Immunotherapy	4
300/400-level Biology elective		4-5
Philosophy & Ethics		3

Upper-Division General Education course		3
Credit Hours		17-18
Second Semester		
300/400-level Biology elective		5
CHEM 441	Biochemistry Lecture	3
Impact of Technology		3
CS 121G or CS 126G or OEAS 130G	Introduction to Information Literacy and Research for Scientists or Honors: Introduction to Information Literacy and Research or Research Skills and Information Literacy for the Natural Sciences	3
Upper-Division General Education course		3
Credit Hours		17
Total Credit Hours		120-127

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Biology with a Major in Marine Biology (BS)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Mathematics: Select MATH 205 or MATH 211; C or better required

Information Literacy and Research: CS 121G, CS 126G or OEAS 130G required

Nature of Science: met by CHEM 121N-CHEM 122N and CHEM 123N-CHEM 124N

Upper-Division General Education Requirements

The Professional Education core satisfies this requirement for the secondary education concentration.

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department) or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division (300-level or above) courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.

- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Biology Core

Required Biology Core Courses (C or better required in each course)

BIOL 121N & BIOL 122N	General Biology I and General Biology I Lab	4
BIOL 123N & BIOL 124N	General Biology II and General Biology II Lab	4

Upon completion of the above sequences, students must complete the following core courses, some of which are prerequisites or corequisites for upper-level biology courses (see course descriptions for individual courses):

BIOL 291	Ecology	3
BIOL 292	Evolution	3
BIOL 293	Cell Biology	3
BIOL 294	Genetics	3

Total Credit Hours 20

Biology with a Major in Marine Biology

The marine biology major provides students with coursework, specialized advising, and practical experience in marine biology while ensuring a strong, balanced education in one of the traditional natural sciences in which students major. A research, practicum, or internship experience in marine biology is strongly encouraged. Marine biology students may also select a minor in ocean and earth science.

General Education

Complete lower-division requirements	33-40
Complete upper-division requirements (minimum of 6 credit hours)	6

Biology Core ¹

Complete biology core requirements	20

Writing Intensive Requirement ¹

Choose a Writing Intensive (W) course from BIOL 415W, 471W, 488W or 405W which requires the approval of topic/sponsor. BIOL 405W will NOT count towards the upper-division Biology elective hours or the laboratory-based course requirement. BIOL 415W and BIOL 488W will count toward the upper-division Biology electives and the laboratory-based course requirement. BIOL 471W will only count toward the upper-division credit hour requirement and will not satisfy one of the laboratory-based course requirements.

Marine Biology Major ¹

BIOL 331	Marine Biology	3
OEAS 306	Oceanography	3

Upper-Division Biology Elective Courses ¹

Students must choose a minimum of three laboratory-based Marine Biology courses and complete a minimum of 13 upper-division elective credit hours. If the three laboratory-based courses satisfy the 13 hours, no additional electives will be required. If they do not satisfy the 13 credit hours, any additional 300/400-level Biology courses may be taken to satisfy the 13 credit hours. Marine Biology laboratory courses include: BIOL 301, BIOL 307, BIOL 402, BIOL 415W, BIOL 420, BIOL 424, BIOL 453, BIOL 487, BIOL 488W, and BIOL 497.

Non-Biology Degree Requirements ¹

CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1
CHEM 211	Organic Chemistry I Lecture	3

OEAS 110N	Earth Science	4
or OEAS 111N	Physical Geology	
PHYS 111N	Introductory General Physics	4
STAT 130M	Elementary Statistics	3
or STAT 310	Introductory Data Analysis	

Total Credit Hours 100-107

¹ All required, elective, and writing intensive courses must be passed with a C (2.0) or better. A passing grade (P) is required in courses graded pass/fail.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours for the degree.

Honors Program in Biology

A. Honors Research

Undergraduates with junior or senior standing and a GPA of 3.00 or better are eligible to participate in Honors Research. After consultation with the CDA (Chief Departmental Advisor), students select a professor who agrees to oversee the research project. Students then enroll in two courses, BIOL 487 and BIOL 488W. The courses may be taken in any sequence: fall-spring, spring-summer, summer-summer, summer-fall. Normally both semesters are required but a student may receive credit for only one semester. The research project, time commitment by the student and the basis for the grade are mutually determined by the student and professor. Because first-semester research results are often preliminary, the grade for BIOL 487 is based on a review paper and/or research proposal, which provides the student with an overview of the field. The second semester is graded on the final research paper and a seminar presented to the honors committee and interested faculty. Professors should encourage students to publish results and present papers at scientific meetings when appropriate. Students should also be urged to apply for funds from agencies that provide seed money to undergraduates. The program director can provide information on scientific societies that sponsor meetings and/or offer small grants. Successful completion of both courses with a C (2.0) or better will allow the student to use BIOL 488W as a lab course in meeting his/her requirements.

B. Bachelor's Degree with Honors in Biological Sciences and Honors Designation for Biology courses

Students maintaining an overall GPA of at least 3.25 and of 3.50 in biology can receive a "Bachelor's Degree with Honors in Biological Sciences" subject to satisfaction of the minimum University standards for the Honors degree and completion of one of the following two options:

Option 1: Successful completion of two semesters of biological research taken as BIOL 487 / BIOL 488W (Honors Research).

Option 2: Successful completion of three upper-division courses in Biological Sciences and achievement of the "Honors" designation in each.

Students petitioning for designation of an upper-division biology course as "Honors" must have a minimum overall GPA of 3.25 and a GPA of at least 3.50 in biology.

To receive the "Honors" designation for a course, students must achieve a final course score of at least 95% or the equivalent of an "A" on the University grade scale.

Faculty are encouraged to assign and work with students on other activities deemed appropriate for an "Honors" course designation and utilize the results of these activities in the assignment of a course grade.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work

and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 163	Precalculus II	3
CHEM 121N and CHEM 122N		4
BIOL 121N & BIOL 122N		4
Credit Hours		14
Second Semester		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MATH 205 or MATH 211	Calculus for Life Sciences or Calculus I	3-4
CHEM 123N and CHEM 124N		4
BIOL 123N & BIOL 124N		4
Credit Hours		14-15
Sophomore		
First Semester		
CS 121G or CS 126G or OEAS 130G	Introduction to Information Literacy and Research for Scientists or Honors: Introduction to Information Literacy and Research or Research Skills and Information Literacy for the Natural Sciences	3
BIOL 291	Ecology	3
BIOL 293	Cell Biology	3
CHEM 211	Organic Chemistry I Lecture	3
PHYS 111N	Introductory General Physics	4
Credit Hours		16
Second Semester		
Human Behavior		3
Philosophy and Ethics		3
OEAS 111N or OEAS 110N	Physical Geology or Earth Science	4
BIOL 292	Evolution	3
BIOL 294	Genetics	3
Credit Hours		16
Junior		
First Semester		
BIOL 331	Marine Biology	3
Oral Communication		3
Literature		3
300/400-level Marine Biology Elective		3
Human Creativity		3
Elective or Language and Culture I (May be waived, see requirement details)		0-3
Credit Hours		15-18

Second Semester		
STAT 130M or STAT 310	Elementary Statistics or Introductory Data Analysis	3
OEAS 306	Oceanography	3
300/400-level Marine Biology Elective		3
Interpreting the Past		3
Impact of Technology		3
Elective or Language and Culture II (May be waived, see requirement details)		0-3
Credit Hours		15-18
Senior		
First Semester		
Biology Writing Intensive (W) course (C or better required)		3
300/400-level Biology Elective		4
Elective		3
Minor or Elective		3
Upper-Division General Education course or Minor		3
Credit Hours		16
Second Semester		
Upper-Division General Education course or Minor		3
Minor or Elective		3
Minor or Elective		2
Elective		6
Credit Hours		14
Total Credit Hours		120-127

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a

student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science

Biology with a Major in Secondary Biology Education (6-12) (BS)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Mathematics: Select MATH 205 or MATH 211; C or better required

Information Literacy and Research: CS 121G, CS 126G or OEAS 130G required

Nature of Science: met by CHEM 121N-CHEM 122N and CHEM 123N-CHEM 124N

Upper-Division General Education Requirements

Met in the major through professional education coursework.

Requirements for Graduation

Requirements for graduation include completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better, completion of the Biology and Senior Assessments, a minimum cumulative 2.75 GPA, in the major area, and in the professional education core, with no grade less than a C in the major and C- in the professional education core; successful completion of the Teacher Candidate Internship and a minimum of 120 credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University. Note that a grade of C (2.0) or better must be earned in all biology courses used to satisfy departmental requirements.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Biology Core

Required Biology Core Courses (C or better required in each course)

BIOL 121N & BIOL 122N	General Biology I and General Biology I Lab	4
BIOL 123N & BIOL 124N	General Biology II and General Biology II Lab	4
Upon completion of the above sequences, students must complete the following core courses, some of which are prerequisites or corequisites for upper-level biology courses (see course descriptions for individual courses):		
BIOL 291	Ecology	3
BIOL 292	Evolution	3
BIOL 293	Cell Biology	3
BIOL 294	Genetics	3
Total Credit Hours		20

Biology with a Major in Secondary Biology Education (6-12)

This program leads to eligibility for teacher licensure in Virginia and is available only to individuals holding a baccalaureate degree or completing requirements for a Bachelor of Science degree in biology.

General Education

Complete lower-division requirements 33-40

Complete upper-division requirements (met in the major through professional education coursework)

Biology Core

Complete biology core requirements 20

Biology Requirements

BIOL 240 or BIOL 250	Fundamentals of Anatomy and Physiology I Human Anatomy and Physiology I	4
BIOL 307 or BIOL 336	Invertebrate Zoology Vertebrate Zoology	4-5
BIOL 308	Botany	4
Biology electives *		8

Non-Biology Requirements

CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1
CHEM 211	Organic Chemistry I Lecture	3
Select one of the following:		3
OEAS 110N	Earth Science	
OEAS 111N	Physical Geology	
PHYS 111N	Introductory General Physics	
STAT 130M or STAT 310	Elementary Statistics Introductory Data Analysis	3

Professional Education Coursework (overall 2.75 GPA required)

STEM 103	Foundations of STEM Teaching: An Inquiry-Based Approach	2
STEM 201	Knowing and Learning in STEM Education	3
STEM 202	Classroom Interactions in STEM Education	3
STEM 401	Project Based Instruction in STEM Education	3

STEM 402	Perspectives on STEM	3
STEM 485	Apprentice Teaching	9
BIOL 468W	Research Methods in Mathematics and Science	3
Total Credit Hours		116-124

* Electives must be at the 300 level or above, to include one lab or field course. See the secondary biology education advisor of chief departmental advisor for details.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours for the degree.

Additional Requirements and Information

Admission

Students must first declare secondary biology education (6-12) as their major with the appropriate advisor. All students must apply for and be admitted into the approved secondary biology education program. Students must meet the required criteria for admission by earning the minimum required grade point averages (GPA).

For the most current information on the prescribed Virginia Board of Education admission assessment, visit the Virginia Department of Education at <https://www.doe.virginia.gov/>.

Required grade point averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required - all biology courses must be passed with a grade of C (2.0) or above and all other science content courses must be passed with a grade of C- or higher.
- A professional education GPA of 2.75 is required – all professional education courses must be passed with a grade of C- or higher

Although students may enroll in a limited number of education courses, students must be admitted into the approved secondary biology education program prior to enrolling in any instructional strategies practicum education course. Students must also meet with an education advisor in the Office of Clinical Experiences.

Continuance

Students must maintain a cumulative GPA of 2.75, a major/content GPA of 2.75 and a professional education GPA of 2.75. Biology courses must be passed with a grade of C (2.0) or higher. The remaining courses required for the major and in the professional education core must be completed with a grade of C- or higher for continuance. A professional education GPA of 2.75 is required for continuance. Students must take and pass the Praxis Subject Assessment, Biology content knowledge (formerly Praxis II) prior to or while enrolled in the instructional strategies course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <http://www.odu.edu/success/academic/teacher-education/placement/background-checks> (<http://www.odu.edu/success/academic/teacher-education/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs are advised to complete

this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Virginia Board of Education Prescribed Assessments for Licensure

Praxis Subject Assessment, Biology content knowledge: (test code: 5236) – passing score of 154 is required

To review more information on the Virginia Board of Education prescribed assessments visit the Office of Clinical Experiences website, www.odu.edu/oce (<http://www.odu.edu/oce/>).

Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the teacher preparation programs in the College of Sciences are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information from their advisors and from the Office of Clinical Experiences website at: www.odu.edu/oce (<http://www.odu.edu/oce/>).

Honors Program in Biology

A. Honors Research

Undergraduates with junior or senior standing and a GPA of 3.00 or better are eligible to participate in Honors Research. After consultation with the CDA (Chief Departmental Advisor), students select a professor who agrees to oversee the research project. Students then enroll in two courses, BIOL 487 and BIOL 488W. The courses may be taken in any sequence: fall-spring, spring-summer, summer-summer, summer-fall. Normally both semesters are required but a student may receive credit for only one semester. The research project, time commitment by the student and the basis for the grade are mutually determined by the student and professor. Because first-semester research results are often preliminary, the grade for BIOL 487 is based on a review paper and/or research proposal, which provides the student with an overview of the field. The second semester is graded on the final research paper and a seminar presented to the honors committee and interested faculty. Professors should encourage students to publish results and present papers at scientific meetings when appropriate. Students should also be urged to apply for funds from agencies that provide seed money to undergraduates. The program director can provide information on scientific societies that sponsor meetings and/or offer small grants. Successful completion of both courses with a C (2.0) or better will allow the student to use BIOL 488W as a lab course in meeting his/her requirements.

B. Bachelor's Degree with Honors in Biological Sciences and Honors Designation for Biology courses

Students maintaining an overall GPA of at least 3.25 and of 3.50 in biology can receive a "Bachelor's Degree with Honors in Biological Sciences" subject to satisfaction of the minimum University standards for the Honors degree and completion of one of the following two options:

Option 1: Successful completion of two semesters of biological research taken as BIOL 487 / BIOL 488W (Honors Research).

Option 2: Successful completion of three upper-division courses in Biological Sciences and achievement of the "Honors" designation in each.

Students petitioning for designation of an upper-division biology course as "Honors" must have a minimum overall GPA of 3.25 and a GPA of at least 3.50 in biology.

To receive the "Honors" designation for a course, students must achieve a final course score of at least 95% or the equivalent of an "A" on the University grade scale.

Faculty are encouraged to assign and work with students on other activities deemed appropriate for an "Honors" course designation and utilize the results of these activities in the assignment of a course grade.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
First Semester		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 162M	Precalculus I	3
BIOL 121N & BIOL 122N		4
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
Credit Hours		14
Second Semester		
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research or Writing, Rhetoric, and Research: Special Topics	3
BIOL 123N & BIOL 124N		4
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1
MATH 205 or MATH 211	Calculus for Life Sciences or Calculus I	3
STEM 103	Foundations of STEM Teaching: An Inquiry-Based Approach	2
Credit Hours		16
Sophomore		
First Semester		
BIOL 291	Ecology	3
BIOL 292	Evolution	3
STAT 130M	Elementary Statistics	3
Oral Communication		3
STEM 201	Knowing and Learning in STEM Education	3
Credit Hours		15
Second Semester		
BIOL 293	Cell Biology	3
BIOL 294	Genetics	3
STEM 202	Classroom Interactions in STEM Education	3
Human Behavior		3
CS 121G or CS 126G or OEAS 130G	Introduction to Information Literacy and Research for Scientists or Honors: Introduction to Information Literacy and Research or Research Skills and Information Literacy for the Natural Sciences	3
Credit Hours		15

Junior

First Semester		
CHEM 211	Organic Chemistry I Lecture	3
BIOL 240 or BIOL 250	Fundamentals of Anatomy and Physiology I or Human Anatomy and Physiology I	4
Literature		3
BIOL 308	Botany	4
Credit Hours		14
Second Semester		
300/400-level Biology elective		4
Select one of the following:		4
OEAS 111N	Physical Geology	
OEAS 112N	Historical Geology	
PHYS 111N	Introductory General Physics	
Philosophy and Ethics		3
Impact of Technology		3
Interpreting the Past		3
Credit Hours		17

Senior

First Semester		
BIOL 468W	Research Methods in Mathematics and Science (C or better required)	3
STEM 401	Project Based Instruction in STEM Education	3
BIOL 307 or BIOL 336	Invertebrate Zoology or Vertebrate Zoology	5
300/400-level Biology elective		3-4
Human Creativity		3
Credit Hours		17-18
Second Semester		
STEM 485	Apprentice Teaching	9
STEM 402	Perspectives on STEM	3
Credit Hours		12
Total Credit Hours		120-121

Language and Culture I & II may be met in high school and are not included in this 4-year plan. Please see requirement details.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/>)

graduate/stromecollegeofbusiness/) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Biology Minor

The minor in biology offers students additional support to their chosen majors, prepares students for post-baccalaureate professional or graduate programs, offers greater job opportunities to graduates, and provides recognition of study in this academic area.

Requirements

BIOL 121N	General Biology I	3
BIOL 122N	General Biology I Lab	1
BIOL 123N	General Biology II	3
BIOL 124N	General Biology II Lab	1
Select a minimum of 12 credit hours of additional biology coursework		12
Total Credit Hours		20

BIOL 121N, BIOL 122N, BIOL 123N and BIOL 124N must be completed as prerequisites and are not included in the calculation of the grade point average for the minor. The 12 credits hours of coursework may include one course (3-4 credits) at the 200-level and the remaining courses (8-9 credits) at the 300-400 level. Courses at the 300-400 level may not include unstructured coursework (experiential learning). For completion of the minor, a student must have a C (2.0) or better in all of the courses designated for the minor excluding prerequisite courses. A minimum of 6 hours of upper-level work must be through courses offered by Old Dominion University.

Chemistry and Biochemistry

Web Site: <http://www.odu.edu/chemistry> (<http://www.odu.edu/chemistry/>)

Craig Bayse, Chair
Kalpana Mahadevan, Chief Departmental Advisor

The Department of Chemistry and Biochemistry offers a program in biochemistry, with optional majors in biochemistry-research and secondary chemistry education (6-12), and an American Chemical Society certified program in chemistry, with optional majors in chemistry-pre-med, chemistry-research, chemical forensic science, and secondary chemistry education (6-12). Chemistry has been called the "central science" because it

makes major contributions to agriculture, biology, electronics, engineering, environmental science, medicine, mineralogy and pharmacology. Either undergraduate degree program gives the student the necessary background for continued academic study at the master's and PhD levels, entry into medical, dental, and pharmacy schools, as well as a career in the chemical industry. Students not only gain an excellent education, but also have many research opportunities available to enrich their understanding of real-world problems. Cooperative arrangements exist with the nearby Eastern Virginia Medical School, NASA Langley Research Center and the Thomas Jefferson National Accelerator Facility.

Preparation for Medically Related Fields

Students seeking careers in pharmacy, medicine, dentistry, or veterinary science are advised to complete a major in a specific discipline. Such students electing either chemistry or biochemistry as their major must meet all of the requirements for the degree of Bachelor of Science in chemistry or biochemistry. In addition, students must complete all of the prerequisite coursework specified for admission into the professional program of their choice. Students should consult the Office of Admissions of such professional programs for specific prerequisite coursework and other entrance requirements. Students are also advised to register with the Prehealth Advisory Committee at Old Dominion University (683-6790).

Advanced Placement

Students who receive a qualifying score on the Advanced Placement of the College Board exam in chemistry may receive credit for introductory chemistry courses. The appropriate credit will be determined after consultation with an advisor. See the equivalency charts on the ODU website at <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>). Students may also refer to the section of this Catalog on Prior Learning Assessment Credit Options at the Undergraduate Level.

Programs

Bachelor of Science Programs

- Biochemistry (BS) (p. 695)
- Biochemistry with a Major in Biochemistry-Research (BS) (p. 696)
- Biochemistry with a Major in Secondary Chemistry Education (6-12) (BS) (p. 699)
- Chemistry (BS) (p. 701)
- Chemistry with a Major in Chemical Forensic Science (BS) (p. 703)
- Chemistry with a Major in Chemistry Pre-Med (BS) (p. 705)
- Chemistry with a Major in Chemistry-Research (BS) (p. 707)
- Chemistry with a Major in Secondary Chemistry Education (6-12) (BS) (p. 709)

Minor Program

- Chemistry Minor (p. 712)

Linked Bachelor's/Master's Degree Programs

The linked BS in biochemistry and the MS in chemistry allows exceptional students to count up to 12 hours of graduate courses toward both a BS degree in biochemistry and an MS degree in chemistry. Students in the combined program must complete Senior Thesis I and II (CHEM 490 and CHEM 499), be accepted into the chemistry master's program, and earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Additional requirements apply; please contact the Chief Departmental Advisor.

Linked Bachelor's/Master's Degree Programs

The linked BS in chemistry and the MS in chemistry allows exceptional students to count up to 12 hours of graduate courses toward both a BS

degree in chemistry and an MS degree in chemistry. Students in the combined program must complete Senior Thesis I and II (CHEM 490 and CHEM 499), be accepted into the chemistry master's program, and earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Additional requirements apply; please contact the Chief Departmental Advisor.

Bachelor of Science Biochemistry (BS)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses

Oral Communication: COMM 101R

Mathematics: MATH 163 required

Information Literacy and Research: satisfied in the major by CHEM 160G

The Nature of Science: BIOL 121N, BIOL 122N, BIOL 123N, BIOL 124N

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department), or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Biochemistry Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6

Required Chemistry Courses

CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N or CHEM 125	Foundations of Chemistry II Laboratory Foundations of Chemistry II Lab with Introduction to Chemical Research	1-2
CHEM 160G	Introduction to Chemistry and Biochemistry Research and Careers	3
CHEM 211	Organic Chemistry I Lecture	3
CHEM 212	Organic Chemistry I Laboratory	2
CHEM 213	Organic Chemistry II Lecture	3
CHEM 214 or CHEM 216	Organic Chemistry II Laboratory Advanced Organic Chemistry Laboratory	2
CHEM 321 & CHEM 322	Analytical Chemistry Lecture and Analytical Chemistry Laboratory	5
CHEM 331 & CHEM 333	Physical Chemistry Lecture I and Physical Chemistry Lecture II	6
CHEM 441	Biochemistry Lecture	3
CHEM 442W	Biochemistry Laboratory	4
CHEM 443	Intermediate Biochemistry	3
CHEM 485	Chemistry and Biochemistry Seminar	1

Other Required courses

MATH 211	Calculus I	4
MATH 212	Calculus II	4
PHYS 231N & PHYS 232N	University Physics I and University Physics II	8
BIOL 293	Cell Biology	3
BIOL 294	Genetics	3

Total Credit Hours **109-116**

Biochemistry majors must have a C or better in all courses required for the major, including prerequisite courses, and must complete a minimum of 12 credits in upper-level (300/400) chemistry courses at Old Dominion University. Written permission by the chief departmental advisor or chair is required prior to taking upper-level chemistry courses at other institutions.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

ACS-Certified Degree

Biochemistry majors can attain an ACS-certified degree for chemistry content if they also complete the following.

CHEM 332W	Experimental Physical Chemistry I	2
CHEM 351	Inorganic Chemistry	3
Select two of the following lecture electives:		6-7
CHEM 411	Natural Products Chemistry in the Caribbean	
CHEM 415	Intermediate Organic Chemistry	
CHEM 421	Instrumental Analysis Lecture	

CHEM 449	Environmental Chemistry	
CHEM 451	Advanced Inorganic Chemistry	
Select two of the following laboratory electives:		4-5
CHEM 334W	Experimental Physical Chemistry II	
CHEM 352	Inorganic Chemistry Laboratory	
CHEM 422	Instrumental Analysis Laboratory	
Total Credit Hours		15-17

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 163	Precalculus II	3
CHEM 121N and CHEM 122N		4
BIOL 121N and BIOL 122N		4
CHEM 160G	Introduction to Chemistry and Biochemistry Research and Careers	3
Credit Hours		17
Spring		
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 211	Calculus I	4
CHEM 123N and CHEM 124N or CHEM 125		4-5
BIOL 123N and BIOL 124N		4
Credit Hours		15-16
Sophomore		
Fall		
CHEM 211 and CHEM 212		5
MATH 212	Calculus II	4
COMM 101R	Public Speaking	3
Elective or Language and Culture I (May be waived; See requirement details)		3
Credit Hours		15
Spring		
CHEM 213 AND CHEM 214 or CHEM 216		5
Elective or Language and Culture II (May be waived; See requirement details)		3
Human Behavior		3
Elective		3
Credit Hours		14
Junior		
Fall		
CHEM 321 and CHEM 322		5
PHYS 231N	University Physics I	4

CHEM 441	Biochemistry Lecture	3
BIOL 293	Cell Biology	3
Credit Hours		15
Spring		
CHEM 443	Intermediate Biochemistry	3
PHYS 232N	University Physics II	4
CHEM 442W	Biochemistry Laboratory (C or better required)	4
Elective		2
Credit Hours		13
Senior		
Fall		
CHEM 331	Physical Chemistry Lecture I	3
BIOL 294	Genetics	3
Interpreting the Past		3
Philosophy and Ethics		3
Upper-Division General Education Course (Option D)		3
Credit Hours		15
Spring		
CHEM 485	Chemistry and Biochemistry Seminar	1
CHEM 333	Physical Chemistry Lecture II	3
Impact of Technology		3
Literature		3
Upper-Division General Education Course (Option D)		3
Human Creativity		3
Credit Hours		16
Total Credit Hours		120-121

Linked Bachelor's/Master's Degree Programs

The linked BS in biochemistry and the MS in chemistry allows exceptional students to count up to 12 hours of graduate courses toward both a BS degree in biochemistry and an MS degree in chemistry. Students in the combined program must complete Senior Thesis I and II (CHEM 490 and CHEM 499), be accepted into the chemistry master's program, and earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Additional requirements apply; please contact the Chief Departmental Advisor.

Bachelor of Science Biochemistry with a Major in Biochemistry-Research (BS) Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6

Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses

Oral Communication: COMM 101R

Mathematics: MATH 163

Information Literacy and Research: satisfied in the major by CHEM 160G

The Nature of Science: BIOL 121N, BIOL 122N, BIOL 123N, BIOL 124N

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department), or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Biochemistry Core

In addition to completing the University's lower-division general education requirements and upper-division general education requirements, a biochemistry major must complete the following courses.

Required Chemistry Courses

CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1-2
or CHEM 125	Foundations of Chemistry II Lab with Introduction to Chemical Research	
CHEM 160G	Introduction to Chemistry and Biochemistry Research and Careers	3

CHEM 211	Organic Chemistry I Lecture	3
CHEM 212	Organic Chemistry I Laboratory	2
CHEM 213	Organic Chemistry II Lecture	3
CHEM 214	Organic Chemistry II Laboratory	2
or CHEM 216	Advanced Organic Chemistry Laboratory	
CHEM 321 & CHEM 322	Analytical Chemistry Lecture and Analytical Chemistry Laboratory	5
CHEM 331 & CHEM 333	Physical Chemistry Lecture I and Physical Chemistry Lecture II	6
CHEM 441	Biochemistry Lecture	3
CHEM 442W	Biochemistry Laboratory	4
CHEM 443	Intermediate Biochemistry	3
CHEM 485	Chemistry and Biochemistry Seminar	1

Other Required courses

MATH 211	Calculus I	4
MATH 212	Calculus II	4
PHYS 231N & PHYS 232N	University Physics I and University Physics II	8
BIOL 293	Cell Biology	3
BIOL 294	Genetics	3

Total Credit Hours **65-66**

Biochemistry majors must have a C or better in all courses required for the major, including prerequisite courses, and must complete a minimum of 12 credits in upper-level (300/400) chemistry courses at Old Dominion University. Written permission by the chief departmental advisor or chair is required prior to taking upper-level chemistry courses at other institutions.

Research Major

Students with an interest in pursuing biochemical research after graduation or in graduate school or those seeking a deeper understanding of biochemical research and applications may pursue a Biochemistry-Research major. Courses taken for the research concentration will substitute for courses in the regular curriculum; please consult the Chief Departmental Advisor for specific information on substitutions. Additionally, all regular BS-Biochemistry degree requirements must be met (with the exception of approved substitutions).

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6

Biochemistry Core

Complete the biochemistry core	65-66

Chemistry-Research Major

CHEM 490	Senior Thesis I	1
CHEM 499	Senior Thesis II	2

Select two of the following research-oriented courses: 3-5

CHEM 125	Foundations of Chemistry II Lab with Introduction to Chemical Research
CHEM 216	Advanced Organic Chemistry Laboratory
CHEM 497	Independent Study
CHEM 498	Independent Study

Total Credit Hours **115-124**

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

Additional Requirements and Information

ACS-Certified Degree

Biochemistry majors can attain an ACS-certified degree for chemistry content if they also complete the following.

CHEM 332W	Experimental Physical Chemistry I	2
CHEM 351	Inorganic Chemistry	3
Select two of the following lecture electives:		6
CHEM 411	Natural Products Chemistry in the Carribean	
CHEM 415	Intermediate Organic Chemistry	
CHEM 421	Instrumental Analysis Lecture	
CHEM 449	Environmental Chemistry	
CHEM 451	Advanced Inorganic Chemistry	
Select two of the following laboratory electives:		4
CHEM 334W	Experimental Physical Chemistry II	
CHEM 352	Inorganic Chemistry Laboratory	
CHEM 422	Instrumental Analysis Laboratory	
Total Credit Hours		15

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 163	Precalculus II	3
CHEM 121N and CHEM 122N		4
BIOL 121N and BIOL 122N		4
CHEM 160G	Introduction to Chemistry and Biochemistry Research and Careers	3
Credit Hours		17
Spring		
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 211	Calculus I	4
CHEM 123N and CHEM 124N or CHEM 125		4-5
BIOL 123N and BIOL 124N		4
Credit Hours		15-16
Sophomore		
Fall		
CHEM 211 and CHEM 212		5
MATH 212	Calculus II	4
COMM 101R	Public Speaking	3
Elective or Language and Culture I (May be waived; See requirement details)		3
Credit Hours		15
Spring		
CHEM 213 AND CHEM 214 or CHEM 216		5
Elective or Language and Culture II (May be waived; See requirement details)		3
Human Behavior		3

Elective		3
Credit Hours		14
Junior		
Fall		
CHEM 321 and CHEM 322		5
PHYS 231N	University Physics I	4
CHEM 441	Biochemistry Lecture	3
BIOL 293	Cell Biology	3
Credit Hours		15
Spring		
CHEM 443	Intermediate Biochemistry	3
PHYS 232N	University Physics II	4
CHEM 442W	Biochemistry Laboratory (C or better required)	4
Elective		2
Credit Hours		13
Senior		
Fall		
CHEM 331	Physical Chemistry Lecture I	3
BIOL 294	Genetics	3
Interpreting the Past		3
Philosophy and Ethics		3
Upper-Division General Education Course (Option D)		3
Credit Hours		15
Spring		
CHEM 485	Chemistry and Biochemistry Seminar	1
CHEM 333	Physical Chemistry Lecture II	3
Impact of Technology		3
Literature		3
Upper-Division General Education Course (Option D)		3
Human Creativity		3
Credit Hours		16
Total Credit Hours		120-121

Linked Bachelor's/Master's Degree Programs

The linked BS in biochemistry and the MS in chemistry allows exceptional students to count up to 12 hours of graduate courses toward both a BS degree in biochemistry and an MS degree in chemistry. Students in the combined program must complete Senior Thesis I and II (CHEM 490 and CHEM 499), be accepted into the chemistry master's program, and earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Additional requirements apply; please contact the Chief Departmental Advisor.

Bachelor of Science Biochemistry with a Major in Secondary Chemistry Education (6-12) (BS)

Biochemistry with a Major in Secondary Chemistry Education (6-12)

This program leads to eligibility for teacher licensure in Virginia and is available only to individuals holding a baccalaureate degree or completing requirements for a Bachelor of Science degree in biochemistry. Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the teacher preparation programs in the College of Sciences are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information from their advisors and the Office of Clinical Experiences website at <https://www.odu.edu/oce> (<https://www.odu.edu/oce/>).

Admission

Students must first declare the biochemistry, secondary chemistry education (6-12) as their major with the chemistry departmental advisor. All students must apply for and be admitted into the approved biochemistry, secondary chemistry education program. Students must meet the required criteria for admission by earning the minimum required grade point averages (GPA).

Required grade point averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required - all chemistry courses must be passed with a grade of C (2.0) or above and all other science content courses must be passed with a grade of C- or higher.
- A professional education GPA of 2.75 is required – all professional education courses must be passed with a grade of C- or higher.

Although students may enroll in a limited number of education courses, students must be admitted into the approved biochemistry teacher preparation program prior to enrolling in any instructional strategies practicum education course. Students must also meet with an education advisor in the Office of Clinical Experiences.

Continuance

Students must maintain a cumulative GPA of 2.75, a major/content GPA of 2.75 and a professional education GPA of 2.75. Chemistry courses must be passed with a grade of C (2.0) or higher. The remaining courses required for the major and in the professional education core must be completed with a grade of C- or higher for continuance. A professional education GPA of 2.75 is required for continuance. Students must take and pass the Praxis Subject Assessment, Chemistry content knowledge (formerly Praxis II) prior to or while enrolled in the instructional strategies course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <https://www.odu.edu/clinical-experiences/placement/background-checks> (<https://www.odu.edu/clinical-experiences/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs

are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Virginia Board of Education Prescribed Assessments for Licensure

Praxis Subject Assessment, Chemistry content knowledge (test code: 5246) – passing score of 146 is required.

To review more information on the Virginia Board of Education prescribed assessments visit the Office of Clinical Experiences website at <https://www.odu.edu/oce> (<https://www.odu.edu/oce/>).

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses

Oral Communication: COMM 101R

Mathematics: MATH 163

Information Literacy and Research: satisfied in the major by CHEM 160G

The Nature of Science: BIOL 121N & BIOL 122N, BIOL 123N & BIOL 124N

Human Behavior: GEOG 101S

Additional hours may be required to meet the foreign language requirement.

Upper-Division General Education

The professional education core satisfies the Upper-Division General Education requirement.

Requirements for Graduation

Requirements for graduation include completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better, completion of the Senior Assessment, a minimum cumulative 2.75 GPA, in the major area, and in the professional education core, with no grade less than a C in the major and C- in the professional education core; successful completion of the Teacher Candidate Internship and a minimum of 129 credit hours, which must include both a minimum of 32 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University. Note that a C

(2.0) must be earned in all chemistry courses used to satisfy departmental requirements.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Biochemistry Core

In addition to completing the University's lower-division general education requirements and upper-division general education requirements, a biochemistry, secondary chemistry education major seeking teacher licensure must complete the following courses.

Required Chemistry courses		
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1-2
or CHEM 125	Foundations of Chemistry II Lab with Introduction to Chemical Research	
CHEM 160G	Introduction to Chemistry and Biochemistry Research and Careers	3
CHEM 211	Organic Chemistry I Lecture	3
CHEM 212	Organic Chemistry I Laboratory	2
CHEM 213	Organic Chemistry II Lecture	3
CHEM 214	Organic Chemistry II Laboratory	2
or CHEM 216	Advanced Organic Chemistry Laboratory	
CHEM 321 & CHEM 322	Analytical Chemistry Lecture and Analytical Chemistry Laboratory	5
CHEM 331	Physical Chemistry Lecture I	3
CHEM 333	Physical Chemistry Lecture II	3
CHEM 441	Biochemistry Lecture	3
CHEM 442W	Biochemistry Laboratory	4
CHEM 443	Intermediate Biochemistry	3
CHEM 485	Chemistry and Biochemistry Seminar	1
Other Required courses		
MATH 211	Calculus I	4
MATH 212	Calculus II	4
BIOL 293	Cell Biology	3
BIOL 294	Genetics	3
PHYS 231N	University Physics I	4
PHYS 232N	University Physics II	4
Total Credit Hours		65-66

Biochemistry majors must have a C or better in all courses required for the major, including prerequisite courses, and must complete a minimum of 12 credits in upper level (300/400) chemistry courses at Old Dominion University. Written permission by the chief departmental advisor or chair is required prior to taking upper-level chemistry courses at other institutions.

Biochemistry with a Major in Secondary Chemistry Education (6-12)

General Education		
Complete lower-division requirements		38-44
Complete upper-division requirements (met by the professional education core)		
Biochemistry Core		
Complete biochemistry core		65-66
Professional Education Core Courses and Requirements		
STEM 103	Foundations of STEM Teaching: An Inquiry-Based Approach	2

STEM 201	Knowing and Learning in STEM Education	3
STEM 202	Classroom Interactions in STEM Education	3
STEM 401	Project Based Instruction in STEM Education	3
STEM 402	Perspectives on STEM	3
STEM 485	Apprentice Teaching	9
CHEM 468	Research Methods in Mathematics and Science	3
Total Credit Hours		129-136

Degree Program Guide

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 163	Precalculus II	3
CHEM 121N and CHEM 122N		4
BIOL 121N and BIOL 122N		4
CHEM 160G	Introduction to Chemistry and Biochemistry Research and Careers	3
Credit Hours		17
Spring		
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 211	Calculus I	4
CHEM 123N and CHEM 124N or CHEM 125		4-5
BIOL 123N and BIOL 124N		4
STEM 103	Foundations of STEM Teaching: An Inquiry-Based Approach	2
Credit Hours		17-18
Sophomore		
Fall		
CHEM 211 and CHEM 212		5
MATH 212	Calculus II	4
COMM 101R	Public Speaking	3
STEM 201	Knowing and Learning in STEM Education	3
Human Creativity		3
Credit Hours		18
Spring		
CHEM 213 AND CHEM 214 or CHEM 216		5
STEM 202	Classroom Interactions in STEM Education	3
Literature		3
Philosophy and Ethics		3
Credit Hours		14
Junior		
Fall		
CHEM 321 and CHEM 322		5

PHYS 231N	University Physics I	4
BIOL 293	Cell Biology	3
STEM 401	Project Based Instruction in STEM Education	3
Interpreting the Past		3
Credit Hours		18
Spring		
CHEM 441	Biochemistry Lecture	3
PHYS 232N	University Physics II	4
CHEM 442W	Biochemistry Laboratory (C or better required))	4
Human Behavior: GEOG 101S		3
STEM 402	Perspectives on STEM	3
Credit Hours		17
Senior		
Fall		
CHEM 331	Physical Chemistry Lecture I	3
CHEM 443	Intermediate Biochemistry	3
BIOL 294	Genetics	3
CHEM 468	Research Methods in Mathematics and Science	3
Impact of Technology		3
Credit Hours		15
Spring		
CHEM 485	Chemistry and Biochemistry Seminar	1
CHEM 333	Physical Chemistry Lecture II	3
STEM 485	Apprentice Teaching	9
Credit Hours		13
Total Credit Hours		129-130

Language and Culture I & II may be met in high school and are not included in this 4-year plan. Please see requirement details.

Linked Bachelor's/Master's Degree Programs

The linked BS in biochemistry and the MS in chemistry allows exceptional students to count up to 12 hours of graduate courses toward both a BS degree in biochemistry and an MS degree in chemistry. Students in the combined program must complete Senior Thesis I and II (CHEM 490 and CHEM 499), be accepted into the chemistry master's program, and earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Additional requirements apply; please contact the Chief Departmental Advisor.

Bachelor of Science Chemistry (BS)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3

Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses

Oral Communication: COMM 101R

Mathematics: MATH 163

Information Literacy and Research: satisfied in the major by CHEM 160G

The Nature of Science: PHYS 231N-PHYS 232N

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department), or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Chemistry Major

General Education

Complete lower-division requirements	41-47
Complete upper-division requirements (minimum of 6 credit hours)	6

Required Courses

CHEM 121N	Foundations of Chemistry I Lecture (cannot earn credit for both 121N and 105N)	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1-2

or CHEM 125	Foundations of Chemistry II Lab with Introduction to Chemical Research	
CHEM 160G	Introduction to Chemistry and Biochemistry Research and Careers	3
CHEM 211	Organic Chemistry I Lecture	3
CHEM 212	Organic Chemistry I Laboratory	2
CHEM 213	Organic Chemistry II Lecture	3
CHEM 214	Organic Chemistry II Laboratory	2
or CHEM 216	Advanced Organic Chemistry Laboratory	
CHEM 321 & CHEM 322	Analytical Chemistry Lecture and Analytical Chemistry Laboratory	5
CHEM 351	Inorganic Chemistry	3
CHEM 331	Physical Chemistry Lecture I	3
CHEM 332W	Experimental Physical Chemistry I	2
CHEM 333	Physical Chemistry Lecture II	3
CHEM 334W	Experimental Physical Chemistry II	2
CHEM 421 & CHEM 422	Instrumental Analysis Lecture and Instrumental Analysis Laboratory	6
CHEM 441	Biochemistry Lecture	3
CHEM 485	Chemistry and Biochemistry Seminar	1
Select two CHEM Electives from the following:		6
CHEM 415	Intermediate Organic Chemistry	
CHEM 439	Introduction to Pharmaceutical Chemistry	
CHEM 443	Intermediate Biochemistry	
CHEM 449	Environmental Chemistry	
CHEM 451	Advanced Inorganic Chemistry	
CHEM 453	Essentials of Toxicology	
Select one CHEM Laboratory from the following:		2-4
CHEM 352	Inorganic Chemistry Laboratory	
CHEM 442W	Biochemistry Laboratory	
Other required courses		
MATH 211	Calculus I	4
MATH 212	Calculus II	4
Total Credit Hours		112-121

Chemistry majors must have a C or better in all courses required for the major, including prerequisite courses, and must complete a minimum of 12 credits in upper-level (300/400) chemistry courses at Old Dominion University. Written permission by the chief departmental advisor or chair is required prior to taking upper-level chemistry courses at other institutions.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

Honors in Chemistry

The honors program provides qualified students the opportunity for supervised individual study in their areas of interest. Admission to the program requires a cumulative GPA of 3.25 or higher and a GPA of 3.50 or higher in the major. Students must take two upper-division courses designated by the department to be honors courses. These are termed "Contract Honors Courses." A description of the procedures for these contract courses is found in the Honors College section of this Catalog.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
CHEM 121N and CHEM 122N		4
MATH 163	Precalculus II	3
ENGL 110C	English Composition (Grade of C or better required)	3
CHEM 160G	Introduction to Chemistry and Biochemistry Research and Careers	3
Credit Hours		13
Spring		
CHEM 123N AND CHEM 124N or CHEM 125		4-5
MATH 211	Calculus I	4
ENGL 211C or ENGL 231C (Grade of C or better required)		3
Philosophy and Ethics		3
Credit Hours		14-15
Sophomore		
Fall		
CHEM 211 and CHEM 212		5
MATH 212	Calculus II	4
PHYS 231N	University Physics I	4
Human Creativity		3
Credit Hours		16
Spring		
CHEM 213 AND CHEM 214 or CHEM 216		5
CHEM 321 and CHEM 322		5
PHYS 232N	University Physics II	4
Elective		2
Credit Hours		16
Junior		
Fall		
CHEM 331	Physical Chemistry Lecture I	3
CHEM 332W	Experimental Physical Chemistry I (C or better required)	2
CHEM 351	Inorganic Chemistry	3
CHEM 441	Biochemistry Lecture	3
CHEM 352 or CHEM 442W		2-4
Impact of Technology		3
Credit Hours		16-18
Spring		
CHEM 333	Physical Chemistry Lecture II	3
CHEM 334W	Experimental Physical Chemistry II	2
CHEM 415 or CHEM 439 or CHEM 443 or CHEM 451		3
COMM 101R	Public Speaking	3
Literature		3
Credit Hours		14
Senior		
Fall		
CHEM 415 or CHEM 439 or CHEM 443 or CHEM 451		3

Interpreting the Past	3
Human Behavior	3
Elective or Language & Culture I (May be waived; See requirement details)	3
Upper-Division General Education Course (Option D)	3
Credit Hours	15
Spring	
CHEM 421 and CHEM 422	6
CHEM 485	Chemistry and Biochemistry Seminar
Upper-Division General Education Course (Option D)	3
Elective or Language and Culture II (May be waived: See requirement details)	3
Elective	3
Credit Hours	16
Total Credit Hours	120-123

Linked Bachelor's/Master's Degree Programs

The linked BS in chemistry and the MS in chemistry allows exceptional students to count up to 12 hours of graduate courses toward both a BS degree in chemistry and an MS degree in chemistry. Students in the combined program must complete Senior Thesis I and II (CHEM 490 and CHEM 499), be accepted into the chemistry master's program, and earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Additional requirements apply; please contact the Chief Departmental Advisor.

Bachelor of Science Chemistry with a Major in Chemical Forensic Science (BS)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses

Oral Communication: COMM 101R

Mathematics: STAT 130M required

Information Literacy and Research: satisfied in the major by CHEM 160G

Human Behavior: CRJS 215S required

Philosophy and Ethics: PHIL 345E recommended

The Nature of Science: PHYS 231N-PHYS 232N required

Impact of Technology: satisfied in the major by CHEM 320T

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department), or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Chemistry Core

Required Courses

CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1-2
or CHEM 125	Foundations of Chemistry II Lab with Introduction to Chemical Research	
CHEM 160G	Introduction to Chemistry and Biochemistry Research and Careers	3
CHEM 211	Organic Chemistry I Lecture	3
CHEM 212	Organic Chemistry I Laboratory	2
CHEM 213	Organic Chemistry II Lecture	3
CHEM 214	Organic Chemistry II Laboratory	2
or CHEM 216	Advanced Organic Chemistry Laboratory	
CHEM 321 & CHEM 322	Analytical Chemistry Lecture and Analytical Chemistry Laboratory	5
CHEM 331 & CHEM 332W	Physical Chemistry Lecture I and Experimental Physical Chemistry I *	5
CHEM 421 & CHEM 422	Instrumental Analysis Lecture and Instrumental Analysis Laboratory	6
CHEM 441	Biochemistry Lecture	3

Other Required Courses

BIOL 121N & BIOL 122N	General Biology I and General Biology I Lab	4

BIOL 123N & BIOL 124N	General Biology II and General Biology II Lab	4
MATH 211	Calculus I	4
MATH 212	Calculus II	4
Total Credit Hours		56-57

* Grade of C or better required in "W" courses if using to meet the University Writing Requirement (minimum of 3 credits total in "W" coursework required).

Chemical Forensic Science Major

General Education

Complete lower-division requirements	35-41
Complete upper-division requirements	6

Chemistry Core

Complete chemistry core	56-57

Chemical Forensic Science Major

CHEM 320T	Survey of Forensic Science	3
CHEM 325	Forensic Biochemistry and Microscopy with Laboratory	3
CHEM 359	Forensic Chemistry with Laboratory	3
CHEM 459	Advanced Forensic Chemistry and Crime Scene Investigation	3
CHEM 461	Forensic Professional Practice	3
CHEM 498 or CHEM 369	Independent Study Chemistry Practicum	2-3
CHEM 442W or CHEM 334W	Biochemistry Laboratory * Experimental Physical Chemistry II	2-4
CRJS 222	The Criminal Justice System	3

Total Credit Hours		119-129

* Grade of C or better required in "W" courses if using to meet the University Writing Requirement (minimum of 3 credits total in "W" coursework required).

Chemistry majors must have a C or better in all courses required for the major, including prerequisite courses, and must complete a minimum of 12 credits in upper-level (300/400) chemistry courses at Old Dominion University. Written permission by the chief departmental advisor or chair is required prior to taking upper-level chemistry courses at other institutions.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

Honors in Chemistry

The honors program provides qualified students the opportunity for supervised individual study in their areas of interest. Admission to the program requires a cumulative GPA of 3.25 or higher and a GPA of 3.50 or higher in the major. Students must take two upper-division courses designated by the department to be honors courses. These are termed "Contract Honors Courses." A description of the procedures for these contract courses is found in the Honors College section of this Catalog.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
Literature		3
CHEM 160G	Introduction to Chemistry and Biochemistry Research and Careers	3
CRJS 215S or CRJS 226S	Introduction to Criminology or Honors: Introduction to Criminology	3
Credit Hours		16

Spring

CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N or CHEM 125	Foundations of Chemistry II Laboratory or Foundations of Chemistry II Lab with Introduction to Chemical Research	1-2
MATH 211	Calculus I	4
COMM 101R	Public Speaking	3
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (Grade of C or better required) or Writing, Rhetoric, and Research: Special Topics	3
CRJS 222	The Criminal Justice System	3
Credit Hours		17-18

Sophomore

Fall

CHEM 211	Organic Chemistry I Lecture	3
CHEM 212	Organic Chemistry I Laboratory	2
MATH 212	Calculus II	4
BIOL 121N	General Biology I	3
BIOL 122N	General Biology I Lab	1
CHEM 320T	Survey of Forensic Science	3

Credit Hours		16

Spring

CHEM 213	Organic Chemistry II Lecture	3
CHEM 214 or CHEM 216	Organic Chemistry II Laboratory or Advanced Organic Chemistry Laboratory	2
STAT 130M	Elementary Statistics	3
BIOL 123N	General Biology II	3
BIOL 124N	General Biology II Lab	1
Upper Division General Education Requirement		3

Credit Hours		15

Junior

Fall

CHEM 441	Biochemistry Lecture	3

CHEM 321	Analytical Chemistry Lecture	3
CHEM 322	Analytical Chemistry Laboratory	2
CHEM 325	Forensic Biochemistry and Microscopy with Laboratory	3
PHYS 231N	University Physics I	4
Credit Hours		15
Spring		
CHEM 359	Forensic Chemistry with Laboratory	3
CHEM 421	Instrumental Analysis Lecture	3
CHEM 422	Instrumental Analysis Laboratory	3
PHYS 232N	University Physics II	4
Philosophy and Ethics (PHIL 345E recommended)		3
Credit Hours		16
Senior		
Fall		
CHEM 331	Physical Chemistry Lecture I	3
CHEM 332W	Experimental Physical Chemistry I *	2
CHEM 334W or CHEM 442W	Experimental Physical Chemistry II * or Biochemistry Laboratory	2-4
CHEM 498 or CHEM 369	Independent Study or Chemistry Practicum	2-3
Upper Division General Education Requirement		3
Elective (only if needed)		1
Credit Hours		13-16
Spring		
CHEM 459	Advanced Forensic Chemistry and Crime Scene Investigation	3
Interpreting the Past		3
Human Creativity		3
CHEM 461	Forensic Professional Practice	3
Language and Culture (May be waived; See requirement details)		0-6
Credit Hours		12-18
Total Credit Hours		120-130

* Grade of C or better required in "W" courses if using to meet the University Writing Requirement (minimum of 3 credits total in "W" coursework required).

Linked Bachelor's/Master's Degree Programs

The linked BS in chemistry and the MS in chemistry allows exceptional students to count up to 12 hours of graduate courses toward both a BS degree in chemistry and an MS degree in chemistry. Students in the combined program must complete Senior Thesis I and II (CHEM 490 and CHEM 499), be accepted into the chemistry master's program, and earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Additional requirements apply; please contact the Chief Departmental Advisor.

Bachelor of Science Chemistry with a Major in Chemistry Pre-Med (BS) Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses

Oral Communication: COMM 101R

Mathematics: MATH 163 or MATH 205 (recommended) and STAT 130M required

Information Literacy and Research: satisfied in the major by CHEM 160G

The Nature of Science: PHYS 111N-PHYS 112N required

Human Behavior: SOC 201S required

Philosophy and Ethics: PHIL 345E required

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department), or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.

- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Chemistry Core

Required Courses

CHEM 121N	Foundations of Chemistry I Lecture (cannot earn credit for both 121N and 105N)	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N or CHEM 125	Foundations of Chemistry II Laboratory Foundations of Chemistry II Lab with Introduction to Chemical Research	1-2
CHEM 160G	Introduction to Chemistry and Biochemistry Research and Careers	3
CHEM 211	Organic Chemistry I Lecture	3
CHEM 212	Organic Chemistry I Laboratory	2
CHEM 213	Organic Chemistry II Lecture	3
CHEM 214 or CHEM 216	Organic Chemistry II Laboratory Advanced Organic Chemistry Laboratory	2
CHEM 321 & CHEM 322	Analytical Chemistry Lecture and Analytical Chemistry Laboratory	5
CHEM 351	Inorganic Chemistry	3
CHEM 421 & CHEM 422	Instrumental Analysis Lecture and Instrumental Analysis Laboratory	6
CHEM 441	Biochemistry Lecture	3
CHEM 442W	Biochemistry Laboratory	4
CHEM 485	Chemistry and Biochemistry Seminar	1
Select two CHEM Electives from the following:		6
CHEM 415	Intermediate Organic Chemistry	
CHEM 439	Introduction to Pharmaceutical Chemistry	
CHEM 443	Intermediate Biochemistry	
CHEM 449	Environmental Chemistry	
CHEM 451	Advanced Inorganic Chemistry	
CHEM 453	Essentials of Toxicology	

Total Credit Hours **49-50**

Chemistry Pre-Med Major

Students who perform well in the life sciences will have the option of taking classes to prepare them for medical school, while also having a multitude of career options, post-graduation with chemical instrumentation experience. The chemistry pre-med major offers training that is directly applicable to medical school curricula, making students attractive applicants for pre-health-related programs. Some courses for the pre-med major will substitute for courses in the regular curriculum. Please contact the Chief Departmental Advisor.

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6

Chemistry Core

Complete chemistry core	49-50

Chemistry Pre-Med Major

BIOL 121N	General Biology I	3
BIOL 122N	General Biology I Lab	1
BIOL 123N	General Biology II	3
BIOL 124N	General Biology II Lab	1
BIOL 250	Human Anatomy and Physiology I	4
BIOL 251	Human Anatomy and Physiology II	4

BIOL 293	Cell Biology	3
BIOL 294	Genetics	3
PSYC 201S	Introduction to Psychology	3

Total Credit Hours **118-125**

Chemistry majors must have a C or better in all courses required for the major, including prerequisite courses, and must complete a minimum of 12 credits in upper-level (300/400) chemistry courses at Old Dominion University. Written permission by the chief departmental advisor or chair is required prior to taking upper-level chemistry courses at other institutions.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

Honors in Chemistry

The honors program provides qualified students the opportunity for supervised individual study in their areas of interest. Admission to the program requires a cumulative GPA of 3.25 or higher and a GPA of 3.50 or higher in the major. Students must take two upper-division courses designated by the department to be honors courses. These are termed "Contract Honors Courses." A description of the procedures for these contract courses is found in the Honors College section of this Catalog.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
CHEM 121N and CHEM 122N		4
BIOL 121N	General Biology I	3
BIOL 122N	General Biology I Lab	1
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 205 or MATH 163	Calculus for Life Sciences (recommended) or Precalculus II	3
CHEM 160G	Introduction to Chemistry and Biochemistry Research and Careers	3
Credit Hours		17
Spring		
CHEM 123N and CHEM 124N or CHEM 125		4-5
BIOL 123N	General Biology II	3
BIOL 124N	General Biology II Lab	1
STAT 130M	Elementary Statistics	3
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research (C or better required)	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics (C or better required)	
Credit Hours		14-15
Sophomore		
Fall		
CHEM 211 and CHEM 212		5
PHYS 111N	Introductory General Physics	4

BIOL 293	Cell Biology	3
PSYC 201S	Introduction to Psychology	3
Credit Hours		15
Spring		
CHEM 213 AND CHEM 214 or CHEM 216		5
PHYS 112N	Introductory General Physics	4
BIOL 294	Genetics	3
SOC 201S	Introduction to Sociology (meets Human Behavior)	3
Credit Hours		15
Junior		
Fall		
BIOL 250	Human Anatomy and Physiology I	4
CHEM 441	Biochemistry Lecture	3
CHEM 321	Analytical Chemistry Lecture	3
CHEM 322	Analytical Chemistry Laboratory	2
CHEM 351	Inorganic Chemistry	3
Language & Culture I (May be waived; See requirement details)		0-3
Credit Hours		15-18
Spring		
BIOL 251	Human Anatomy and Physiology II	4
CHEM 442W	Biochemistry Laboratory	4
COMM 101R	Public Speaking	3
Pre-Med Elective		3
Language & Culture I (May be waived; See requirement details)		0-3
Credit Hours		14-17
Senior		
Fall		
CHEM 421 and CHEM 422		6
PHIL 345E	Bioethics (meets Philosophy and Ethics)	3
Interpreting the Past		3
Human Creativity		3
Credit Hours		15
Spring		
CHEM 485	Chemistry and Biochemistry Seminar	1
Impact of Technology		3
Literature		3
Upper-Division General Education Course (Option D)		3
Upper-Division General Education Course (Option D)		3
CHEM elective		2-3
Credit Hours		15-16
Total Credit Hours		120-128

Linked Bachelor's/Master's Degree Programs

The linked BS in chemistry and the MS in chemistry allows exceptional students to count up to 12 hours of graduate courses toward both a BS degree in chemistry and an MS degree in chemistry. Students in the combined program must complete Senior Thesis I and II (CHEM 490

and CHEM 499), be accepted into the chemistry master's program, and earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Additional requirements apply; please contact the Chief Departmental Advisor.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Chemistry with a Major in Chemistry-Research (BS)

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6

Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses

Oral Communication: COMM 101R

Mathematics: MATH 163

Information Literacy and Research: satisfied in the major by CHEM 160G

The Nature of Science: PHYS 231N-PHYS 232N required

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department), or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Chemistry Core

Required Courses

CHEM 121N	Foundations of Chemistry I Lecture (cannot earn credit for both 121N and 105N)	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1-2
or CHEM 125	Foundations of Chemistry II Lab with Introduction to Chemical Research	
CHEM 160G	Introduction to Chemistry and Biochemistry Research and Careers	3
CHEM 211	Organic Chemistry I Lecture	3
CHEM 212	Organic Chemistry I Laboratory	2

CHEM 213	Organic Chemistry II Lecture	3
CHEM 214 or CHEM 216	Organic Chemistry II Laboratory Advanced Organic Chemistry Laboratory	2
CHEM 321 & CHEM 322	Analytical Chemistry Lecture and Analytical Chemistry Laboratory	5
CHEM 351	Inorganic Chemistry	3
CHEM 331	Physical Chemistry Lecture I	3
CHEM 332W	Experimental Physical Chemistry I	2
CHEM 333	Physical Chemistry Lecture II	3
CHEM 334W	Experimental Physical Chemistry II	2
CHEM 421 & CHEM 422	Instrumental Analysis Lecture and Instrumental Analysis Laboratory	6
CHEM 441	Biochemistry Lecture	3
CHEM 485	Chemistry and Biochemistry Seminar	1
Select two CHEM Electives from the following:		6
CHEM 415	Intermediate Organic Chemistry	
CHEM 439	Introduction to Pharmaceutical Chemistry	
CHEM 443	Intermediate Biochemistry	
CHEM 449	Environmental Chemistry	
CHEM 451	Advanced Inorganic Chemistry	
CHEM 453	Essentials of Toxicology	
Select one CHEM Laboratory from the following:		2-4
CHEM 352	Inorganic Chemistry Laboratory	
CHEM 442W	Biochemistry Laboratory	

Other required courses

MATH 211	Calculus I	4
MATH 212	Calculus II	4

Total Credit Hours **65-68**

Chemistry majors must have a C or better in all courses required for the major, including prerequisite courses, and must complete a minimum of 12 credits in upper-level (300/400) chemistry courses at Old Dominion University. Written permission by the chief departmental advisor or chair is required prior to taking upper-level chemistry courses at other institutions.

Chemistry-Research Major

Students with an interest in pursuing chemical research after graduation or in graduate school or those seeking a deeper understanding of chemical research and applications may pursue a major in Chemistry-Research. Courses taken for the chemistry-research major will substitute for courses in the regular curriculum; please consult the chief departmental advisor for specific information on substitutions. Additionally, all regular BS-Chemistry degree requirements must be met (with the exception of approved substitutions).

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6

Chemistry Core

Complete chemistry core	65-68

Research Major

CHEM 490	Senior Thesis I	1
CHEM 499	Senior Thesis II	2
Select two of the following research-oriented courses:		3-5
CHEM 125	Foundations of Chemistry II Lab with Introduction to Chemical Research	
CHEM 216	Advanced Organic Chemistry Laboratory	
CHEM 497	Independent Study	
CHEM 498	Independent Study	

Total Credit Hours **115-126**

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

Honors in Chemistry

The honors program provides qualified students the opportunity for supervised individual study in their areas of interest. Admission to the program requires a cumulative GPA of 3.25 or higher and a GPA of 3.50 or higher in the major. Students must take two upper-division courses designated by the department to be honors courses. These are termed "Contract Honors Courses." A description of the procedures for these contract courses is found in the Honors College section of this Catalog.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
CHEM 121N and CHEM 122N		4
MATH 163	Precalculus II	3
ENGL 110C	English Composition (Grade of C or better required)	3
CHEM 160G	Introduction to Chemistry and Biochemistry Research and Careers	3
Credit Hours		13
Spring		
CHEM 123N AND CHEM 124N or CHEM 125		4-5
MATH 211	Calculus I	4
ENGL 211C or ENGL 231C (Grade of C or better required)		3
Philosophy and Ethics		3
Credit Hours		14-15
Sophomore		
Fall		
CHEM 211 and CHEM 212		5
MATH 212	Calculus II	4
PHYS 231N	University Physics I	4
Human Creativity		3
Credit Hours		16
Spring		
CHEM 213 AND CHEM 214 or CHEM 216		5
CHEM 321 and CHEM 322		5
PHYS 232N	University Physics II	4
Elective		2
Credit Hours		16
Junior		
Fall		
CHEM 331	Physical Chemistry Lecture I	3
CHEM 332W	Experimental Physical Chemistry I (C or better required)	2
CHEM 351	Inorganic Chemistry	3

CHEM 441	Biochemistry Lecture	3
CHEM 352 or CHEM 442W		2-4
Impact of Technology		3
Credit Hours		16-18
Spring		
CHEM 333	Physical Chemistry Lecture II	3
CHEM 334W	Experimental Physical Chemistry II	2
CHEM 415 or CHEM 439 or CHEM 443 or CHEM 451		3
COMM 101R	Public Speaking	3
Literature		3
Credit Hours		14
Senior		
Fall		
CHEM 415 or CHEM 439 or CHEM 443 or CHEM 451		3
Interpreting the Past		3
Human Behavior		3
Elective or Language & Culture I (May be waived; See requirement details)		3
Upper-Division General Education Course (Option D)		3
Credit Hours		15
Spring		
CHEM 421 and CHEM 422		6
CHEM 485	Chemistry and Biochemistry Seminar	1
Upper-Division General Education Course (Option D)		3
Elective or Language and Culture II (May be waived: See requirement details)		3
Elective		3
Credit Hours		16
Total Credit Hours		120-123

Linked Bachelor's/Master's Degree Programs

The linked BS in chemistry and the MS in chemistry allows exceptional students to count up to 12 hours of graduate courses toward both a BS degree in chemistry and an MS degree in chemistry. Students in the combined program must complete Senior Thesis I and II (CHEM 490 and CHEM 499), be accepted into the chemistry master’s program, and earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Additional requirements apply; please contact the Chief Departmental Advisor.

Bachelor of Science Chemistry with a Major in Secondary Chemistry Education (6-12) (BS)

This major leads to eligibility for teacher licensure in Virginia and is available only to individuals holding a baccalaureate degree or completing requirements for a Bachelor of Science degree in chemistry. Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the teacher preparation programs in the College of Sciences are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information

from their advisors and the Office of Clinical Experiences website at <https://www.odu.edu/oce> (<https://www.odu.edu/oce/>).

Admission

Students must first declare secondary chemistry education (6-12) as their major with the chemistry departmental advisor. All students must apply for and be admitted into the approved secondary chemistry education program. Students must meet the required criteria for admission by earning the minimum required grade point averages (GPA).

Required grade point averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required - all chemistry courses must be passed with a grade of C (2.0) or above and all other science content courses must be passed with a grade of C- or higher.
- A professional education GPA of 2.75 is required – all professional education courses must be passed with a grade of C- or higher.

Although students may enroll in a limited number of education courses, students must be admitted into the approved chemistry teacher preparation program prior to enrolling in any instructional strategies practicum education course. Students must also meet with an education advisor in the Office of Clinical Experiences.

Continuance

Students must maintain a cumulative GPA of 2.75, a major/content GPA of 2.75 and a professional education GPA of 2.75. Chemistry courses must be passed with a grade of C (2.0) or higher. The remaining courses required for the major and in the professional education core must be completed with a grade of C- or higher for continuance. A professional education GPA of 2.75 is required for continuance. Students must take and pass the Praxis Subject Assessment, Chemistry content knowledge (formerly Praxis II) prior to or while enrolled in the instructional strategies course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <http://www.odu.edu/success/academic/teacher-education/placement/background-checks> (<http://www.odu.edu/success/academic/teacher-education/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Virginia Board of Education Prescribed Assessments for Licensure

Praxis Subject Assessment, Chemistry content knowledge (test code: 5246) – passing score of 146 is required.

To review more information on the Virginia Board of Education prescribed assessments visit the Office of Clinical Experiences website at <https://www.odu.edu/oce> (<https://www.odu.edu/oce/>).

Requirements

Lower-Division General Education

Written Communication (<http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written>)

6

Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses

Oral Communication: COMM 101R

Mathematics: MATH 163 required

Information Literacy and Research: satisfied in the major by CHEM 160G

The Nature of Science: PHYS 231N & PHYS 232N

Upper-Division General Education

The professional education core satisfies the Upper-Division General Education requirement.

Requirements for Graduation

Requirements for graduation include completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better, completion of the Senior Assessment, a minimum cumulative 2.75 GPA, in the major area, and in the professional education core, with no grade less than a C in the major and C- in the professional education core; successful completion of the Teacher Candidate Internship and a minimum of 129 credit hours, which must include both a minimum of 32 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University. Note that a C (2.0) must be earned in all chemistry courses used to satisfy departmental requirements.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Chemistry Core

In addition to completing the University's lower-division general education requirements and upper-division general education requirements, a secondary chemistry education major seeking teacher licensure must complete the following courses.

CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1-2
or CHEM 125	Foundations of Chemistry II Lab with Introduction to Chemical Research	

CHEM 160G	Introduction to Chemistry and Biochemistry Research and Careers	3
CHEM 211	Organic Chemistry I Lecture	3
CHEM 212	Organic Chemistry I Laboratory	2
CHEM 213	Organic Chemistry II Lecture	3
CHEM 214	Organic Chemistry II Laboratory	2
or CHEM 216	Advanced Organic Chemistry Laboratory	
CHEM 321 & CHEM 322	Analytical Chemistry Lecture and Analytical Chemistry Laboratory	5
CHEM 351	Inorganic Chemistry	3
CHEM 331	Physical Chemistry Lecture I	3
CHEM 332W	Experimental Physical Chemistry I	2
CHEM 333 & CHEM 334W	Physical Chemistry Lecture II and Experimental Physical Chemistry II	5
CHEM 421 & CHEM 422	Instrumental Analysis Lecture and Instrumental Analysis Laboratory	6
CHEM 441	Biochemistry Lecture	3
CHEM 449	Environmental Chemistry	3
CHEM 485	Chemistry and Biochemistry Seminar	1
Select one CHEM elective from the following:		3
CHEM 415	Intermediate Organic Chemistry	
CHEM 439	Introduction to Pharmaceutical Chemistry	
CHEM 443	Intermediate Biochemistry	
CHEM 451	Advanced Inorganic Chemistry	
Select one CHEM Laboratory from the following:		2-4
CHEM 352	Inorganic Chemistry Laboratory	
CHEM 442W	Biochemistry Laboratory	
Other Required courses		
MATH 211	Calculus I	4
MATH 212	Calculus II	4
Total Credit Hours		65-68

Chemistry majors must have a C or better in all courses required for the major, including prerequisite courses, and must complete a minimum of 12 credits in upper level (300/400) chemistry courses at Old Dominion University. Written permission by the chief departmental advisor or chair is required prior to taking upper-level chemistry courses at other institutions.

Secondary Chemistry Education (6-12) Major

General Education

Complete lower-division requirements	38-44

Complete upper-division requirements (met in the major by the professional education core)

Chemistry Core

Complete chemistry core	65-68

Professional Education Core Courses and Requirements

STEM 103	Foundations of STEM Teaching: An Inquiry-Based Approach	2
STEM 201	Knowing and Learning in STEM Education	3
STEM 202	Classroom Interactions in STEM Education	3
STEM 401	Project Based Instruction in STEM Education	3
STEM 402	Perspectives on STEM	3
STEM 485	Apprentice Teaching	9
CHEM 468	Research Methods in Mathematics and Science	3

Total Credit Hours		129-138

Honors in Chemistry

The honors program provides qualified students the opportunity for supervised individual study in their areas of interest. Admission to the program requires a cumulative GPA of 3.25 or higher and a GPA of 3.50 or higher in the major. Students must take two upper-division courses designated by the department to be honors courses. These are termed "Contract Honors Courses." A description of the procedures for these contract courses is found in the Honors College section of this Catalog.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 163	Precalculus II	3
CHEM 121N and CHEM 122N		4
Human Creativity		3
CHEM 160G	Introduction to Chemistry and Biochemistry Research and Careers	3
Credit Hours		16
Spring		
ENGL 211C or ENGL 231C (Grade of C or better required)		3
MATH 211	Calculus I	4
CHEM 123N and CHEM 124N or CHEM 125		4-5
Philosophy and Ethics		3
STEM 103	Foundations of STEM Teaching: An Inquiry-Based Approach	2
Credit Hours		16-17
Sophomore		
Fall		
CHEM 211 and CHEM 212		5
MATH 212	Calculus II	4
PHYS 231N	University Physics I	4
STEM 201	Knowing and Learning in STEM Education	3
Credit Hours		16
Spring		
CHEM 213 AND CHEM 214 or CHEM 216		5
PHYS 232N	University Physics II	4
STEM 202	Classroom Interactions in STEM Education	3
CHEM 321 and CHEM 322		5
Credit Hours		17
Junior		
Fall		
CHEM 331	Physical Chemistry Lecture I	3
CHEM 332W	Experimental Physical Chemistry I (C or better required)	2

CHEM 441	Biochemistry Lecture	3
CHEM 351	Inorganic Chemistry	3
CHEM 352 or CHEM 442W		2-4
Impact of Technology		3
Credit Hours		16-18
Spring		
CHEM 333	Physical Chemistry Lecture II	3
CHEM 334W	Experimental Physical Chemistry II (C or better required)	2
CHEM 449	Environmental Chemistry	3
COMM 101R	Public Speaking	3
Literature		3
Credit Hours		14
Senior		
Fall		
CHEM 421 and CHEM 422		6
CHEM 468	Research Methods in Mathematics and Science	3
STEM 401	Project Based Instruction in STEM Education	3
Human Behavior		3
Interpreting the Past		3
Credit Hours		18
Spring		
STEM 485	Apprentice Teaching	9
CHEM 415 or CHEM 439 or CHEM 443 or CHEM 451		3
STEM 402	Perspectives on STEM	3
CHEM 485	Chemistry and Biochemistry Seminar	1
Credit Hours		16
Total Credit Hours		129-132

Language and Culture I & II may be met in high school and are not included in this 4-year plan. Please see requirement details.

Linked Bachelor's/Master's Degree Programs

The linked BS in chemistry and the MS in chemistry allows exceptional students to count up to 12 hours of graduate courses toward both a BS degree in chemistry and an MS degree in chemistry. Students in the combined program must complete Senior Thesis I and II (CHEM 490 and CHEM 499), be accepted into the chemistry master's program, and earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Additional requirements apply; please contact the Chief Departmental Advisor.

Minor Chemistry Minor Requirements

The chemistry minor consists of 13 credits of which nine credits must be selected from the following:

Select nine credits from the following:	9
CHEM 213	Organic Chemistry II Lecture
CHEM 321	Analytical Chemistry Lecture

CHEM 331	Physical Chemistry Lecture I
CHEM 333	Physical Chemistry Lecture II
CHEM 351	Inorganic Chemistry
CHEM 411	Natural Products Chemistry in the Caribbean
CHEM 415	Intermediate Organic Chemistry
CHEM 421	Instrumental Analysis Lecture
CHEM 439	Introduction to Pharmaceutical Chemistry
CHEM 441	Biochemistry Lecture
CHEM 443	Intermediate Biochemistry
CHEM 449	Environmental Chemistry
CHEM 451	Advanced Inorganic Chemistry
CHEM 453	Essentials of Toxicology
Select four credits from the following:	4
CHEM 214	Organic Chemistry II Laboratory
CHEM 322	Analytical Chemistry Laboratory
CHEM 332W	Experimental Physical Chemistry I
CHEM 334W	Experimental Physical Chemistry II
CHEM 352	Inorganic Chemistry Laboratory
CHEM 422	Instrumental Analysis Laboratory
CHEM 442W	Biochemistry Laboratory
CHEM 452	Advanced Inorganic Chemistry Laboratory
CHEM 497	Independent Study
CHEM 498	Independent Study

Total Credit Hours **13**

The courses designated for the minor and taken by students must be completed with an overall cumulative grade point average of 2.00 or better. CHEM 121N/CHEM 122N and CHEM 123N/CHEM 124N must be completed as prerequisites for the minor in chemistry and are not included in the calculation of the grade point average for the minor. Additional prerequisite courses may also be required and are not included in the grade point average for the minor. Students electing the minor must complete a minimum of six credit hours in the minor requirement through courses offered by Old Dominion University. Any substitutions must be approved in writing by the chief departmental advisor.

Computer Science

Ravi Mukkamala, Chair
Soad Ibrahim, Chief Departmental Advisor
Ayman El Mesalami, Undergraduate Program Director

The Department of Computer Science (CS) offers programs leading to the Bachelor of Science in Computer Science (BSCS), Master of Science with a concentration in computer science, and Doctor of Philosophy with a concentration in computer science. Students can also earn a degree of Bachelor of Science in Computer Science with a major in secondary computer science education (6-12), which is intended for those who wish to pursue a career in teaching computer science at the high school level and leads to teaching licensure in the Commonwealth of Virginia. A linked undergraduate to graduate option is available that leads to a Bachelor of Science in Computer Science (BSCS) and a Master of Science in computer science, and a linked undergraduate to graduate option is available that leads to a Bachelor of Science in Computer Science (BSCS) and a Master of Science in data science. The BSCS courses are offered via traditional live lectures and ODUGlobal options.

At the undergraduate level the Department of Computer Science jointly offers a program with the Department of Electrical and Computer Engineering in the College of Engineering and Technology leading to a Bachelor of Science in Computer Engineering. A linked undergraduate to graduate option is available that leads to Bachelor of Science in Computer Science and Master of Business Administration degrees. The CS department supports the electrical engineering technology major of the Engineering Technology bachelor's degree and the modeling and simulation engineering major in the Computer Engineering bachelor's degree. The CS department

also supports the Bachelor of Science degree with majors in cybersecurity and in cyber operations.

Computer science traces its foundation to mathematics, logic and engineering. Students in this program are exposed to the broad theoretical and practical basis of computer science in lectures and laboratory experiences. Through laboratories, students are introduced to both the experimental and the design aspects of computer science. Students may choose their electives to obtain an emphasis in data science, machine learning, databases, networking, web programming, systems programming, game programming, and cybersecurity.

The CS Department's curriculum applies computer science education to the real world. The Professional Workforce Development courses (CS 410 and CS 411W) expand upon the experimental and design approach of earlier courses by addressing the creativity and productivity required for business and industrial applications today. Faculty and industry representatives provide project concepts and mentor student teams in design and development of usable products.

Computing Facilities

The Computer Science Department at Old Dominion University offers a wide array of facilities, resources, and services to our faculty, staff, students and guests. Assets are distributed between Dragas Hall and the Engineering and Computational Sciences Building (E&CS). This system architecture enables our services to be configured in a redundant/highly-available manner. This stability and resiliency is essential to maintaining a high level of service to over 2,300 users.

The E&CS building is home to our primary data-center and main administrative office. It also houses several of our research labs, a multimedia conference room, and our network operations center. Dragas Hall contains several instructional and research labs, our satellite administrative office, secondary conference room, redundant data-center, extended network operations center, and support staff offices.

The department offers a heterogeneous computing environment that primarily consists of Windows and *nix based workstations and servers. On the Windows domain, users are offered network logons, Exchange email, terminal services via our Virtual Computing Lab (VCLab) where users can have access to our software remotely, roaming profiles, MSSQL database access for research, and Hyper-V virtualization for research/faculty projects. For Unix and Linux users we support Solaris, Ubuntu and Red Hat Enterprise Linux (RHEL) distributions. Our *nix services include DNS, NIS, Unix mail, access to personal MySQL databases, class and research project Oracle databases, and both Linux and Unix servers for secure shell sessions.

Programs

Bachelor of Science in Computer Science Programs

- Computer Science (BSCS) (p. 715)
- Computer Science with a Major in Secondary Computer Science Education (6-12) (BSCS) (p. 720)

Minor Programs

- Computer Science Minor (p. 725)
- Web Programming Minor (p. 725)

Bachelor of Science in Computer Engineering

The computer engineering undergraduate degree program is designed to provide both a broad engineering background and comprehensive foundation in the technical principles underlying the computer area. Students develop a background through course work in mathematics, the basic sciences, and general engineering. The technical core consists of courses from electrical and computer engineering to address hardware aspects of computer engineering and course work from computer science to address software aspects. A grade of C or better must be earned in computer science required courses. In addition, course work in General Education ways of knowing and

communication skills is required to assure a well rounded program of study. Specific degree requirements can be found listed under the Department of Electrical and Computer Engineering.

Due to limited laboratory facilities, admission to the computer engineering program is on a competitive basis. Students should apply to the Department of Electrical and Computer Engineering.

Bachelor of Science in Engineering Technology with a Major in Electrical Engineering Technology-Computer Engineering Technology

The goal of the electrical engineering technology-computer engineering technology program is to prepare students for employment in areas defined by the rapidly expanding opportunities of computer applications. With new hardware and software products being introduced monthly, students who wish to succeed in this field should develop a background in both software and hardware. This program provides such a background by combining a grounding in basic theory with hands-on, application courses selected from the disciplines of Computer Science and Electrical Engineering Technology. The curriculum emphasizes practical design and the utilization of systems and hardware. Areas of study include network design and management, modern communication systems, microcomputer systems and applications, and application program development. A grade of C or better must be earned in computer science required courses. Specific degree requirements can be found listed under the Department of Engineering Technology.

Linked Bachelor of Science in Computer Science and Master of Business Administration

This program allows students to earn a Bachelor of Science in Computer Science and a Master of Business Administration. After students have satisfactorily completed their undergraduate requirements, they must complete the remaining requirements in the MBA program. Additional information can be found in the section on BS/MBA Linked Program at the beginning of the College of Sciences section of this Catalog and the Strome College of Business section in the Graduate Catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>).

Linked Bachelor of Science in Computer Science and Master of Science in Computer Science

This program allows for exceptionally successful students to earn both a BSCS and an MS in Computer Science by allowing up to 12 credits of graduate coursework to count toward both their bachelor's and master's degree in Computer Science. All options available under the MS degree are available under this program. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission

To be admitted to the linked program, students must have completed at least 60 undergraduate credit hours with at least 24 credit hours from ODU. Students must have completed CS 361, CS 381, MATH 212 and all prerequisites for those courses. At the time of admission, they must have an overall GPA of 3.00 or better, and an overall GPA of 3.00 or better in CS and MATH courses.

Interested students who meet the admission requirements should apply to the graduate program director, after consulting with the undergraduate chief departmental advisor, as soon as possible upon completing the required courses and 60 credit hours. In consultation with the graduate program director, a student will:

1. Officially declare an undergraduate Computer Science major with the undergraduate chief departmental advisor.

2. Draft a schedule of graduate courses to be taken as an undergraduate to be presented to the undergraduate chief departmental advisor.
3. Apply, during their senior year, to the Office of Graduate Admissions for admission to the master's in computer science program.

Students who have completed at least six hours of graduate courses upon attaining senior standing (completion of 90 credit hours) and who have earned a GPA of 3.00 or better in those courses will not be required to take the Graduate Record Exam (GRE) for admission to the master's program. Otherwise, in keeping with normal admission requirements for the MS in computer science, students will take the GRE as an undergraduate and will subsequently be reevaluated for continuation into the master's program.

Once students have been awarded their bachelor's degree and fulfilled all regular admission requirements for the MS in computer science, they will be officially admitted into the MS program.

Program Requirements

Students in the program will fulfill all normal admission and curricular requirements for both a Bachelor of Science in Computer Science and an MS in computer science with the following exceptions:

1. Students in the program may count up to 12 hours of graduate courses, at the 500 or 600 level, excluding independent study, taken as an undergraduate toward both the bachelor's and master's degrees in computer science.
 - a. Students in the program may substitute computer science graduate courses for undergraduate courses according to the following schema. All students must complete an undergraduate writing intensive course in the major.
Students may substitute 500- and 600-level courses for the upper-level CS electives in the undergraduate program so long as they have the prerequisites for those courses. 700- or 800-level courses may not be used.
 - b. Students will not receive credit for both the 400 and 500 level version of the same course.
 - c. Students in the program may make a written petition for other substitutions to the graduate program director, who will consider them in consultation with the chief departmental advisor and the instructor(s) of the courses involved.
 - d. To maximize the accelerated benefit one or more of the following required courses should be selected: CS 517, CS 518, CS 550, or CS 571.

NOTES:

1. In accordance with University policy, up to 21 hours of graduate courses taken as an undergraduate may be counted toward the bachelor's degree in computer science. However, only 12 hours of graduate courses taken as an undergraduate may also be counted toward the MS degree in computer science. This will limit students' scheduling flexibility subsequently.
2. Like students in the regular MS in computer science program, students in the linked BSCS/MS computer science degree may count no more than 12 hours at the 500-level toward their MS degree. Students are advised against taking all 12 of those 500-level credits as an undergraduate, since doing so will limit their scheduling flexibility subsequently.

Linked Bachelor of Science in Computer Science and Master of Science in Data Science and Analytics

This program allows for exceptionally successful students to earn both a BSCS and an MS in Data Science and Analytics by allowing up to 12 credits of graduate coursework to count toward both their bachelor's degree in Computer Science and master's degree in Data Science and Analytics. All options available under the MS degree are available under this program. Students must earn a minimum of 150 credit hours (120 discrete credit hours

for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission

To be admitted to the linked program, students must have completed at least 60 undergraduate credit hours with at least 24 credit hours from ODU. Students must have completed CS 361, CS 381, MATH 212 and all prerequisites for those courses. At the time of admission, they must have an overall GPA of 3.00 or better, and an overall GPA of 3.00 or better in CS and MATH courses.

Interested students who meet the admission requirements should apply to the graduate program director, after consulting with the undergraduate chief departmental advisor, as soon as possible upon completing the required courses and 60 credit hours. In consultation with the graduate program director, a student will:

1. Officially declare an undergraduate Computer Science major with the undergraduate chief departmental advisor.
2. Draft a schedule of graduate courses to be taken as an undergraduate to be presented to the undergraduate chief departmental advisor.
3. Apply, during their senior year, to the Office of Graduate Admissions for admission to the master's in Data Science and Analytics program.

Students who have completed at least six hours of graduate courses upon attaining senior standing (completion of 90 credit hours) and who have earned a GPA of 3.00 or better in those courses will not be required to take the Graduate Record Exam (GRE) for admission to the master's program. Otherwise, in keeping with normal admission requirements for the MS in Data Science and Analytics, students will take the GRE as an undergraduate and will subsequently be reevaluated for continuation into the master's program.

Once students have been awarded their bachelor's degree and fulfilled all regular admission requirements for the MS in data science and analytics, they will be officially admitted into the MS program.

Program Requirements

Students in the program will fulfill all normal admission and curricular requirements for both a Bachelor of Science in Computer Science and an MS in Data Science and Analytics with the following exceptions:

1. Students in the program may count up to 12 hours of graduate courses, at the 500 or 600 level, excluding independent study, taken as an undergraduate toward both the bachelor's and master's degrees.
 - a. Students in the program may substitute computer science graduate courses for undergraduate courses according to the following schema. All students must complete an undergraduate writing intensive course in the major.
Students may substitute 500- and 600-level courses for the upper-level CS electives in the undergraduate program so long as they have the prerequisites for those courses. 700- or 800-level courses may not be used.
 - b. Students will not receive credit for both the 400 and 500 level version of the same course.
 - c. Students in the program may make a written petition for other substitutions to the graduate program director, who will consider them in consultation with the chief departmental advisor and the instructor(s) of the courses involved.

The graduate courses taken must be from the following:

CS 550	Database Concepts	3
Choose three from the following:*		9
CS 522	Introduction to Machine Learning	
CS 532	Web Science	
CS 569	Data Analytics for Cybersecurity	
CS 580	Introduction to Artificial Intelligence	

Total Credit Hours **12**

* Substitutions of other computer science courses may be made with approval of the graduate program director.

NOTE:

1. In accordance with University policy, up to 21 hours of graduate courses taken as an undergraduate may be counted toward the bachelor's degree in computer science. However, only 12 hours of graduate courses taken as an undergraduate may also be counted toward the MS degree in Data Science and Analytics. This will limit students' scheduling flexibility subsequently.

Bachelor of Science in Computer Science Computer Science (BSCS)

Requirements

The Bachelor of Science in Computer Science requires the successful completion of a minimum of 120 semester credit hours of approved course work. At least 30 credit hours overall and 12 credit hours in upper-level courses in the major program must be completed at Old Dominion University. In order to gain appropriate exposure and competency in basic computer science theory and applications, students must satisfy the General Education requirements and departmental requirements.

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: Grade of C or better required in both courses.

Mathematics (satisfied in the major)

Oral Communication: COMM 101R or PHIL 160R

Information Literacy and Research: CS 121G or CS 202C

Language and Culture (competence must be at the 102 level)

Impact of Technology (satisfied through the major by CS 330, CS 350, CS 410, and CS 411W)

The Nature of Science: Computer Science majors must complete two Nature of Science courses in sequence for a total of eight credits from the following:

BIOL 121N & BIOL 122N	General Biology I and General Biology I Lab	4

BIOL 123N & BIOL 124N	General Biology II and General Biology II Lab	4
BIOL 136N & BIOL 137N	Honors General Biology I and Honors General Biology I Lab	4
BIOL 138N & BIOL 139N	Honors General Biology II and Honors General Biology II Lab	4
CHEM 105N & CHEM 106N	Introductory Chemistry and Introductory Chemistry Laboratory	4
CHEM 107N & CHEM 108N	Introductory Organic and Biochemistry and Introductory Organic and Biochemistry Laboratory	4
CHEM 121N & CHEM 122N	Foundations of Chemistry I Lecture and Foundations of Chemistry I Laboratory	4
CHEM 123N & CHEM 124N	Foundations of Chemistry II Lecture and Foundations of Chemistry II Laboratory	4
OEAS 106N & OEAS 108N	Introductory Oceanography and Understanding Global Climate Change	8
OEAS 106N & OEAS 250N	Introductory Oceanography and Natural Hazards and Disasters	8
OEAS 126N & OEAS 108N	Honors: Introductory Oceanography and Understanding Global Climate Change	8
OEAS 126N & OEAS 250N	Honors: Introductory Oceanography and Natural Hazards and Disasters	8
PHYS 111N & PHYS 112N	Introductory General Physics and Introductory General Physics	8
PHYS 226N & PHYS 227N	Honors: University Physics I and Honors: University Physics II	8
PHYS 231N & PHYS 232N	University Physics I and University Physics II	8

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department), or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Computer Science Major

General Education

Complete lower-division requirements	35-41
Complete upper-division requirements (minimum of 6 credit hours)	6-12

Computer Science

Required Computer Science Courses

Select one of the following:	4
CS 151	Introduction to Programming with Java

or		
CS 153	Introduction to Programming with Python	
or		
CS 150	Introduction to Programming with C++	
CS 170	Introduction to Computer Architecture I	3
Select one of the following:		5-6
CS 251 & CS 260	Programming with Java and C++ for Programmers	
or		
CS 253 & CS 260 & CS 261	Transfer Credit for Programming with Python and C++ for Programmers and Java for Programmers	
or		
CS 250 & CS 261	Programming with C++ and Java for Programmers	
CS 252	Introduction to Unix for Programmers	1
CS 270	Introduction to Computer Architecture II	3
CS 315	Computer Science Undergraduate Colloquium *	1
or CS 115	Introduction to Computer Science with Python	
CS 330	Object-Oriented Design and Programming	3
CS 350	Introduction to Software Engineering	3
CS 355	Principles of Programming Languages	3
CS 361	Data Structures and Algorithms	3
CS 381	Introduction to Discrete Structures	3
CS 390	Introduction to Theoretical Computer Science	3
CS 410	Professional Workforce Development I	3
CS 411W	Professional Workforce Development II	3
CS 417	Computational Methods and Software	3
CS 450	Database Concepts (or)	3
or CS 418	Web Programming	
CS 471	Operating Systems	3
Elective Computer Science Courses		
Select three additional CS courses from the following: **		9
CS 222	Introduction to Digital Image Processing	
CS 312	Internet Concepts	
CS 402	Formal Software Foundations	
CS 418	Web Programming	
CS 422	Introduction to Machine Learning	
CS 431	Web Server Design	
CS 432	Web Science	
CS 433	Web Security	
CS 441	App Development for Smart Devices	
CS 450	Database Concepts	
CS 455	Introduction to Networks and Communications	
CS 460	Computer Graphics	
CS 462	Cybersecurity Fundamentals	
CS 463	Cryptography for Cybersecurity	
CS 464	Networked Systems Security	
CS 465	Information Assurance for Cybersecurity	
CS 466	Principles and Practice of Cyber Defense	
CS 467	Introduction to Reverse Software Engineering	
CS 469	Data Analytics for Cybersecurity	
CS 472	Network and Systems Security	
CS 475	Introduction to Computer Simulation	
CS 476	Systems Programming	

CS 478	Computational Geometry, Methods and Applications	
CS 480	Introduction to Artificial Intelligence	
CS 486	Introduction to Parallel Computing	
CS 487	Applied Parallel Computing	
CS 488	Principles of Compiler Construction	
CS 491	Honors Research I in Computer Science	
CS 492	Honors Research II in Computer Science	
CS 499W	Honors Thesis in Computer Science	
Other Required Courses		
MATH 211	Calculus I	4
MATH 212	Calculus II	4
MATH 316	Introductory Linear Algebra	3
STAT 330	An Introduction to Probability and Statistics	3
Technical Elective ***		3-4
Total Credit Hours		117-131

* CS 115 is not open to students with prior credit for CS 150, CS 151, or CS 153. Students who have taken CS 115 may also take CS 315.

** Excluding CS 300T and CS 315. Computer science majors may select their own electives from the CS offerings. Up to six credits of work experience (CS 367 or CS 368) may be used.

*** Computer Science majors must complete one course not counted toward another degree requirement. These may be selected from the following biology, chemistry, ocean and earth science, and physics courses: BIOL 121N, BIOL 123N, BIOL 136N, BIOL 138N, CHEM 105N, CHEM 107N, CHEM 121N, CHEM 123N, OEAS 106N, OEAS 108N, OEAS 110N, OEAS 111N, OEAS 112N, OEAS 126N, OEAS 250N, PHYS 111N, PHYS 112N, PHYS 226N, PHYS 227N, PHYS 231N, PHYS 232N.
With the approval of a computer science advisor, other technically oriented courses may be used to meet this requirement.

Computer science majors must earn a grade of C or better in all (non-elective) computer science courses required for the major and in all computer science prerequisite courses and in the writing intensive (W) course in the major. A minimum of 9 credits of upper-level (300/400) computer science elective courses must be completed in addition to the required courses.

Computer Science Major Double Degree/Major Options

Computer science majors may also complete the requirements for a second degree or second major in computer engineering, cybersecurity, or cyber operations. Students interested in a second degree or second major in cybersecurity or cyber operations should contact their computer science advisor. A five-year degree program guide for students pursuing degrees in computer science and computer engineering can be found below. Students seeking two degrees should be aware that a minimum of 150 credit hours is required.

Computer Science (BSCS) & Computer Engineering Major (BSCE) 5-Year Plan (p. 578)

Additional Requirements and Information

Advanced Placement

Advanced placement credit is awarded to students who earn qualifying scores on AP and IB subject examinations. See the equivalency charts on the Office of Undergraduate Admissions website at <https://ww1.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://ww1.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Cooperative Education

Computer science majors interested in gaining practical experience and on-the-job training while completing undergraduate degree requirements may find opportunities through participation in the Cooperative Education Program.

Those students usually start in the junior year working with an employer in a field of computer science. Students must apply through the Center for Career & Leadership Development prior to registering for Cooperative Education credit. All work experiences must be approved by the Center for Career & Leadership Development and the academic department concerned.

Undergraduates can earn a maximum of six semester credits through cooperative education that apply toward degree requirements. For further information, see the Center for Career & Leadership Development section of this Catalog.

Honors Program in Computer Science

Undergraduate computer science majors maintaining an overall GPA of at least 3.25 and of 3.50 in the major have the opportunity to participate in the Honors Program in Computer Science (program coordinator: Dr. Jing He). Students who complete the program and also meet the University's standards for graduation with honors (see description in this Catalog) may earn the designation of departmental honors on their diplomas. Students must complete one of three options.

A. Departmental Honors in Computer Science

Students maintaining an overall GPA of at least 3.25 and of 3.50 in computer science can receive a "Bachelor's Degree with Honors in Computer Science" subject to satisfaction of the minimum University standards for the departmental honors and completion of one of the following three options:

- 1. Successful completion of two semesters of honors research taken as either CS 491 and CS 492 or CS 491 and CS 499W.
- 2. Successful completion of four upper-division courses in Computer Science as "Contract Honors Courses" and achievement of the "Honors" designation in each.
- 3. Successful completion of one semester of honors research taken as CS 491 and two "Contract Honors Courses" in Computer Science and achievement of the Contract Honors designation in each.

Note: Completion of at least 60 credit hours at Old Dominion University, 54 of which must be in grade-point graded courses, is also required. Candidates who have used grade forgiveness or adjusted resident credit should be aware that the enhanced grade point average determined by use of these procedures does not determine eligibility for departmental honors. To determine eligibility for departmental honors, the student's complete record, including grades and hours for courses that have been forgiven or adjusted, will be evaluated to calculate the final grade point average.

B. Honors Research Scholars

Undergraduates with junior or senior standing and a minimum of 3.0 GPA (or with approval by Honors Program Coordinator) are eligible to participate in Honors Research. After consultation with the Honors Program Coordinator, students select a faculty member who agrees to oversee the research project. The research project, time commitment, and the basis for grading are mutually determined by the student and the mentor. An outline is to be submitted and approved by the Honors Program Coordinator before registration of the course. Students are expected to perform mentored research. Faculty mentors encourage students to present/publish results at scientific conferences or journals. Students are encouraged to apply for funds to support undergraduate research. The following honors research courses are provided:

CS 491	Honors Research I in Computer Science	3
CS 492	Honors Research II in Computer Science	3
CS 499W	Honors Thesis in Computer Science	3

C. Contract Honors Designation for Upper-Division Computer Science courses

Students with a grade point average of at least 3.25 may convert any upper-division computer science course into an Honors course on an individual basis. No grade below B is accepted for Honors designation. An Honors designation of a course requires successful completion of honors-level tasks to be agreed upon by the student and the instructor. Students who plan to apply for the honors designation of a course are required to communicate with the instructor before registration. Students are required to submit an outline of honors work to Honors Program Coordinator and obtain an approval before the start of the semester in which the course is taken.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 211	Calculus I	4
Select one of the following:		4
CS 151 or CS 153	Introduction to Programming with Java or Introduction to Programming with Python	
Human Behavior		3
Language & Culture I (May be waived; See requirement details)		0-3
Credit Hours		14-17
Spring		
ENGL 211C or ENGL 231C (Grade of C or better required)		3
MATH 212	Calculus II	4
CS 170	Introduction to Computer Architecture I	3
CS 251	Programming with Java	4
CS 252	Introduction to Unix for Programmers	1
Elective or Language & Culture II (May be waived; See requirement details)		3
Credit Hours		18
Sophomore		
Fall		
MATH 316	Introductory Linear Algebra	3
CS 270	Introduction to Computer Architecture II	3
CS 330	Object-Oriented Design and Programming	3
Oral Communication: COMM 101R or PHIL 160R		3
Nature of Science I (Must be in sequence)		4
Credit Hours		16
Spring		
STAT 330	An Introduction to Probability and Statistics	3
CS 260	C++ for Programmers	1
CS 361	Data Structures and Algorithms	3

Information Literacy and Research: CS 121G or CS 202G		3
Nature of Science II (Must be in sequence)		4
Credit Hours		14
Junior		
Fall		
CS 315	Computer Science Undergraduate Colloquium **	1
CS 355	Principles of Programming Languages	3
CS 381	Introduction to Discrete Structures	3
Human Creativity		3
Upper-Division General Education Course (Option D)		3
Credit Hours		13
Spring		
CS 350	Introduction to Software Engineering	3
CS 390	Introduction to Theoretical Computer Science	3
CS 450 or CS 418	Database Concepts or Web Programming	3
Literature		3
Interpreting the Past		3
Credit Hours		15
Senior		
Fall		
CS 410	Professional Workforce Development I	3
CS 417	Computational Methods and Software	3
Technical Elective		3-4
Elective CS course		3
Philosophy & Ethics		3
Credit Hours		15-16
Spring		
CS 411W	Professional Workforce Development II	3
CS 471	Operating Systems	3
Elective CS course		3
Elective CS course		3
Upper-Division General Education Course (Option D)		3
Credit Hours		15
Total Credit Hours		120-124

** Students who have completed CS 115 are not required to take CS 315.

Linked Bachelor of Science in Computer Science and Master of Business Administration

This program allows students to earn a Bachelor of Science in Computer Science and a Master of Business Administration. After students have satisfactorily completed their undergraduate requirements, they must complete the remaining requirements in the MBA program. Additional information can be found in the section on BS/MBA Linked Program at the beginning of the College of Sciences section of this Catalog and the Strome

College of Business section in the Graduate Catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>).

Linked Bachelor of Science in Computer Science and Master of Science in Computer Science

This program allows for exceptionally successful students to earn both a BSCS and an MS in Computer Science by allowing up to 12 credits of graduate coursework to count toward both their bachelor's and master's degree in Computer Science. All options available under the MS degree are available under this program. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission

To be admitted to the linked program, students must have completed at least 60 undergraduate credit hours with at least 24 credit hours from ODU. Students must have completed CS 361, CS 381, MATH 212 and all prerequisites for those courses. At the time of admission, they must have an overall GPA of 3.00 or better, and an overall GPA of 3.00 or better in CS and MATH courses.

Interested students who meet the admission requirements should apply to the graduate program director, after consulting with the undergraduate chief departmental advisor, as soon as possible upon completing the required courses and 60 credit hours. In consultation with the graduate program director, a student will:

1. Officially declare an undergraduate Computer Science major with the undergraduate chief departmental advisor.
2. Draft a schedule of graduate courses to be taken as an undergraduate to be presented to the undergraduate chief departmental advisor.
3. Apply, during their senior year, to the Office of Graduate Admissions for admission to the master's in computer science program.

Students who have completed at least six hours of graduate courses upon attaining senior standing (completion of 90 credit hours) and who have earned a GPA of 3.00 or better in those courses will not be required to take the Graduate Record Exam (GRE) for admission to the master's program. Otherwise, in keeping with normal admission requirements for the MS in computer science, students will take the GRE as an undergraduate and will subsequently be reevaluated for continuation into the master's program.

Once students have been awarded their bachelor's degree and fulfilled all regular admission requirements for the MS in computer science, they will be officially admitted into the MS program.

Program Requirements

Students in the program will fulfill all normal admission and curricular requirements for both a Bachelor of Science in Computer Science and an MS in computer science with the following exceptions:

1. Students in the program may count up to 12 hours of graduate courses, at the 500 or 600 level, excluding independent study, taken as an undergraduate toward both the bachelor's and master's degrees in computer science.
 - a. Students in the program may substitute computer science graduate courses for undergraduate courses according to the following schema. All students must complete an undergraduate writing intensive course in the major. Students may substitute 500- and 600-level courses for the upper-level CS electives in the undergraduate program so long as they have the prerequisites for those courses. 700- or 800-level courses may not be used.
 - b. Students will not receive credit for both the 400 and 500 level version of the same course.
 - c. Students in the program may make a written petition for other substitutions to the graduate program director, who will consider

them in consultation with the chief departmental advisor and the instructor(s) of the courses involved.

- d. To maximize the accelerated benefit one or more of the following required courses should be selected: CS 517, CS 518, CS 550, or CS 571.

NOTES:

1. In accordance with University policy, up to 21 hours of graduate courses taken as an undergraduate may be counted toward the bachelor's degree in computer science. However, only 12 hours of graduate courses taken as an undergraduate may also be counted toward the MS degree in computer science. This will limit students' scheduling flexibility subsequently.
2. Like students in the regular MS in computer science program, students in the linked BSCS/MS computer science degree may count no more than 12 hours at the 500-level toward their MS degree. Students are advised against taking all 12 of those 500-level credits as an undergraduate, since doing so will limit their scheduling flexibility subsequently.

Linked Bachelor of Science in Computer Science and Master of Science in Data Science and Analytics

This program allows for exceptionally successful students to earn both a BSCS and an MS in Data Science and Analytics by allowing up to 12 credits of graduate coursework to count toward both their bachelor's degree in Computer Science and master's degree in Data Science and Analytics. All options available under the MS degree are available under this program. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission

To be admitted to the linked program, students must have completed at least 60 undergraduate credit hours with at least 24 credit hours from ODU. Students must have completed CS 361, CS 381, MATH 212 and all prerequisites for those courses. At the time of admission, they must have an overall GPA of 3.00 or better, and an overall GPA of 3.00 or better in CS and MATH courses.

Interested students who meet the admission requirements should apply to the graduate program director, after consulting with the undergraduate chief departmental advisor, as soon as possible upon completing the required courses and 60 credit hours. In consultation with the graduate program director, a student will:

1. Officially declare an undergraduate Computer Science major with the undergraduate chief departmental advisor.
2. Draft a schedule of graduate courses to be taken as an undergraduate to be presented to the undergraduate chief departmental advisor.
3. Apply, during their senior year, to the Office of Graduate Admissions for admission to the master's in Data Science and Analytics program.

Students who have completed at least six hours of graduate courses upon attaining senior standing (completion of 90 credit hours) and who have earned a GPA of 3.00 or better in those courses will not be required to take the Graduate Record Exam (GRE) for admission to the master's program. Otherwise, in keeping with normal admission requirements for the MS in Data Science and Analytics, students will take the GRE as an undergraduate and will subsequently be reevaluated for continuation into the master's program.

Once students have been awarded their bachelor's degree and fulfilled all regular admission requirements for the MS in data science and analytics, they will be officially admitted into the MS program.

Program Requirements

Students in the program will fulfill all normal admission and curricular requirements for both a Bachelor of Science in Computer Science and an MS in Data Science and Analytics with the following exceptions:

1. Students in the program may count up to 12 hours of graduate courses, at the 500 or 600 level, excluding independent study, taken as an undergraduate toward both the bachelor's and master's degrees.
 - a. Students in the program may substitute computer science graduate courses for undergraduate courses according to the following schema. All students must complete an undergraduate writing intensive course in the major.
Students may substitute 500- and 600-level courses for the upper-level CS electives in the undergraduate program so long as they have the prerequisites for those courses. 700- or 800-level courses may not be used.
 - b. Students will not receive credit for both the 400 and 500 level version of the same course.
 - c. Students in the program may make a written petition for other substitutions to the graduate program director, who will consider them in consultation with the chief departmental advisor and the instructor(s) of the courses involved.

The graduate courses taken must be from the following:

CS 550	Database Concepts	3
Choose three from the following:*		9
CS 522	Introduction to Machine Learning	
CS 532	Web Science	
CS 569	Data Analytics for Cybersecurity	
CS 580	Introduction to Artificial Intelligence	
Total Credit Hours		12

* Substitutions of other computer science courses may be made with approval of the graduate program director.

NOTE:

1. In accordance with University policy, up to 21 hours of graduate courses taken as an undergraduate may be counted toward the bachelor's degree in computer science. However, only 12 hours of graduate courses taken as an undergraduate may also be counted toward the MS degree in Data Science and Analytics. This will limit students' scheduling flexibility subsequently.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science in Computer Science Computer Science with a Major in Secondary Computer Science Education (6-12) (BSCS)

Bachelor of Science in Computer Science with Teaching Licensure

This program leads to eligibility for teacher licensure in Virginia and is available only to individuals holding a baccalaureate degree or completing requirements for a Bachelor of Science in Computer Science. Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the teacher preparation programs in the College of Sciences are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information from their advisors and the Office of Clinical Experiences website at <https://www.odu.edu/oce> (<https://www.odu.edu/oce/>).

Admission

Students must first declare computer science with a major in secondary computer science education (6-12) with the computer science departmental advisor. All students must apply for and be admitted into the approved secondary computer science education program. Students must meet the required criteria for admission by earning the minimum required grade point averages (GPA).

Required grade point averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required - all computer science courses must be passed with a grade of C (2.0) or above and all other content courses must be passed with a grade of C- or higher.
- A professional education GPA of 2.75 is required – all professional education courses must be passed with a grade of C- or higher.

Although students may enroll in a limited number of education courses, students must be admitted into the approved computer science teacher preparation program prior to enrolling in any instructional strategies practicum education course. Students must also meet with an education advisor in the Office of Clinical Experiences in the Darden College of Education and Professional Studies.

Continuance

Students must maintain a cumulative GPA of 2.75, a major/content GPA of 2.75 and a professional education GPA of 2.75. Computer science courses must be passed with a grade of C (2.0) or higher. Courses in the professional education core must be completed with a grade of C- or higher for continuance. A professional education GPA of 2.75 is required for continuance. Students must take and pass the Praxis Subject Assessment, Computer Science content knowledge (formerly Praxis II) prior to or while enrolled in the instructional strategies course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <http://www.odu.edu/success/academic/teacher-education/placement/background-checks> (<http://www.odu.edu/success/academic/teacher-education/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Virginia Board of Education Prescribed Assessments for Licensure

Praxis Subject Assessment, Computer Science content knowledge (test code: 5652) - passing score of 142 is required.

To review more information on the Virginia Board of Education prescribed assessments visit the Office of Clinical Experiences website at <https://www.odu.edu/oce> (<https://www.odu.edu/oce/>).

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Additional hours may be required to meet the foreign language requirement.

Written Communication: ENGL 110C and ENGL 211C or ENGL 231C; grade of C or better required in both courses

Mathematics: satisfied in the major

Oral Communication: COMM 101R or PHIL 160R

Information Literacy and Research: CS 121G or CS 202G

Language and Culture: competence must be at the 102 level

Impact of Technology: satisfied in the major by CS 300T

The Nature of Science: Computer Science majors must complete two Nature of Science courses in sequence for a total of eight credits from the following:

BIOL 121N & BIOL 122N	General Biology I and General Biology I Lab	4
BIOL 123N & BIOL 124N	General Biology II and General Biology II Lab	4
BIOL 136N & BIOL 137N	Honors General Biology I and Honors General Biology I Lab	4
BIOL 138N & BIOL 139N	Honors General Biology II and Honors General Biology II Lab	4
CHEM 105N & CHEM 106N	Introductory Chemistry and Introductory Chemistry Laboratory	4
CHEM 107N & CHEM 108N	Introductory Organic and Biochemistry and Introductory Organic and Biochemistry Laboratory	4
CHEM 121N & CHEM 122N	Foundations of Chemistry I Lecture and Foundations of Chemistry I Laboratory	4
CHEM 123N & CHEM 124N	Foundations of Chemistry II Lecture and Foundations of Chemistry II Laboratory	4
OEAS 106N & OEAS 108N	Introductory Oceanography and Understanding Global Climate Change	8
OEAS 106N & OEAS 250N	Introductory Oceanography and Natural Hazards and Disasters	8
OEAS 126N & OEAS 108N	Honors: Introductory Oceanography and Understanding Global Climate Change	8
OEAS 126N & OEAS 250N	Honors: Introductory Oceanography and Natural Hazards and Disasters	8
OEAS 110N or OEAS 111N	Earth Science Physical Geology	4
and		
OEAS 112N	Historical Geology	4
PHYS 111N & PHYS 112N	Introductory General Physics and Introductory General Physics	8
PHYS 226N & PHYS 227N	Honors: University Physics I and Honors: University Physics II	8
PHYS 231N & PHYS 232N	University Physics I and University Physics II	8

Upper-Division General Education

The professional education core satisfies the Upper-Division General Education requirement.

Requirements for Graduation

Requirements for graduation include completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better, completion of the Senior Assessment, a minimum cumulative 2.75 GPA, in the major area, and in the professional education core, with no grade less than a C in the major and C- in the professional education core; successful completion of the Teacher Candidate Internship and a minimum of 120 credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University.

Note that a C (2.0) must be earned in all computer science courses used to satisfy departmental requirements.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Professional Education Core

STEM 103	Foundations of STEM Teaching: An Inquiry-Based Approach	2
STEM 201	Knowing and Learning in STEM Education	3
STEM 202	Classroom Interactions in STEM Education	3
STEM 401	Project Based Instruction in STEM Education	3
STEM 402	Perspectives on STEM	3
STEM 485	Apprentice Teaching	9
CS 468W	Research Methods in Mathematics and Sciences	3
Total Credit Hours		26

Secondary Computer Science Education (6-12) Major

General Education

Complete lower-division requirements 35-41

Complete upper-division requirements (met by the professional education core)

Secondary Computer Science Education (6-12)

Required Computer Science Courses

Select one of the following:		4
CS 151	Introduction to Programming with Java	
or		
CS 153	Introduction to Programming with Python	
or		
CS 150	Introduction to Programming with C++	
CS 170	Introduction to Computer Architecture I	3
Select one of the following:		5-6
CS 251 & CS 260	Programming with Java and C++ for Programmers	
or		
CS 253 & CS 260 & CS 261	Transfer Credit for Programming with Python and C++ for Programmers and Java for Programmers	
or		
CS 250 & CS 261	Programming with C++ and Java for Programmers	
CS 252	Introduction to Unix for Programmers	1
CS 300T	Computers in Society	3
CS 330	Object-Oriented Design and Programming	3
CS 350	Introduction to Software Engineering	3
CS 355	Principles of Programming Languages	3
CS 361	Data Structures and Algorithms	3
CS 381	Introduction to Discrete Structures	3
CS 432	Web Science	3
CS 462	Cybersecurity Fundamentals	3
CS 471	Operating Systems	3
One CS Upper-Level Elective *		3
Other Required Courses		
MATH 211	Calculus I	4

MATH 212	Calculus II	4
MATH 316	Introductory Linear Algebra	3
STAT 330	An Introduction to Probability and Statistics	3
Professional Education Core		
Complete professional education core requirements		26
Total Credit Hours		118-125

* Excluding CS 315

Computer science majors must earn a grade of C or better in all (non-elective) computer science courses required for the major and in all computer science prerequisite courses.

Additional Requirements and Information

Advanced Placement

Advanced placement credit is awarded to students who earn qualifying scores on AP and IB subject examinations. See the equivalency charts on the Office of Undergraduate Admissions website at <https://ww1.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://ww1.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Cooperative Education

Computer science majors interested in gaining practical experience and on-the-job training while completing undergraduate degree requirements may find opportunities through participation in the Cooperative Education Program.

Those students usually start in the junior year working with an employer in a field of computer science. Students must apply through the Center for Career & Leadership Development prior to registering for Cooperative Education credit. All work experiences must be approved by the Center for Career & Leadership Development and the academic department concerned.

Undergraduates can earn a maximum of six semester credits through cooperative education that apply toward degree requirements. For further information, see the Center for Career & Leadership Development section of this Catalog.

Honors Program in Computer Science

Undergraduate computer science majors maintaining an overall GPA of at least 3.25 and of 3.50 in the major have the opportunity to participate in the Honors Program in Computer Science (program coordinator: Dr. Jing He). Students who complete the program and also meet the University's standards for graduation with honors (see description in this Catalog) may earn the designation of departmental honors on their diplomas. Students must complete one of three options.

A. Departmental Honors in Computer Science

Students maintaining an overall GPA of at least 3.25 and of 3.50 in computer science can receive a "Bachelor's Degree with Honors in Computer Science" subject to satisfaction of the minimum University standards for the departmental honors and completion of one of the following three options:

1. Successful completion of two semesters of honors research taken as either CS 491 and CS 492 or CS 491 and CS 499W.
2. Successful completion of four upper-division courses in Computer Science as "Contract Honors Courses" and achievement of the "Honors" designation in each.
3. Successful completion of one semester of honors research taken as CS 491 and two "Contract Honors Courses" in Computer Science and achievement of the Contract Honors designation in each.

Note: Completion of at least 60 credit hours at Old Dominion University, 54 of which must be in grade-point graded courses, is also required. Candidates who have used grade forgiveness or adjusted resident credit should be aware that the enhanced grade point average determined by use of these procedures does not determine eligibility for departmental honors. To determine eligibility for departmental honors, the student's complete record, including

grades and hours for courses that have been forgiven or adjusted, will be evaluated to calculate the final grade point average.

B. Honors Research Scholars

Undergraduates with junior or senior standing and a minimum of 3.0 GPA (or with approval by Honors Program Coordinator) are eligible to participate in Honors Research. After consultation with the Honors Program Coordinator, students select a faculty member who agrees to oversee the research project. The research project, time commitment, and the basis for grading are mutually determined by the student and the mentor. An outline is to be submitted and approved by the Honors Program Coordinator before registration of the course. Students are expected to perform mentored research. Faculty mentors encourage students to present/publish results at scientific conferences or journals. Students are encouraged to apply for funds to support undergraduate research. The following honors research courses are provided:

CS 491	Honors Research I in Computer Science	3
CS 492	Honors Research II in Computer Science	3
CS 499W	Honors Thesis in Computer Science	3

C. Contract Honors Designation for Upper-Division Computer Science courses

Students with a grade point average of at least 3.25 may convert any upper-division computer science course into an Honors course on an individual basis. No grade below B is accepted for Honors designation. An Honors designation of a course requires successful completion of honors-level tasks to be agreed upon by the student and the instructor. Students who plan to apply for the honors designation of a course are required to communicate with the instructor before registration. Students are required to submit an outline of honors work to Honors Program Coordinator and obtain an approval before the start of the semester in which the course is taken.

Degree Program Guide

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
Select one of the following:		4
CS 151 or CS 153	Introduction to Programming with Java or Introduction to Programming with Python	
Human Creativity		3
Literature		3
STEM 103	Foundations of STEM Teaching: An Inquiry-Based Approach	2
Credit Hours		15
Spring		
ENGL 211C or ENGL 231C (Grade of C or better required)		3
CS 251	Programming with Java	4
CS 252	Introduction to Unix for Programmers	1
Interpreting the Past		3
Human Behavior		3
Credit Hours		14
Sophomore		
Fall		
MATH 211	Calculus I	4

CS 170	Introduction to Computer Architecture I	3
Nature of Science I (Must be in sequence)		4
Oral Communication: COMM 101R or PHIL 160R		3
STEM 201	Knowing and Learning in STEM Education	3
Credit Hours		17
Spring		
MATH 212	Calculus II	4
CS 260	C++ for Programmers	1
Nature of Science II (Must be in sequence)		4
Information Literacy and Research: CS 121G or CS 202G		3
STEM 202	Classroom Interactions in STEM Education	3
Credit Hours		15
Junior		
Fall		
MATH 316	Introductory Linear Algebra	3
CS 300T	Computers in Society	3
CS 350	Introduction to Software Engineering	3
STEM 401	Project Based Instruction in STEM Education	3
Philosophy and Ethics		3
Credit Hours		15
Spring		
CS 330	Object-Oriented Design and Programming	3
CS 361	Data Structures and Algorithms	3
CS 381	Introduction to Discrete Structures	3
STAT 330	An Introduction to Probability and Statistics	3
STEM 402	Perspectives on STEM	3
Credit Hours		15
Senior		
Fall		
CS 355	Principles of Programming Languages	3
CS 432	Web Science	3
CS 462	Cybersecurity Fundamentals	3
CS 468W	Research Methods in Mathematics and Sciences	3
CS 471	Operating Systems	3
Credit Hours		15
Spring		
STEM 485	Apprentice Teaching	9
CS Upper-Level Elective *		3
Elective		2
Credit Hours		14
Total Credit Hours		120

* Excluding CS 315

Language and Culture I & II may be met in high school and is not included in this four-year plan. Please see requirement details.

Linked Bachelor of Science in Computer Science and Master of Business Administration

This program allows students to earn a Bachelor of Science in Computer Science and a Master of Business Administration. After students have satisfactorily completed their undergraduate requirements, they must complete the remaining requirements in the MBA program. Additional information can be found in the section on BS/MBA Linked Program at the beginning of the College of Sciences section of this Catalog and the Strome College of Business section in the Graduate Catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>).

Linked Bachelor of Science in Computer Science and Master of Science in Computer Science

This program allows for exceptionally successful students to earn both a BSCS and an MS in Computer Science by allowing up to 12 credits of graduate coursework to count toward both their bachelor's and master's degree in Computer Science. All options available under the MS degree are available under this program. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission

To be admitted to the linked program, students must have completed at least 60 undergraduate credit hours with at least 24 credit hours from ODU. Students must have completed CS 361, CS 381, MATH 212 and all prerequisites for those courses. At the time of admission, they must have an overall GPA of 3.00 or better, and an overall GPA of 3.00 or better in CS and MATH courses.

Interested students who meet the admission requirements should apply to the graduate program director, after consulting with the undergraduate chief departmental advisor, as soon as possible upon completing the required courses and 60 credit hours. In consultation with the graduate program director, a student will:

1. Officially declare an undergraduate Computer Science major with the undergraduate chief departmental advisor.
2. Draft a schedule of graduate courses to be taken as an undergraduate to be presented to the undergraduate chief departmental advisor.
3. Apply, during their senior year, to the Office of Graduate Admissions for admission to the master's in computer science program.

Students who have completed at least six hours of graduate courses upon attaining senior standing (completion of 90 credit hours) and who have earned a GPA of 3.00 or better in those courses will not be required to take the Graduate Record Exam (GRE) for admission to the master's program. Otherwise, in keeping with normal admission requirements for the MS in computer science, students will take the GRE as an undergraduate and will subsequently be reevaluated for continuation into the master's program.

Once students have been awarded their bachelor's degree and fulfilled all regular admission requirements for the MS in computer science, they will be officially admitted into the MS program.

Program Requirements

Students in the program will fulfill all normal admission and curricular requirements for both a Bachelor of Science in Computer Science and an MS in computer science with the following exceptions:

1. Students in the program may count up to 12 hours of graduate courses, at the 500 or 600 level, excluding independent study, taken as an undergraduate toward both the bachelor's and master's degrees in computer science.

- Students in the program may substitute computer science graduate courses for undergraduate courses according to the following schema. All students must complete an undergraduate writing intensive course in the major.
Students may substitute 500- and 600-level courses for the upper-level CS electives in the undergraduate program so long as they have the prerequisites for those courses. 700- or 800-level courses may not be used.
- Students will not receive credit for both the 400 and 500 level version of the same course.
- Students in the program may make a written petition for other substitutions to the graduate program director, who will consider them in consultation with the chief departmental advisor and the instructor(s) of the courses involved.
- To maximize the accelerated benefit one or more of the following required courses should be selected: CS 517, CS 518, CS 550, or CS 571.

NOTES:

- In accordance with University policy, up to 21 hours of graduate courses taken as an undergraduate may be counted toward the bachelor's degree in computer science. However, only 12 hours of graduate courses taken as an undergraduate may also be counted toward the MS degree in computer science. This will limit students' scheduling flexibility subsequently.
- Like students in the regular MS in computer science program, students in the linked BSCS/MS computer science degree may count no more than 12 hours at the 500-level toward their MS degree. Students are advised against taking all 12 of those 500-level credits as an undergraduate, since doing so will limit their scheduling flexibility subsequently.

Linked Bachelor of Science in Computer Science and Master of Science in Data Science and Analytics

This program allows for exceptionally successful students to earn both a BSCS and an MS in Data Science and Analytics by allowing up to 12 credits of graduate coursework to count toward both their bachelor's degree in Computer Science and master's degree in Data Science and Analytics. All options available under the MS degree are available under this program. Students must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission

To be admitted to the linked program, students must have completed at least 60 undergraduate credit hours with at least 24 credit hours from ODU. Students must have completed CS 361, CS 381, MATH 212 and all prerequisites for those courses. At the time of admission, they must have an overall GPA of 3.00 or better, and an overall GPA of 3.00 or better in CS and MATH courses.

Interested students who meet the admission requirements should apply to the graduate program director, after consulting with the undergraduate chief departmental advisor, as soon as possible upon completing the required courses and 60 credit hours. In consultation with the graduate program director, a student will:

- Officially declare an undergraduate Computer Science major with the undergraduate chief departmental advisor.
- Draft a schedule of graduate courses to be taken as an undergraduate to be presented to the undergraduate chief departmental advisor.
- Apply, during their senior year, to the Office of Graduate Admissions for admission to the master's in Data Science and Analytics program.

Students who have completed at least six hours of graduate courses upon attaining senior standing (completion of 90 credit hours) and who have earned a GPA of 3.00 or better in those courses will not be required to take

the Graduate Record Exam (GRE) for admission to the master's program. Otherwise, in keeping with normal admission requirements for the MS in Data Science and Analytics, students will take the GRE as an undergraduate and will subsequently be reevaluated for continuation into the master's program.

Once students have been awarded their bachelor's degree and fulfilled all regular admission requirements for the MS in data science and analytics, they will be officially admitted into the MS program.

Program Requirements

Students in the program will fulfill all normal admission and curricular requirements for both a Bachelor of Science in Computer Science and an MS in Data Science and Analytics with the following exceptions:

- Students in the program may count up to 12 hours of graduate courses, at the 500 or 600 level, excluding independent study, taken as an undergraduate toward both the bachelor's and master's degrees.
 - Students in the program may substitute computer science graduate courses for undergraduate courses according to the following schema. All students must complete an undergraduate writing intensive course in the major.
Students may substitute 500- and 600-level courses for the upper-level CS electives in the undergraduate program so long as they have the prerequisites for those courses. 700- or 800-level courses may not be used.
 - Students will not receive credit for both the 400 and 500 level version of the same course.
 - Students in the program may make a written petition for other substitutions to the graduate program director, who will consider them in consultation with the chief departmental advisor and the instructor(s) of the courses involved.

The graduate courses taken must be from the following:

CS 550	Database Concepts	3
Choose three from the following:*		9
CS 522	Introduction to Machine Learning	
CS 532	Web Science	
CS 569	Data Analytics for Cybersecurity	
CS 580	Introduction to Artificial Intelligence	
Total Credit Hours		12

* Substitutions of other computer science courses may be made with approval of the graduate program director.

NOTE:

- In accordance with University policy, up to 21 hours of graduate courses taken as an undergraduate may be counted toward the bachelor's degree in computer science. However, only 12 hours of graduate courses taken as an undergraduate may also be counted toward the MS degree in Data Science and Analytics. This will limit students' scheduling flexibility subsequently.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation

with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Computer Science Minor

Requirements

Students may minor in computer science by taking the following courses:

Select one of the following:		4
CS 151	Introduction to Programming with Java	
or		
CS 153	Introduction to Programming with Python	
CS 251	Programming with Java	4
CS 252	Introduction to Unix for Programmers	1
CS 361	Data Structures and Algorithms	3
or CS 330		Object-Oriented Design and Programming
Select two CS Electives at the 400-level or from the following:		6
CS 312	Internet Concepts	
CS 330	Object-Oriented Design and Programming	
CS 355	Principles of Programming Languages	
CS 361	Data Structures and Algorithms	
CS 350	Introduction to Software Engineering	
CS 381	Introduction to Discrete Structures	
CS 390	Introduction to Theoretical Computer Science	
Total Credit Hours		18

A grade of C or better is required in each course. Students must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of prerequisite courses and complete a minimum of six hours in upper-level courses in the minor through courses offered by Old Dominion University.

The curriculum for the Bachelor of Science in Engineering Technology with a major in electrical engineering technology and specialized coursework in computer engineering technology and the Bachelor of Science in Computer Engineering contain a built-in minor in computer science.

Minor Web Programming Minor

Requirements

Students may minor in Web Programming by taking the following:

CS 330	Object-Oriented Design and Programming *	3
CS 418	Web Programming	3
Select two of the following:		6
CS 312	Internet Concepts	
CS 431	Web Server Design	
CS 432	Web Science	
CS 441	App Development for Smart Devices	
CS 462	Cybersecurity Fundamentals	
CS 465	Information Assurance for Cybersecurity	
Total Credit Hours		12

* CS 252 is a prerequisite and is not included in the calculation of the grade point average for the minor.

A grade of C or better is required in any of these courses if they are used as a prerequisite to any other CS course. Students must have a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of 100- and 200-level courses and prerequisite courses and complete a minimum of six hours in upper-level courses in the minor through courses offered by Old Dominion University.

Mathematics and Statistics

Web Site: <http://www.odu.edu/math> (<http://www.odu.edu/math/>)

Gordon Melrose, Chair
Robert Strozak, Chief Departmental Advisor

The Department of Mathematics and Statistics offers programs of study that lead to the degree of Bachelor of Science in Mathematics. A student can earn the degree by completing a major in Applied Mathematics, a major in Statistics/Biostatistics, a major in Actuarial Mathematics, or a major in Big Data Analytics. Students can also earn a degree of Bachelor of Science in Mathematics with a major in Secondary Mathematics Education (6-12), which is intended for those who wish to pursue a career in teaching mathematics at the high school level and leads to teaching licensure in the Commonwealth of Virginia.

The applied mathematics major is intended for students wishing to pursue graduate work in mathematics or otherwise obtain employment in a mathematics field. Similarly, the statistics/biostatistics major is intended for those who wish to pursue graduate work in statistics or otherwise obtain employment in a statistics-related field, especially biostatistics.

The actuarial mathematics major is specifically designed for students who wish to pursue an actuarial field, pursue graduate work in financial mathematics, or employment in a mathematics or statistics-related field.

The big data analytics major is designed for students wishing to pursue one of the many jobs that require solving important large-scale problems in applied science, engineering, business, industry and government as well as pursue graduate work in big data analytics.

Teaching licensure can also be added to any of the majors above, which automatically fulfills the University's upper-division general education requirement under Option C. A double major within the Department of Mathematics and Statistics will not satisfy the University's upper-division general education requirement under option A except for a double major in applied mathematics and statistics/biostatistics.

The requirements of each major along with the professional education courses needed for teacher licensure in the Commonwealth of Virginia are listed in the section for each major. All students earning a Bachelor of

Science in Mathematics have to successfully complete the mathematics core course requirements.

Advanced Placement

Advanced placement credit is awarded to students who earn qualifying scores on AP and IB subject examinations. See the equivalency charts on the ODU website: <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Programs

Bachelor of Science Programs

- Mathematics with a Major in Actuarial Mathematics (BS) (p. 726)
- Mathematics with a Major in Applied Mathematics (BS) (p. 729)
- Mathematics with a Major in Big Data Analytics (BS) (p. 732)
- Mathematics with a Major in Secondary Mathematics Education (6-12) (BS) (p. 734)
- Mathematics with a Major in Statistics/Biostatistics (BS) (p. 738)

Minor Program

- Mathematics-Actuarial Mathematics Minor (p. 740)
- Mathematics-Applied Mathematics Minor (p. 740)
- Mathematics-Statistics/Biostatistics Minor (p. 741)

Linked Bachelor of Science in Mathematics and Master of Science in Computational and Applied Mathematics

The linked program allows students to count up to 12 credits of graduate coursework toward both their undergraduate and master's degrees. Students must earn a minimum of 150 credits (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission

To be admitted to the linked program, students must have completed at least 60 undergraduate credit hours with at least 24 credit hours from ODU. Students must have completed MATH 307, MATH 312, MATH 317 and all prerequisites for those courses. At the time of admission, they must have an overall GPA of 3.00 or better and a GPA of 3.00 or better in MATH and STAT courses.

Interested students who meet the admission requirements should apply to the graduate program director, after consulting with the undergraduate chief departmental advisor, as soon as possible upon completing the required courses and 60 credit hours. In consultation with the graduate program director, a student will:

1. Officially declare an undergraduate Mathematics major with the undergraduate chief departmental advisor.
2. Draft a schedule of graduate courses to be taken as an undergraduate to be presented to the undergraduate chief departmental advisor.
3. Apply, during their senior year, to the Office of Graduate Admissions for admission to the master's in computational and applied mathematics program.

Students who have completed at least six hours of graduate courses upon attaining senior standing (completion of 90 credit hours) and who have earned a GPA of 3.00 or better in those courses will not be required to take the Graduate Record Exam (GRE) for admission to the master's program. Otherwise, in keeping with normal admission requirements for the MS in computational and applied mathematics, students will take the GRE as an undergraduate and will subsequently be reevaluated for continuation into the master's program.

Once students have been awarded their bachelor's degree and fulfilled all regular admission requirements for the MS in computational and applied mathematics, they will be officially admitted into the MS program.

Program Requirements

Students in the program will fulfill all normal admission and curricular requirements for both a BS in mathematics and an MS in computational and applied mathematics with the following exceptions:

1. Students in the program may count up to 12 hours of 500 or 600 level graduate courses, excluding independent study, taken as an undergraduate for which they have earned a grade point average of 3.0 or greater with no course grade lower than a B- toward both the BS in mathematics and the MS in computational and applied mathematics.
2. Students in the program may substitute mathematics or statistics graduate courses for undergraduate courses according to the following schema. All students must complete an undergraduate writing intensive course in the major.
 - a. All students must complete the prescribed undergraduate program including all 400-level required courses and electives.
 - b. All students may substitute 500- and 600-level courses for the remaining credit hours in the 120-hour requirement in the undergraduate program so long as they have the prerequisites for those courses. 700- or 800-level courses may not be used.
 - c. Students will not receive credit for both the 400 and 500 level version of the same course.
 - d. Students in the program may make a written petition for other substitutions to the graduate program director, who will consider them in consultation with the chief departmental advisor and the instructor(s) of the courses involved.

NOTES:

1. In accordance with University policy, up to 21 hours of graduate courses taken as an undergraduate may be counted toward the bachelor's degree; however, only 12 hours of graduate courses taken as an undergraduate may also be counted toward the MS degree. This will limit students' scheduling flexibility subsequently.

Bachelor of Science Mathematics with a Major in Actuarial Mathematics (BS) Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8

Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: A grade of C or better is required in both courses.

Mathematics: met in the major by MATH 211

Information Literacy and Research: CS 121G (preferred); IT 150G is an acceptable substitute

Human Behavior: ECON 202S required

Philosophy and Ethics: PHIL 120P recommended

The Nature of Science: The eight credit hours of Nature of Science with labs need not be in the same science.

Impact of Technology: IT 360T recommended

Upper-Division General Education

The upper-division general education requirement must be satisfied by completing a second major in Risk Management and Insurance in the Bachelor of Science in Business Administration degree in Financial Management (Option A) or by completing a minor in Risk Management and Insurance (Option B).

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Mathematics Core

Mathematics Core Course Requirements *

CS 151 or CS 153	Introduction to Programming with Java Introduction to Programming with Python	4
MATH 211	Calculus I	4
MATH 212	Calculus II	4
MATH 307	Ordinary Differential Equations	3
MATH 311W	Abstract Algebra	3
MATH 312	Calculus III	4
MATH 316	Introductory Linear Algebra	3
MATH 317	Calculus IV: Introductory Analysis	3
STAT 310	Introductory Data Analysis	3
STAT 331	Theory of Probability	3
Total Credit Hours		34

* A grade of C+ or higher is required in MATH 211 and MATH 212. A cumulative GPA of 2.3 or higher is required in all 300 and 400 level core courses with no grade lower than a C. In addition, a grade of C or higher is required in mathematics and statistics prerequisite courses to advance to the next course.

Actuarial Mathematics Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minor or second major in risk management and insurance required; minimum of 12 credit hours)	12

Mathematics Core

Complete mathematics core requirements	34

Actuarial Mathematics Major

STAT 405	Introduction to Data Handling	3
STAT 431	Theory of Statistics	3
STAT 437	Applied Regression and Time Series Analysis	3
MATH 408	Applied Numerical Methods I	3
Two courses from the following list with at least one being a STAT course		6
MATH 401	Partial Differential Equations	
MATH 409	Applied Numerical Methods II	
MATH 417	Intermediate Real Analysis I	
STAT 432	Sampling Theory	
STAT 449	Nonparametric Statistics	
STAT 450	Categorical Data Analysis	
Or approved BDA courses		

Total Credit Hours	102-108

Practicum

Any student who wishes to receive a practicum or internship experience may do so as an integral part of the degree program. Students may substitute the practicum experience for one of the optional courses listed in the major.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours for all students earning a BS in Mathematics.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 211	Calculus I	4
Human Behavior (ECON 202S required for the Actuarial Mathematics major)		3
Information Literacy and Research (CS 121G preferred. IT 150G is acceptable substitute for the Actuarial Mathematics major or the Big Data Analytics major)		3
Elective or Language & Culture I (May be waived; See requirement details)		3
Credit Hours		16
Spring		
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	

MATH 212	Calculus II	4
Oral Communication		3
Impact of Technology (IT 360T suggested for Actuarial Mathematics major)		3
Elective or Language & Culture II (May be waived; See requirement details)		3
Credit Hours		16
Sophomore		
Fall		
MATH 307	Ordinary Differential Equations	3
CS 151 or CS 153	Introduction to Programming with Java or Introduction to Programming with Python	4
Human Creativity		3
Nature of Science I (Course depends on major chosen. See requirement details)		4
Credit Hours		14
Spring		
MATH 312	Calculus III	4
Interpreting the Past		3
Philosophy and Ethics (PHIL 120P recommended)		3
Nature of Science II (Course depends on major chosen. See requirement details)		4
Credit Hours		14
Junior		
Fall		
MATH 311W	Abstract Algebra (C or better required)	3
STAT 310 or STAT 331 (Statistics/Biostatistics and Actuarial Mathematics Majors must take STAT 331)		3
Literature		3
Major course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
MATH 316	Introductory Linear Algebra	3
MATH 317	Calculus IV: Introductory Analysis	3
STAT 330 or STAT 431 (Statistics/Biostatistics and Actuarial Mathematics majors take STAT 431)		3
Major course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
Major course		3
Major course		3
Elective or Major Course if Big Data Analytics major		3
Elective or STAT 310		3
Minor or Elective		3
Credit Hours		15
Spring		
Major course		3

Major course	3
Elective or Major Course if Big Data Analytics major	3
Elective	3
Minor or Elective	3
Credit Hours	15
Total Credit Hours	120

Linked Bachelor of Science in Mathematics and Master of Science in Computational and Applied Mathematics

The linked program allows students to count up to 12 credits of graduate coursework toward both their undergraduate and master's degrees. Students must earn a minimum of 150 credits (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission

To be admitted to the linked program, students must have completed at least 60 undergraduate credit hours with at least 24 credit hours from ODU. Students must have completed MATH 307, MATH 312, MATH 317 and all prerequisites for those courses. At the time of admission, they must have an overall GPA of 3.00 or better and a GPA of 3.00 or better in MATH and STAT courses.

Interested students who meet the admission requirements should apply to the graduate program director, after consulting with the undergraduate chief departmental advisor, as soon as possible upon completing the required courses and 60 credit hours. In consultation with the graduate program director, a student will:

1. Officially declare an undergraduate Mathematics major with the undergraduate chief departmental advisor.
2. Draft a schedule of graduate courses to be taken as an undergraduate to be presented to the undergraduate chief departmental advisor.
3. Apply, during their senior year, to the Office of Graduate Admissions for admission to the master's in computational and applied mathematics program.

Students who have completed at least six hours of graduate courses upon attaining senior standing (completion of 90 credit hours) and who have earned a GPA of 3.00 or better in those courses will not be required to take the Graduate Record Exam (GRE) for admission to the master's program. Otherwise, in keeping with normal admission requirements for the MS in computational and applied mathematics, students will take the GRE as an undergraduate and will subsequently be reevaluated for continuation into the master's program.

Once students have been awarded their bachelor's degree and fulfilled all regular admission requirements for the MS in computational and applied mathematics, they will be officially admitted into the MS program.

Program Requirements

Students in the program will fulfill all normal admission and curricular requirements for both a BS in mathematics and an MS in computational and applied mathematics with the following exceptions:

1. Students in the program may count up to 12 hours of 500 or 600 level graduate courses, excluding independent study, taken as an undergraduate for which they have earned a grade point average of 3.0 or greater with no course grade lower than a B- toward both the BS in mathematics and the MS in computational and applied mathematics.
2. Students in the program may substitute mathematics or statistics graduate courses for undergraduate courses according to the following schema. All students must complete an undergraduate writing intensive course in the major.
 - a. All students must complete the prescribed undergraduate program including all 400-level required courses and electives.

- b. All students may substitute 500- and 600-level courses for the remaining credit hours in the 120-hour requirement in the undergraduate program so long as they have the prerequisites for those courses. 700- or 800-level courses may not be used.
- c. Students will not receive credit for both the 400 and 500 level version of the same course.
- d. Students in the program may make a written petition for other substitutions to the graduate program director, who will consider them in consultation with the chief departmental advisor and the instructor(s) of the courses involved.

NOTES:

1. In accordance with University policy, up to 21 hours of graduate courses taken as an undergraduate may be counted toward the bachelor's degree; however, only 12 hours of graduate courses taken as an undergraduate may also be counted toward the MS degree. This will limit students' scheduling flexibility subsequently.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Mathematics with a Major in Applied Mathematics (BS) Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: A grade of C or better is required in both courses.

Mathematics: met in the major by MATH 211

Information Literacy and Research: CS 121G (preferred)

Impact of Technology: BDA 200T (preferred)

Philosophy and Ethics: PHIL 120P recommended

The Nature of Science: The eight credit hours of Nature of Science with labs need not be in the same science. However, PHYS 231N-PHYS 232N are recommended for the Applied Mathematics major.

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department), or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.

- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Mathematics Core

Mathematics Core Course Requirements *		
CS 151 or CS 153	Introduction to Programming with Java Introduction to Programming with Python	4
MATH 211	Calculus I	4
MATH 212	Calculus II	4
MATH 307	Ordinary Differential Equations	3
MATH 311W	Abstract Algebra	3
MATH 312	Calculus III	4
MATH 316	Introductory Linear Algebra	3
MATH 317	Calculus IV: Introductory Analysis	3
STAT 310	Introductory Data Analysis	3
STAT 330 or STAT 331	An Introduction to Probability and Statistics Theory of Probability	3
Total Credit Hours		34

* A grade of C+ or higher is required in MATH 211 and MATH 212. A cumulative GPA of 2.3 or higher is required in all 300 and 400 level core courses with no grade lower than a C. In addition, a grade of C or higher is required in mathematics and statistics prerequisite courses to advance to the next course.

Applied Mathematics Major

General Education		
Complete lower-division requirements		38-44
Complete upper-division requirements (minimum of 6 credit hours)		6
Mathematics Core		
Complete mathematics core requirements		34
Applied Mathematics Major		
MATH 401	Partial Differential Equations	3
MATH 408	Applied Numerical Methods I	3
MATH 422	Applied Complex Variables	3
MATH 400-level electives (or approved BDA courses):		9
No more than one of the following may be selected:		
MATH 400	History of Mathematics	
MATH 404	Fundamental Concepts of Geometry	
MATH 406	Number Theory and Discrete Mathematics	
Total Credit Hours		96-102

Practicum

Any student who wishes to receive a practicum or internship experience may do so as an integral part of the degree program. Students may substitute the practicum experience for one of the optional courses listed in the major.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours for all students earning a BS in Mathematics.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 211	Calculus I	4
Human Behavior (ECON 202S required for the Actuarial Mathematics major)		3
Information Literacy and Research (CS 121G preferred; IT 150G is acceptable substitute for the Actuarial Mathematics major or the Big Data Analytics major)		3
Elective or Language & Culture I (May be waived; See requirement details)		3
Credit Hours		16
Spring		
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 212	Calculus II	4
Oral Communication		3
Impact of Technology (BDA 200T preferred)		3
ELective or Language & Culture II (May be waived; See requirement details)		3
Credit Hours		16
Sophomore		
Fall		
MATH 307	Ordinary Differential Equations	3
Human Creativity		3
CS 151 or CS 153	Introduction to Programming with Java or Introduction to Programming with Python	4
Nature of Science I (Course depends on major chosen. See requirement details)		4
Credit Hours		14
Spring		
MATH 312	Calculus III	4
Interpreting the Past		3
Philosophy and Ethics (PHIL 120P recommended)		3
Nature of Science II (Course depends on major chosen. See requirement details)		4
Credit Hours		14
Junior		
Fall		
MATH 311W	Abstract Algebra (C or better required)	3
STAT 310 or STAT 331 (Statistics/Biostatistics and Actuarial Mathematics Majors must take STAT 331)		3
Literature		3
Major course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
MATH 316	Introductory Linear Algebra	3

MATH 317	Calculus IV: Introductory Analysis	3
STAT 330 or STAT 431 (Statistics/Biostatistics and Actuarial Mathematics majors take STAT 431)		3
Major course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
Major course		3
Major course		3
Elective or Major Course if Big Data Analytics major		3
Elective or STAT 310		3
Minor or Elective		3
Credit Hours		15
Spring		
Major course		3
Major course		3
Elective or Major Course if Big Data Analytics major		3
Elective		3
Minor or Elective		3
Credit Hours		15
Total Credit Hours		120

Linked Bachelor of Science in Mathematics and Master of Science in Computational and Applied Mathematics

The linked program allows students to count up to 12 credits of graduate coursework toward both their undergraduate and master's degrees. Students must earn a minimum of 150 credits (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission

To be admitted to the linked program, students must have completed at least 60 undergraduate credit hours with at least 24 credit hours from ODU. Students must have completed MATH 307, MATH 312, MATH 317 and all prerequisites for those courses. At the time of admission, they must have an overall GPA of 3.00 or better and a GPA of 3.00 or better in MATH and STAT courses.

Interested students who meet the admission requirements should apply to the graduate program director, after consulting with the undergraduate chief departmental advisor, as soon as possible upon completing the required courses and 60 credit hours. In consultation with the graduate program director, a student will:

1. Officially declare an undergraduate Mathematics major with the undergraduate chief departmental advisor.
2. Draft a schedule of graduate courses to be taken as an undergraduate to be presented to the undergraduate chief departmental advisor.
3. Apply, during their senior year, to the Office of Graduate Admissions for admission to the master's in computational and applied mathematics program.

Students who have completed at least six hours of graduate courses upon attaining senior standing (completion of 90 credit hours) and who have earned a GPA of 3.00 or better in those courses will not be required to take the Graduate Record Exam (GRE) for admission to the master's program. Otherwise, in keeping with normal admission requirements for the MS in computational and applied mathematics, students will take the GRE as an

undergraduate and will subsequently be reevaluated for continuation into the master's program.

Once students have been awarded their bachelor's degree and fulfilled all regular admission requirements for the MS in computational and applied mathematics, they will be officially admitted into the MS program.

Program Requirements

Students in the program will fulfill all normal admission and curricular requirements for both a BS in mathematics and an MS in computational and applied mathematics with the following exceptions:

1. Students in the program may count up to 12 hours of 500 or 600 level graduate courses, excluding independent study, taken as an undergraduate for which they have earned a grade point average of 3.0 or greater with no course grade lower than a B- toward both the BS in mathematics and the MS in computational and applied mathematics.
2. Students in the program may substitute mathematics or statistics graduate courses for undergraduate courses according to the following schema. All students must complete an undergraduate writing intensive course in the major.
 - a. All students must complete the prescribed undergraduate program including all 400-level required courses and electives.
 - b. All students may substitute 500- and 600-level courses for the remaining credit hours in the 120-hour requirement in the undergraduate program so long as they have the prerequisites for those courses. 700- or 800-level courses may not be used.
 - c. Students will not receive credit for both the 400 and 500 level version of the same course.
 - d. Students in the program may make a written petition for other substitutions to the graduate program director, who will consider them in consultation with the chief departmental advisor and the instructor(s) of the courses involved.

NOTES:

1. In accordance with University policy, up to 21 hours of graduate courses taken as an undergraduate may be counted toward the bachelor's degree; however, only 12 hours of graduate courses taken as an undergraduate may also be counted toward the MS degree. This will limit students' scheduling flexibility subsequently.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking

to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Mathematics with a Major in Big Data Analytics (BS) Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: A grade of C or better is required in both courses.

Mathematics: met in the major by MATH 211

Information Literacy and Research: CS 121G (preferred); IT 150G is an acceptable substitute.

Philosophy and Ethics: PHIL 120P recommended

The Nature of Science: The eight credit hours of Nature of Science with labs need not be in the same science.

Impact of Technology: BDA 200T preferred.

Upper-Division General Education

A minor or second major in computer science, which includes CS 361 Advanced Data Structures and Algorithms, is required.

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Mathematics Core

Mathematics Core Course Requirements *		
CS 151 or CS 153	Introduction to Programming with Java Introduction to Programming with Python	4
MATH 211	Calculus I	4
MATH 212	Calculus II	4
MATH 307	Ordinary Differential Equations	3
MATH 311W	Abstract Algebra	3
MATH 312	Calculus III	4
MATH 316	Introductory Linear Algebra	3
MATH 317	Calculus IV: Introductory Analysis	3
STAT 310	Introductory Data Analysis	3
STAT 330 or STAT 331	An Introduction to Probability and Statistics Theory of Probability	3
Total Credit Hours		34

* A grade of C+ or higher is required in MATH 211 and MATH 212. A cumulative GPA of 2.3 or higher is required in all 300 and 400 level core courses with no grade lower than a C. In addition, a grade of C or higher is required in mathematics and statistics prerequisite courses to advance to the next course.

Big Data Analytics Major

General Education		
Complete lower-division requirements		38-44
Complete upper-division requirements (minor or second major in computer science required; minimum of 12 credit hours)		12
Mathematics Core		
Complete mathematics core requirements		34
Big Data Analytics Major		
STAT 405	Introduction to Data Handling	3
BDA 411	Introduction to Machine Learning	3
BDA 431	Modern Statistical Methods for Big Data Analytics	3
BDA 432	Introduction to Optimization in Data Science	3
BDA 450	Senior Project in Big Data Analytics I	3
At least three of the following courses:		9
STAT 431	Theory of Statistics	
STAT 437	Applied Regression and Time Series Analysis	
MATH 401	Partial Differential Equations	
MATH 408	Applied Numerical Methods I	

MATH 421	Applied Mathematics II: Mathematical Modeling
Total Credit Hours	108-114

Practicum

Any student who wishes to receive a practicum or internship experience may do so as an integral part of the degree program. Students may substitute the practicum experience for one of the optional courses listed in the major.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours for all students earning a BS in Mathematics.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 211	Calculus I	4
Human Behavior (ECON 202S required for the Actuarial Mathematics major)		3
Information Literacy and Research (CS 121G preferred. IT 150G is acceptable substitute for the Actuarial Mathematics major or the Big Data Analytics major)		3
Elective or Language & Culture I (May be waived; See requirement details)		3
Credit Hours		16
Spring		
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 212	Calculus II	4
Oral Communication		3
Impact of Technology (BDA 200T preferred)		3
Elective or Language & Culture II (May be waived; See requirement details)		3
Credit Hours		16
Sophomore		
Fall		
MATH 307	Ordinary Differential Equations	3
Human Creativity		3
CS 151 or CS 153	Introduction to Programming with Java or Introduction to Programming with Python	4
Nature of Science I (Course depends on major chosen. See requirement details)		4
Credit Hours		14
Spring		
MATH 312	Calculus III	4
Interpreting the Past		3

Philosophy and Ethics (PHIL 120P recommended)		3
Nature of Science II (Course depends on major chosen. See requirement details)		4
Credit Hours		14
Junior		
Fall		
MATH 311W	Abstract Algebra (C or better required)	3
STAT 310 or STAT 331 (Statistics/Biostatistics and Actuarial Mathematics Majors must take STAT 331)		3
Literature		3
Major course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
MATH 316	Introductory Linear Algebra	3
MATH 317	Calculus IV: Introductory Analysis	3
STAT 330 or STAT 431 (Statistics/Biostatistics and Actuarial Mathematics majors take STAT 431)		3
Major course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
Major course		3
Major course		3
Elective or Major Course if Big Data Analytics major		3
Elective or STAT 310		3
Minor or Elective		3
Credit Hours		15
Spring		
Major course		3
Major course		3
Elective or Major Course if Big Data Analytics major		3
Elective		3
Minor or Elective		3
Credit Hours		15
Total Credit Hours		120

Linked Bachelor of Science in Mathematics and Master of Science in Computational and Applied Mathematics

The linked program allows students to count up to 12 credits of graduate coursework toward both their undergraduate and master's degrees. Students must earn a minimum of 150 credits (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission

To be admitted to the linked program, students must have completed at least 60 undergraduate credit hours with at least 24 credit hours from ODU. Students must have completed MATH 307, MATH 312, MATH 317 and all prerequisites for those courses. At the time of admission, they must have an overall GPA of 3.00 or better and a GPA of 3.00 or better in MATH and STAT courses.

Interested students who meet the admission requirements should apply to the graduate program director, after consulting with the undergraduate chief departmental advisor, as soon as possible upon completing the required courses and 60 credit hours. In consultation with the graduate program director, a student will:

1. Officially declare an undergraduate Mathematics major with the undergraduate chief departmental advisor.
2. Draft a schedule of graduate courses to be taken as an undergraduate to be presented to the undergraduate chief departmental advisor.
3. Apply, during their senior year, to the Office of Graduate Admissions for admission to the master's in computational and applied mathematics program.

Students who have completed at least six hours of graduate courses upon attaining senior standing (completion of 90 credit hours) and who have earned a GPA of 3.00 or better in those courses will not be required to take the Graduate Record Exam (GRE) for admission to the master's program. Otherwise, in keeping with normal admission requirements for the MS in computational and applied mathematics, students will take the GRE as an undergraduate and will subsequently be reevaluated for continuation into the master's program.

Once students have been awarded their bachelor's degree and fulfilled all regular admission requirements for the MS in computational and applied mathematics, they will be officially admitted into the MS program.

Program Requirements

Students in the program will fulfill all normal admission and curricular requirements for both a BS in mathematics and an MS in computational and applied mathematics with the following exceptions:

1. Students in the program may count up to 12 hours of 500 or 600 level graduate courses, excluding independent study, taken as an undergraduate for which they have earned a grade point average of 3.0 or greater with no course grade lower than a B- toward both the BS in mathematics and the MS in computational and applied mathematics.
2. Students in the program may substitute mathematics or statistics graduate courses for undergraduate courses according to the following schema. All students must complete an undergraduate writing intensive course in the major.
 - a. All students must complete the prescribed undergraduate program including all 400-level required courses and electives.
 - b. All students may substitute 500- and 600-level courses for the remaining credit hours in the 120-hour requirement in the undergraduate program so long as they have the prerequisites for those courses. 700- or 800-level courses may not be used.
 - c. Students will not receive credit for both the 400 and 500 level version of the same course.
 - d. Students in the program may make a written petition for other substitutions to the graduate program director, who will consider them in consultation with the chief departmental advisor and the instructor(s) of the courses involved.

NOTES:

1. In accordance with University policy, up to 21 hours of graduate courses taken as an undergraduate may be counted toward the bachelor's degree; however, only 12 hours of graduate courses taken as an undergraduate may also be counted toward the MS degree. This will limit students' scheduling flexibility subsequently.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits

toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Mathematics with a Major in Secondary Mathematics Education (6-12) (BS)

Bachelor of Science in Mathematics with Teaching Licensure

Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the teacher preparation programs in the College of Sciences are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information from their advisors and the Office of Clinical Experiences website at www.odu.edu/oce (<http://www.odu.edu/oce/>).

Admission

Students must first declare mathematics with a major in secondary mathematics education (6-12) with the mathematics departmental advisor. All students must apply for and be admitted into the approved secondary mathematics education major. Students must meet the required criteria for admission by earning the minimum required grade point averages (GPA).

Required grade point averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required. The mathematics core must be successfully completed. A grade of C+ or higher is required in MATH 211 and MATH 212, and a cumulative GPA of 2.3 or higher is required in all 300 and 400 level core courses with no grade lower than a C. No grade lower than C- is accepted for the remaining math courses.

- A professional education GPA of 2.75 is required. All professional education courses must be passed with a grade of C- or higher.

Although students may enroll in a limited number of education courses, students must be admitted into the approved mathematics teacher preparation program prior to enrolling in any instructional strategies practicum education course. Students must also meet with an education advisor in the MonarchTeach Office.

Continuance

Students must maintain a cumulative GPA of 2.75, a major/content GPA of 2.75 and a professional education GPA of 2.75. The mathematics core must be successfully completed. A grade of C+ or higher is required in MATH 211 and MATH 212, and a cumulative GPA of 2.3 or higher is required in all 300 and 400 level mathematics core courses with no grade lower than a C. The remaining courses required for the major and in the professional education core must be completed with a grade of C- or higher for continuance. A professional education GPA of 2.75 is required for continuance. Students must take and pass the Praxis Subject Assessment, Mathematics content knowledge (formerly Praxis II) prior to or while enrolled in the instructional strategies course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <https://www.odu.edu/clinical-experiences/placement/background-checks> (<https://www.odu.edu/clinical-experiences/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Virginia Board of Education Prescribed Assessments for Licensure

Praxis Subject Assessment, Mathematics content knowledge (formerly Praxis II). Test code: 5161 – passing score of 160 is required.

To review more information on the Virginia Board of Education prescribed assessments visit the Office of Clinical Experiences website, www.odu.edu/oce (<http://www.odu.edu/oce/>).

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3

Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: A grade of C or better is required in both courses.

Mathematics: met in the major by MATH 211

Information Literacy and Research: CS 121G (preferred)

Philosophy and Ethics: PHIL 120P recommended

The Nature of Science: The eight credit hours of Nature of Science with labs need not be in the same science.

Impact of Technology: BDA 200T preferred.

Upper-Division General Education

The professional education core satisfies the Upper-Division General Education requirement.

Requirements for Graduation

Requirements for graduation with a BS in Mathematics with Teaching Licensure include completion of ENGL 110C and ENGL 211C or ENGL 231C with a grade of C or better, completion of the Senior Assessment, a minimum cumulative 2.75 GPA, in the major area, and in the professional education core, successful completion of the mathematics core, no grade less than C- in the remaining courses in the major and the professional education core, successful completion of the Apprentice Teaching, and a minimum of 120 credit hours to include a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University. Successful completion of the core requires a grade of C+ or higher in MATH 211 and MATH 212, and a cumulative GPA of 2.3 or higher is required in all 300 and 400 level mathematics core courses with no grade lower than a C.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Mathematics Core

Mathematics Core Course Requirements *

CS 151 or CS 153	Introduction to Programming with Java Introduction to Programming with Python	4
MATH 211	Calculus I	4
MATH 212	Calculus II	4
MATH 307	Ordinary Differential Equations	3
MATH 311W	Abstract Algebra	3
MATH 312	Calculus III	4
MATH 316	Introductory Linear Algebra	3
MATH 317	Calculus IV: Introductory Analysis	3
STAT 310	Introductory Data Analysis	3
STAT 330 or STAT 331	An Introduction to Probability and Statistics Theory of Probability	3
Total Credit Hours		34

* A grade of C+ or higher is required in MATH 211 and MATH 212. A cumulative GPA of 2.3 or higher is required in all 300 and 400 level core courses with no

grade lower than a C. In addition, a grade of C or higher is required in mathematics and statistics prerequisite courses to advance to the next course.

Professional Education Core

STEM 103	Foundations of STEM Teaching: An Inquiry-Based Approach	2
STEM 201	Knowing and Learning in STEM Education	3
STEM 202	Classroom Interactions in STEM Education	3
STEM 401	Project Based Instruction in STEM Education	3
STEM 402	Perspectives on STEM	3
STEM 485	Apprentice Teaching	9
SCI 468	Research Methods in Math and Sciences	3
(Satisfied by BIOL 468W, CHEM 468, OEAS 468W, or PHYS 468W)		
Total Credit Hours		26

Secondary Mathematics Education (6-12) Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (satisfied by the professional education core)	

Mathematics Core

Complete mathematics core requirements	34

Professional Education Core

Complete professional education core requirements	26

Secondary Mathematics Education Major **

MATH 375	Advanced Concepts for Secondary Educators: Function and Modeling	3
MATH 400	History of Mathematics	3
MATH 404	Fundamental Concepts of Geometry	3
MATH 406	Number Theory and Discrete Mathematics	3
MATH 417	Intermediate Real Analysis I	3
or MATH 422	Applied Complex Variables	
MATH 400-level electives (or approved BDA courses)		6

Total Credit Hours	119-125

** A C- or higher is required in all Secondary Mathematics Education courses.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 211	Calculus I	4
Human Behavior		3
Information Literacy and Research (CS 121G preferred)		3
Credit Hours		13

Spring

Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
MATH 212	Calculus II	4
STEM 103	Foundations of STEM Teaching: An Inquiry-Based Approach	2
Oral Communication		3
Philosophy and Ethics (PHIL 120P recommended)		3
Credit Hours		15

Sophomore

Fall

MATH 307	Ordinary Differential Equations	3
Human Creativity		3
CS 151 or CS 153	Introduction to Programming with Java or Introduction to Programming with Python	4
Nature of Science I		4
STEM 201	Knowing and Learning in STEM Education	3
Credit Hours		17

Spring

MATH 312	Calculus III	4
Interpreting the Past		3
Literature		3
Nature of Science II		4
STEM 202	Classroom Interactions in STEM Education	3
Credit Hours		17

Junior

Fall

MATH 311W	Abstract Algebra (C or better required)	3
MATH 317	Calculus IV: Introductory Analysis	3
MATH 375	Advanced Concepts for Secondary Educators: Function and Modeling	3
STAT 330 or STAT 331		3
MATH 400-level elective (or approved BDA course)		3
Elective		1
Credit Hours		16

Spring

MATH 316	Introductory Linear Algebra	3
MATH 400	History of Mathematics	3
MATH 404	Fundamental Concepts of Geometry	3
STAT 310 or STAT 431		
SCI 468	Research Methods in Math and Sciences (Satisfied by BIOL 468W, CHEM 468, OEAS 468W or PHYS 468W))	3

Impact of Technology (BDA 200T preferred)		3
Credit Hours		15
Senior		
Fall		
MATH 406	Number Theory and Discrete Mathematics	3
MATH 417 or MATH 422		3
STAT 310 or STAT 431		3
MATH 400-level elective (or approved BDA course)		3
STEM 401	Project Based Instruction in STEM Education	3
Credit Hours		15
Spring		
STEM 402	Perspectives on STEM	3
STEM 485	Apprentice Teaching	9
Credit Hours		12
Total Credit Hours		120

Language and Culture I & II may be met in high school and are not included in this four-year plan. Please see requirement details.

Linked Bachelor of Science in Mathematics and Master of Science in Computational and Applied Mathematics

The linked program allows students to count up to 12 credits of graduate coursework toward both their undergraduate and master's degrees. Students must earn a minimum of 150 credits (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission

To be admitted to the linked program, students must have completed at least 60 undergraduate credit hours with at least 24 credit hours from ODU. Students must have completed MATH 307, MATH 312, MATH 317 and all prerequisites for those courses. At the time of admission, they must have an overall GPA of 3.00 or better and a GPA of 3.00 or better in MATH and STAT courses.

Interested students who meet the admission requirements should apply to the graduate program director, after consulting with the undergraduate chief departmental advisor, as soon as possible upon completing the required courses and 60 credit hours. In consultation with the graduate program director, a student will:

1. Officially declare an undergraduate Mathematics major with the undergraduate chief departmental advisor.
2. Draft a schedule of graduate courses to be taken as an undergraduate to be presented to the undergraduate chief departmental advisor.
3. Apply, during their senior year, to the Office of Graduate Admissions for admission to the master's in computational and applied mathematics program.

Students who have completed at least six hours of graduate courses upon attaining senior standing (completion of 90 credit hours) and who have earned a GPA of 3.00 or better in those courses will not be required to take the Graduate Record Exam (GRE) for admission to the master's program. Otherwise, in keeping with normal admission requirements for the MS in computational and applied mathematics, students will take the GRE as an undergraduate and will subsequently be reevaluated for continuation into the master's program.

Once students have been awarded their bachelor's degree and fulfilled all regular admission requirements for the MS in computational and applied mathematics, they will be officially admitted into the MS program.

Program Requirements

Students in the program will fulfill all normal admission and curricular requirements for both a BS in mathematics and an MS in computational and applied mathematics with the following exceptions:

1. Students in the program may count up to 12 hours of 500 or 600 level graduate courses, excluding independent study, taken as an undergraduate for which they have earned a grade point average of 3.0 or greater with no course grade lower than a B- toward both the BS in mathematics and the MS in computational and applied mathematics.
2. Students in the program may substitute mathematics or statistics graduate courses for undergraduate courses according to the following schema. All students must complete an undergraduate writing intensive course in the major.
 - a. All students must complete the prescribed undergraduate program including all 400-level required courses and electives.
 - b. All students may substitute 500- and 600-level courses for the remaining credit hours in the 120-hour requirement in the undergraduate program so long as they have the prerequisites for those courses. 700- or 800-level courses may not be used.
 - c. Students will not receive credit for both the 400 and 500 level version of the same course.
 - d. Students in the program may make a written petition for other substitutions to the graduate program director, who will consider them in consultation with the chief departmental advisor and the instructor(s) of the courses involved.

NOTES:

1. In accordance with University policy, up to 21 hours of graduate courses taken as an undergraduate may be counted toward the bachelor's degree; however, only 12 hours of graduate courses taken as an undergraduate may also be counted toward the MS degree. This will limit students' scheduling flexibility subsequently.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a

student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Mathematics with a Major in Statistics/Biostatistics (BS) Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: A grade of C or better is required in both courses.

Mathematics: met in the major by MATH 211

Information Literacy and Research: CS 121G (preferred)

Impact of Technology: BDA 200T (preferred)

Philosophy and Ethics: PHIL 120P recommended

The Nature of Science: The eight credit hours of Nature of Science with labs need not be in the same science. However, BIOL 110N/BIOL 111N; BIOL 112N/BIOL 113N; BIOL 117N/BIOL 118N or BIOL 121N/BIOL 122N-BIOL 123N/BIOL 124N are recommended major.

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department), or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Mathematics Core

Mathematics Core Course Requirements *

CS 151 or CS 153	Introduction to Programming with Java Introduction to Programming with Python	4
MATH 211	Calculus I	4
MATH 212	Calculus II	4
MATH 307	Ordinary Differential Equations	3
MATH 311W	Abstract Algebra	3
MATH 312	Calculus III	4
MATH 316	Introductory Linear Algebra	3
MATH 317	Calculus IV: Introductory Analysis	3
STAT 310	Introductory Data Analysis	3
STAT 331	Theory of Probability	3

Total Credit Hours **34**

* A grade of C+ or higher is required in MATH 211 and MATH 212. A cumulative GPA of 2.3 or higher is required in all 300 and 400 level core courses with no grade lower than a C. In addition, a grade of C or higher is required in mathematics and statistics prerequisite courses to advance to the next course.

Statistics/Biostatistics Major

General Education

Complete lower-division requirements	38-44
Complete upper-division requirements (minimum of 6 credit hours)	6

Mathematics Core

Complete mathematics core requirements	34

Statistics/Biostatistics Major

STAT 405	Introduction to Data Handling	3
STAT 431	Theory of Statistics	3
STAT 400-level electives (or approved BDA courses)		12

Total Credit Hours **96-102**

Practicum

Any student who wishes to receive a practicum or internship experience may do so as an integral part of the degree program. Students may substitute the practicum experience for one of the optional courses listed in the major.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours for all students earning a BS in Mathematics.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 211	Calculus I	4
Human Behavior (ECON 202S required for the Actuarial Mathematics major)		3
Information Literacy and Research (CS 121G preferred. IT 150G is an acceptable substitute for the Actuarial Mathematics major or the Big Data Analytics major.)		3
Elective or Language & Culture I (May be waived; See requirement details)		3
Credit Hours		16
Spring		
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research (C or better required)	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics (C or better required)	
MATH 212	Calculus II	4
Oral Communication		3
Impact of Technology (BDA 200T preferred)		3
Elective or Language & Culture II (May be waived; See requirement details)		3
Credit Hours		16
Sophomore		
Fall		
MATH 307	Ordinary Differential Equations	3
Human Creativity		3
CS 151 or CS 153	Introduction to Programming with Java or Introduction to Programming with Python	4
Nature of Science I (Course depends on major chosen. See requirement details)		4
Credit Hours		14
Spring		
MATH 312	Calculus III	4
Interpreting the Past		3
Philosophy and Ethics (PHIL 120P recommended)		3
Nature of Science II (Course depends on major chosen. See requirement details)		4
Credit Hours		14
Junior		
Fall		
MATH 311W	Abstract Algebra (C or better required)	3
STAT 310 or STAT 331 (Statistics/Biostatistics and Actuarial Mathematics Majors must take STAT 331)		3

Literature		3
Major course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Spring		
MATH 316	Introductory Linear Algebra	3
MATH 317	Calculus IV: Introductory Analysis	3
STAT 330 or STAT 431 (Statistics/Biostatistics and Actuarial Mathematics majors take STAT 431)		3
Major course		3
Upper-Division General Education Course or Minor		3
Credit Hours		15
Senior		
Fall		
Major course		3
Major course		3
Elective or Major Course if Big Data Analytics major		3
Elective or STAT 310		3
Minor or Elective		3
Credit Hours		15
Spring		
Major course		3
Major course		3
Elective or Major Course if Big Data Analytics major		3
Elective		3
Minor or Elective		3
Credit Hours		15
Total Credit Hours		120

Linked Bachelor of Science in Mathematics and Master of Science in Computational and Applied Mathematics

The linked program allows students to count up to 12 credits of graduate coursework toward both their undergraduate and master's degrees. Students must earn a minimum of 150 credits (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Admission

To be admitted to the linked program, students must have completed at least 60 undergraduate credit hours with at least 24 credit hours from ODU. Students must have completed MATH 307, MATH 312, MATH 317 and all prerequisites for those courses. At the time of admission, they must have an overall GPA of 3.00 or better and a GPA of 3.00 or better in MATH and STAT courses.

Interested students who meet the admission requirements should apply to the graduate program director, after consulting with the undergraduate chief departmental advisor, as soon as possible upon completing the required courses and 60 credit hours. In consultation with the graduate program director, a student will:

1. Officially declare an undergraduate Mathematics major with the undergraduate chief departmental advisor.
2. Draft a schedule of graduate courses to be taken as an undergraduate to be presented to the undergraduate chief departmental advisor.

3. Apply, during their senior year, to the Office of Graduate Admissions for admission to the master's in computational and applied mathematics program.

Students who have completed at least six hours of graduate courses upon attaining senior standing (completion of 90 credit hours) and who have earned a GPA of 3.00 or better in those courses will not be required to take the Graduate Record Exam (GRE) for admission to the master's program. Otherwise, in keeping with normal admission requirements for the MS in computational and applied mathematics, students will take the GRE as an undergraduate and will subsequently be reevaluated for continuation into the master's program.

Once students have been awarded their bachelor's degree and fulfilled all regular admission requirements for the MS in computational and applied mathematics, they will be officially admitted into the MS program.

Program Requirements

Students in the program will fulfill all normal admission and curricular requirements for both a BS in mathematics and an MS in computational and applied mathematics with the following exceptions:

1. Students in the program may count up to 12 hours of 500 or 600 level graduate courses, excluding independent study, taken as an undergraduate for which they have earned a grade point average of 3.0 or greater with no course grade lower than a B- toward both the BS in mathematics and the MS in computational and applied mathematics.
2. Students in the program may substitute mathematics or statistics graduate courses for undergraduate courses according to the following schema. All students must complete an undergraduate writing intensive course in the major.
 - a. All students must complete the prescribed undergraduate program including all 400-level required courses and electives.
 - b. All students may substitute 500- and 600-level courses for the remaining credit hours in the 120-hour requirement in the undergraduate program so long as they have the prerequisites for those courses. 700- or 800-level courses may not be used.
 - c. Students will not receive credit for both the 400 and 500 level version of the same course.
 - d. Students in the program may make a written petition for other substitutions to the graduate program director, who will consider them in consultation with the chief departmental advisor and the instructor(s) of the courses involved.

NOTES:

1. In accordance with University policy, up to 21 hours of graduate courses taken as an undergraduate may be counted toward the bachelor's degree; however, only 12 hours of graduate courses taken as an undergraduate may also be counted toward the MS degree. This will limit students' scheduling flexibility subsequently.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Mathematics-Actuarial Mathematics Minor Requirements

The mathematics-actuarial mathematics minor consists of the following:

MATH 312	Calculus III	4
MATH 316	Introductory Linear Algebra	3
STAT 330	An Introduction to Probability and Statistics	3
or STAT 331	Theory of Probability	
MATH 408	Applied Numerical Methods I	3
or STAT 431	Theory of Statistics	
Total Credit Hours		13

At least nine credit hours in the chosen minor must be taken through courses offered by Old Dominion University. Students must have an overall grade point average of at least 2.00 in all courses specified as a requirement for the minor in their chosen minor exclusive of 100/200-level courses and prerequisite courses.

Minor Mathematics-Applied Mathematics Minor

The mathematics-applied mathematics minor consists of the following:

MATH 307	Ordinary Differential Equations	3
MATH 312	Calculus III	4
MATH 317	Calculus IV: Introductory Analysis	3
Select two of the following:		6
MATH 316	Introductory Linear Algebra	
MATH 401	Partial Differential Equations	
MATH 408	Applied Numerical Methods I	
MATH 409	Applied Numerical Methods II	
MATH 417	Intermediate Real Analysis I	
MATH 420	Applied Mathematics I: Biomathematics	
MATH 421	Applied Mathematics II: Mathematical Modeling	

MATH 422	Applied Complex Variables
MATH 427	Applied Mathematics III: Elasticity
MATH 428	Applied Mathematics IV: Fluid Mechanics
MATH 457	Mathematics in Nature
Or approved topics or BDA courses	
Total Credit Hours	16

At least nine credit hours in the chosen minor must be taken through courses offered by Old Dominion University. Students must have an overall grade point average of at least 2.00 in all courses specified as a requirement for the minor in their chosen minor exclusive of 100/200-level courses and prerequisite courses.

Minor Mathematics-Statistics/Biostatistics Minor

The mathematics-statistics/biostatistics minor consists of 12 hours of statistics at the 300/400 level, of which at most six hours can be at the 300 level. STAT 306 cannot be applied to this option.

At least nine credit hours in the chosen minor must be taken through courses offered by Old Dominion University. Students must have an overall grade point average of at least 2.00 in all courses specified as a requirement for the minor in their chosen minor exclusive of 100/200-level courses and prerequisite courses.

Ocean and Earth Sciences

Web Site: <http://www.odu.edu/oeas> (<http://www.odu.edu/oeas/>)

Kevin Yeager, Chair
Richard Hale, Chief Departmental Advisor

The Department of Ocean and Earth Sciences offers the following undergraduate majors in Ocean and Earth Science: Oceanography, Environmental Sciences, Geology, Marine Science Technology, Secondary Earth Science Education (6-12), and Middle School Science Education (6-8). A minor in Ocean and Earth Science is also offered.

The department receives considerable support from the Commonwealth and local philanthropic sources, as well as from private industry and area citizens. Establishment of the Virginia Graduate Marine Science Consortium by the General Assembly in 1979 demonstrated the Commonwealth's determination to achieve excellence in marine science. The purpose of the consortium is to advance marine science instruction, research, training, and advisory services and to enhance Virginia's position in seeking funding to carry out these activities. Charter members of the consortium are Old Dominion University, the University of Virginia, Virginia Polytechnic Institute and State University, and the College of William and Mary. The Samuel L. and Fay M. Slover endowment to Old Dominion University in 1986 has significantly accelerated the program of marine studies. In 1991, a Center for Coastal Physical Oceanography (CCPO) was established at Old Dominion University by the Commonwealth of Virginia. The center is a Designated Center for Excellence.

The Department of Ocean and Earth Sciences is housed in two buildings. The Oceanography/Physical Sciences Building contains state-of-the-art teaching laboratories, computer facilities, and research laboratories for biological, chemical and geological oceanography. The Center for Coastal Physical Oceanography is located in the Research I building and houses all of the department's physical oceanography laboratories. The department maintains a 55-foot research vessel, the R/V Fay Slover, primarily for estuarine and coastal studies. In addition to the Slover, the department has a number of small boats suitable for near shore investigations.

Practicum Experiences

Students in the Ocean and Earth Science majors have the chance to participate in a practicum—a hands-on, course-length experience that closely ties their classroom learning with "real life." Students in Oceanography,

Geology, Environmental Science, and Marine Science Technology take OEAS 307, Research Experience in Oceanography. Students in the other majors (Secondary Earth Science Education, and Middle School Science Education) can take OEAS 307 as an upper-division elective. Students may also complete an internship (OEAS 368) with a municipal, state, or federal government agency, a non-governmental organization, or a business. In addition, Honors students may also develop a senior research project in OEAS 487.

Professional Geologist Certification

Ocean and Earth science graduates who work for several years as geologists and then pass a national standardized test can be certified as a Professional Geologist by the Commonwealth of Virginia or other states. The standardized tests commonly cover the following topics (listed in order of emphasis on the test): Research, Field Methods, and Communications; Structural Geology; Hydrogeology; Sedimentology/Stratigraphy; Petrology; Geomorphology; Engineering Geology; Mineralogy; Geophysics; Paleontology; Geochemistry; Mining Geology; and Petroleum Geology.

Credit by Examination

Students with prior training or experience may receive credit for three hours of OEAS 111N by passing the DANTES Physical Geology exam. Both tests are administered by the Testing Center. Because OEAS 111N is a four credit course students must also complete a physical geology laboratory course (one credit) in order to use this advanced placement credit. Interested students should contact the chief departmental advisor about this course. Students may also refer to the Policy on Prior Learning Assessment Credit Options at the Undergraduate Level found in this Catalog.

Programs

Bachelor of Science Programs

- Ocean and Earth Science with a Major in Environmental Sciences (BS) (p. 741)
- Ocean and Earth Science with a Major in Geology (BS) (p. 744)
- Ocean and Earth Science with a Major in Marine Science Technology (BS) (p. 746)
- Ocean and Earth Science with a Major in Middle School Science Education (6-8) (BS) (p. 749)
- Ocean and Earth Science with a Major in Oceanography (BS) (p. 751)
- Ocean and Earth Science with a Major in Secondary Earth Science Education (6-12) (BS) (p. 754)

Minor Program

- Ocean and Earth Science Minor (p. 756)

Certificate Program

- Spatial Analysis of Coastal Environments Certificate (p. 757)

Bachelor of Science Ocean and Earth Science with a Major in Environmental Sciences (BS)

Richard Hale, Advisor

Students in the Ocean and Earth Science program focus on global systems that control environmental conditions on the planet. They also learn to develop solutions to complex environmental problems by working in interdisciplinary teams. All majors in the department complete courses in the basic sciences and mathematics and core courses in Earth systems science. Students majoring in Environmental Science complete a course-based research experience including both field work and laboratory analysis. In addition, students complete a suite of specialty courses specified in

each major. A minimum grade of C or higher in all major and prerequisite courses is required for graduation.

Ocean and Earth Science with a Major in Environmental Sciences

The environmental sciences major is designed for students broadly interested in earth and ocean sciences. Students in this major gain a solid background in basic sciences (e.g., chemistry, physics, math, and biology) while also taking courses in geology, oceanography, and atmospheric sciences. The major is also designed to allow students the freedom to focus their upper-level coursework across disciplinary fields related to the natural environment they find most compelling. Students in this major will be prepared for a wide range of future scientific pursuits (including graduate studies in appropriate fields), as well as careers that apply their interdisciplinary skills to policy development and interpretation. Specific employment opportunities include work in local, state, and federal government agencies, environmental consulting firms, and non-governmental organizations (NGOs).

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: grade of C or better required in both courses

Mathematics: MATH 211 or MATH 205

Information Literacy and Research: met in the major by OEAS 130G

The Nature of Science: CHEM 121N & CHEM 122N, CHEM 123N & CHEM 124N

Impact of Technology: met in the major by OEAS 220T

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department), or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Environmental Sciences Major

General Education		
Complete lower-division requirements		35-42
Complete upper-division requirements (minimum of 6 credit hours)		6
Environmental Sciences		
OEAS 111N	Physical Geology	4
or OEAS 112N	Historical Geology	
OEAS 130G	Research Skills and Information Literacy for the Natural Sciences	3
BIOL 121N & BIOL 122N	General Biology I and General Biology I Lab	4
BIOL 123N & BIOL 124N	General Biology II and General Biology II Lab	4
PHYS 111N	Introductory General Physics	4
or PHYS 231N	University Physics I	
PHYS 112N	Introductory General Physics	4
or PHYS 232N	University Physics II	
OEAS 220T	Introduction to Meteorology	3
BIOL 291	Ecology	3
or OEAS 320	Sedimentology and Stratigraphy	
STAT 310	Introductory Data Analysis	3
OEAS 306	Oceanography	3
OEAS 307	Research Experience in Oceanography	3
OEAS 310	Global Earth Systems	4
OEAS 406	Matlab	1
GEOG 402	Geographic Information Systems	3
Upper-Division Electives (OEAS 250N or 300-400 Level OEAS courses excluding 302 and 468W) *		17
The following courses include a structured laboratory or field requirement:		
OEAS 250N	Natural Hazards and Disasters (L)	
OEAS 303	Paleontology (L)	
OEAS 315	Minerals and Rocks (L)	
OEAS 320	Sedimentology and Stratigraphy (L; can be used as an elective only if not taken as required course above)	
OEAS 420	Hydrogeology (L)	
OEAS 440	Biological Oceanography (L)	
OEAS 452	Microbial Ecology of the Oceans (L)	
OEAS 453W	Marine Molecular Ecology (L)	
Total Credit Hours		104-111

* For these upper-division courses please pay careful attention to prerequisites that may not necessarily also be required courses in the major. A minimum of two courses

must have a structured laboratory or field requirement (indicated by L). Up to 4 credits of 200-level courses may be used to satisfy this upper-division requirement. Up to six credit hours of electives from departments outside of Ocean and Earth Sciences on an approved electives list can be used to satisfy this requirement (see the Chief Departmental Advisor for details). At least one writing-intensive "W" course must be taken within the major.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

Honors Program in Ocean and Earth Science

Students admitted by the faculty to the Ocean and Earth science honors program engage in supervised individual study in areas of their interest. Honors students must complete all courses required by the department with a minimum grade point average of 3.50 and a total of at least three credits in one of the following courses:

OEAS 487	Honors Research in Ocean and Earth Sciences	1-3
OEAS 497	Special Problems and Research	1-3

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
OEAS 111N or OEAS 112N	Physical Geology or Historical Geology	4
BIOL 121N and BIOL 122N		4
Literature		3
Credit Hours		14
Spring		
MATH 205 or MATH 211	Calculus for Life Sciences or Calculus I	3-4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
Interpreting the Past		3
BIOL 123N and BIOL 124N		4
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)		3
Credit Hours		16-17
Sophomore		
Fall		
CHEM 121N and CHEM 122N		4
OEAS 130G	Research Skills and Information Literacy for the Natural Sciences (Meets Information Literacy and Research)	3

OEAS 320 or BIOL 291	Sedimentology and Stratigraphy or Ecology	4
PHYS 111N or PHYS 231N	Introductory General Physics or University Physics I	4
Credit Hours		15
Spring		
CHEM 123N and CHEM 124N		4
OEAS 220T	Introduction to Meteorology (Meets Impact of Technology)	3
Philosophy and Ethics		3
PHYS 112N or PHYS 232N	Introductory General Physics or University Physics II	4
Credit Hours		14
Junior		
Fall		
OEAS 306	Oceanography	3
OEAS 307	Research Experience in Oceanography	3
OEAS 300/400-level elective		3
Human Behavior		3
Elective or Language and Culture if required		3
Credit Hours		15
Spring		
OEAS 310	Global Earth Systems	4
STAT 310	Introductory Data Analysis	3
OEAS 406	Matlab	1
OEAS 300/400-level elective		4
Elective or Language and Culture if required		3
Credit Hours		15
Senior		
Fall		
OEAS 300/400-level elective		3
OEAS 300/400-level elective		4
Human Creativity		3
Upper-Division General Education Course (Option D)		3
Elective		3
Credit Hours		16
Spring		
GEOG 402	Geographic Information Systems	3
Upper-Division General Education Course (Option D)		3
OEAS 300/400-level elective		3
Elective		6
Credit Hours		15
Total Credit Hours		120-121

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits

toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Ocean and Earth Science with a Major in Geology (BS)

Richard Hale, Advisor

Students in the Ocean and Earth Science program focus on global systems that control environmental conditions on the planet. They also learn to develop solutions to complex environmental problems by working in interdisciplinary teams. All majors in the department complete courses in the basic sciences and mathematics and core courses in Earth systems science. Students majoring in Geology complete a course-based research experience including both field work and laboratory analysis. In addition, students complete a suite of specialty courses specified in each major. A minimum grade of C or higher in all major and prerequisite courses is required for graduation.

Ocean and Earth Science with a Major in Geology

The geology major is designed for students with a wide range of professional goals in the sciences, engineering, business, and the arts. Students considering graduate work or employment in pure and applied fields of geology, including environmental geology, geological oceanography, hydrogeology, marine geology, geobiology, geophysics, and geochemistry, should build their backgrounds to support certification as a professional geologist (see later information). Students with a strong interest in geological applications of geographic information systems (GIS) and remote sensing tools should consider the geology major with a minor in geography; the certificate program in spatial analysis of coastal environments (see later description) also emphasizes this area of study.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: grade of C or better required in both courses

Mathematics: MATH 211.

Information Literacy and Research: met in the major by OEAS 130G

The Nature of Science: CHEM 121N & CHEM 122N, CHEM 123N & CHEM 124N

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department), or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Geology Major

General Education

Complete lower-division requirements	39-45
Complete upper-division requirements (minimum of 6 credit hours)	6
Geology	
BIOL 121N & BIOL 122N	General Biology I and General Biology I Lab 4
BIOL 123N & BIOL 124N	General Biology II and General Biology II Lab 4
MATH 212	Calculus II 4
OEAS 130G	Research Skills and Information Literacy for the Natural Sciences 3
OEAS 111N & OEAS 112N	Physical Geology and Historical Geology 8
PHYS 231N & PHYS 232N	University Physics I and University Physics II 8
OEAS 306	Oceanography 3
OEAS 307	Research Experience in Oceanography 3
STAT 310	Introductory Data Analysis 3
OEAS 310	Global Earth Systems 4
OEAS 315	Minerals and Rocks 4
OEAS 344W	Geomorphology 3
OEAS 320	Sedimentology and Stratigraphy 4
OEAS 406	Matlab 1
OEAS 420	Hydrogeology 3
Select six to seven credits from the following:	6-7
OEAS 303	Paleontology
OEAS 368	Internship in Ocean and Earth Sciences
OEAS 403W	Aquatic Pollution
OEAS 412	Global Environmental Change
OEAS 413	Environmental Geochemistry
OEAS 415	Waves and Tides
OEAS 419	Spatial Analysis of Coastal Environments
OEAS 425	Marine Geology
OEAS 430	Introduction to Geophysics
OEAS 434	Geodynamics
OEAS 451W	Data Collection and Analysis in Oceanography
OEAS 490	Paleoceanography

Total Credit Hours **110-117**

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

Honors Program in Ocean and Earth Science

Students admitted by the faculty to the Ocean and Earth science honors program engage in supervised individual study in areas of their interest. Honors students must complete all courses required by the department with a minimum grade point average of 3.50 and a total of at least three credits in one of the following courses:

OEAS 487	Honors Research in Ocean and Earth Sciences	1-3
OEAS 497	Special Problems and Research	1-3

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly

encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
OEAS 111N	Physical Geology	4
MATH 211	Calculus I	4
BIOL 121N and BIOL 122N		4
Credit Hours		15
Spring		
OEAS 112N	Historical Geology	4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MATH 212	Calculus II	4
BIOL 123N and BIOL 124N		4
Credit Hours		15
Sophomore		
Fall		
CHEM 121N and CHEM 122N		4
OEAS 320	Sedimentology and Stratigraphy	4
OEAS 130G	Research Skills and Information Literacy for the Natural Sciences (Meets Information Literacy and Research)	3
Literature		3
Elective or Language and Culture I (may be waived; see requirements for details)		3
Credit Hours		17
Spring		
CHEM 123N AND CHEM 124N		4
OEAS 300/400-level elective		3-4
Impact of Technology		3
Interpreting the Past		3
Elective or Language and Culture II (may be waived; see requirements for details)		3
Credit Hours		16-17
Junior		
Fall		
PHYS 231N	University Physics I	4
OEAS 315	Minerals and Rocks	4
OEAS 306	Oceanography	3
OEAS 307	Research Experience in Oceanography	3
Credit Hours		14
Spring		
PHYS 232N	University Physics II	4
OEAS 310	Global Earth Systems	4
OEAS 344W	Geomorphology	3
OEAS 406	Matlab	1

STAT 310	Introductory Data Analysis	3
Credit Hours		15
Senior		
Fall		
OEAS 420	Hydrogeology	3
Human Creativity		3
Upper-Division General Education Course (Option D)		3
Electives		4
Oral Communication		3
Credit Hours		16
Spring		
OEAS 300/400-level elective		3
Philosophy and Ethics		3
Upper-Division General Education Course (Option D)		3
Human Behavior		3
Credit Hours		12
Total Credit Hours		120-121

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Ocean and Earth Science with a Major in Marine Science Technology (BS)

Richard Hale, Advisor

Students in the Ocean and Earth Science program focus on global systems that control environmental conditions on the planet. They also learn to develop solutions to complex environmental problems by working in interdisciplinary teams. All majors in the department complete courses in the basic sciences and mathematics and core courses in Earth systems science. Students majoring in Marine Science Technology complete a course-based research experience including both field work and laboratory analysis. In addition, students complete a suite of specialty courses specified in each major. A minimum grade of C or higher in all major and prerequisite courses is required for graduation.

Ocean and Earth Science with a Major in Marine Science Technology

The marine science technology major is designed for students interested in the more practical and technical side of oceanography. Students in this major will gain practical skills in data acquisition and processing, field operations, and instrument design, assembly, operation, and maintenance. Whereas other majors in ocean and earth science emphasize more theoretical aspects of these fields, this major focuses on hands-on skills. Upon graduation, students in this major will be able to work closely with scientists, researchers, and engineers on wide ranging projects in the environmental science and technology fields. For example, these include potential job opportunities associated with Virginia's offshore wind resource development, which involve collecting and analyzing meteorological, oceanographic and environmental data, upgrading port and logistics facilities, and ensuring this development is compatible with other ocean uses.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: grade of C or better required in both courses

Oral Communication: met in the major by OEAS 444.

Mathematics: MATH 211 or MATH 205

Information Literacy and Research: met in the major by OEAS 130G

The Nature of Science: CHEM 121N & CHEM 122N, CHEM 123N & CHEM 124N

Impact of Technology: met in the major by OEAS 220T

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department), or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Marine Science Technology Major

General Education

Complete lower-division requirements 32-39

Complete upper-division requirements (minimum of 6 credit hours) 6

Marine Science Technology

OEAS 111N or OEAS 112N	Physical Geology Historical Geology	4
OEAS 130G	Research Skills and Information Literacy for the Natural Sciences	3
BIOL 121N & BIOL 122N	General Biology I and General Biology I Lab	4
BIOL 123N & BIOL 124N	General Biology II and General Biology II Lab	4
PHYS 111N or PHYS 231N	Introductory General Physics University Physics I	4
PHYS 112N or PHYS 232N	Introductory General Physics University Physics II	4
BIOL 291 or OEAS 320	Ecology Sedimentology and Stratigraphy	3-4
OEAS 220T	Introduction to Meteorology	3
OEAS 306	Oceanography	3
OEAS 307	Research Experience in Oceanography	3
OEAS 310	Global Earth Systems	4
STAT 310	Introductory Data Analysis	3
OEAS 406	Matlab	1
OEAS 416	Electronics and Oceanographic Instrumentation	3

OEAS 444	Communicating Ocean Science to Informal Audiences (meets Oral Communication)	3
GEOG 402	Geographic Information Systems	3
Upper-Division OEAS Electives*		15
BIOL 402	Scientific Diving Methods for Marine Research	
OEAS 303	Paleontology	
OEAS 315	Minerals and Rocks	
OEAS 320	Sedimentology and Stratigraphy (can be used as an elective only if BIOL 291 is used to satisfy the concentration requirement)	
OEAS 344W	Geomorphology	
OEAS 350	Where Rivers Meet the Sea: Ecology and Climate	
OEAS 403W	Aquatic Pollution	
OEAS 405	Physical Oceanography	
OEAS 410	Chemical Oceanography	
OEAS 412	Global Environmental Change	
OEAS 413	Environmental Geochemistry	
OEAS 415	Waves and Tides	
OEAS 418	Limnology: Biogeochemistry of Lakes	
OEAS 425	Marine Geology	
OEAS 451W	Data Collection and Analysis in Oceanography	
OEAS 490	Paleoceanography	

Total Credit Hours 105-113

* For these upper-division courses please pay careful attention to prerequisites that may not necessarily also be required courses in the major. Up to 4 credits of 200-level courses may be used to satisfy this upper-division requirement. Up to six credit hours of electives from departments outside of Ocean and Earth Sciences can be used to satisfy this requirement (see the Chief Departmental Advisor for the list of these approved electives). At least one writing-intensive "W" course must be taken within the major.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

Honors Program in Ocean and Earth Science

Students admitted by the faculty to the Ocean and Earth science honors program engage in supervised individual study in areas of their interest. Honors students must complete all courses required by the department with a minimum grade point average of 3.50 and a total of at least three credits in one of the following courses:

OEAS 487	Honors Research in Ocean and Earth Sciences	1-3
OEAS 497	Special Problems and Research	1-3

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
OEAS 111N or OEAS 112N	Physical Geology or Historical Geology	4
BIOL 121N and BIOL 122N		4
Literature		3
Elective or Language & Culture I (May be waived; See requirement details)		3
Credit Hours		17
Spring		
BIOL 123N and BIOL 124N		4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MATH 211 or MATH 205	Calculus I or Calculus for Life Sciences	3-4
Elective or Language & Culture II (May be waived; See requirement details)		3
Credit Hours		13-14
Sophomore		
Fall		
CHEM 121N and CHEM 122N		4
BIOL 291 or OEAS 320	Ecology or Sedimentology and Stratigraphy	3
PHYS 111N or PHYS 231N	Introductory General Physics or University Physics I	4
OEAS 130G (Meets Information Literacy and Research)		3
Interpreting the Past		3
Credit Hours		17
Spring		
CHEM 123N AND CHEM 124N		4
PHYS 112N or PHYS 232N	Introductory General Physics or University Physics II	4
OEAS 220T	Introduction to Meteorology (Meets Impact of Technology)	3
Philosophy and Ethics		3
Credit Hours		14
Junior		
Fall		
OEAS 306	Oceanography	3
OEAS 307	Research Experience in Oceanography	3
Human Behavior		3
Upper-Division OEAS Elective		3
Elective		3
Credit Hours		15
Spring		
OEAS 310	Global Earth Systems	4
OEAS 406	Matlab	1
STAT 310	Introductory Data Analysis	3

Upper-Division OEAS Elective		3
Human Creativity		3
Credit Hours		14
Senior		
Fall		
Upper-Division OEAS Elective		3
GEOG 402	Geographic Information Systems	3
Upper-Division General Education Course (Option D)		3
Upper-Division OEAS Elective		3
Elective		3
Credit Hours		15
Spring		
OEAS 416	Electronics and Oceanographic Instrumentation	3
Upper-Division OEAS Elective		3
Upper-Division General Education Course (Option D)		3
OEAS 444	Communicating Ocean Science to Informal Audiences	3
Elective		3
Credit Hours		15
Total Credit Hours		120-121

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Ocean and Earth Science with a Major in Middle School Science Education (6-8) (BS)

Richard Hale, Advisor

Students in the Ocean and Earth Science program focus on global systems that control environmental conditions on the planet. They also learn to develop solutions to complex environmental problems by working in interdisciplinary teams. All majors in the department complete courses in the basic sciences and mathematics and core courses in Earth systems science, as well as a suite of specialty courses specified in each major. A minimum grade of C or higher in all major and prerequisite courses is required for graduation.

Ocean and Earth Science with a Major in Middle School Science Education (6-8)

The middle school science education major is designed for students preparing to teach middle school science. This program meets the requirements for teacher licensure in Virginia as established by the Virginia Board of Education licensure regulations.

Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the teacher preparation programs in the College of Sciences are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information from their advisors and the Office of Clinical Experiences website at www.odu.edu/oce (<http://www.odu.edu/oce/>).

Admission

Students must first declare Ocean and Earth Science with a major in middle school science education with the chief departmental advisor. All students must apply for and be admitted into the approved middle school science education program. Students must meet the required criteria for admission by earning the minimum required grade point averages (GPA).

Required grade point averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required - all Ocean and Earth Science courses and all other science and mathematics content courses must be passed with a grade of C (2.0) or higher.
- A professional education GPA of 2.75 is required – all professional education courses must be passed with a grade of C- or higher.

Although students may enroll in a limited number of education courses, students must be admitted into the approved Earth science teacher preparation program prior to enrolling in any instructional strategies practicum education course. Students must also meet with an education advisor in the Office of Clinical Experiences.

Continuance

Students must maintain a cumulative GPA of 2.75, a major/content GPA of 2.75 and a professional education GPA of 2.75. Ocean, Earth and Atmospheric Sciences content courses must be passed with a grade of C (2.0) or higher. Courses in the professional education core must be completed with a grade of C- or higher for continuance. A professional education GPA of 2.75 is required for continuance. Students must take and pass the Praxis Subject Assessment, Earth and Spaces Sciences content knowledge (formerly Praxis II) prior to or while enrolled in the instructional

strategies course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <https://www.odu.edu/clinical-experiences/placement/background-checks> (<https://www.odu.edu/clinical-experiences/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Virginia Board of Education Prescribed Assessments for Licensure

- Praxis Subject Assessment, Earth and Spaces Sciences content knowledge (test code: 5442) – passing score of 147 required.

To review more information on the Virginia Board of Education prescribed assessments visit the Office of Clinical Experiences website, www.odu.edu/oce (<http://www.odu.edu/oce/>).

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: grade of C or better required in both courses

Oral Communication: met in the major by OEAS 444.

Mathematics: MATH 211 or MATH 205

Information Literacy and Research: met in the major by OEAS 130G

The Nature of Science: CHEM 121N & CHEM 122N, CHEM 123N & CHEM 124N

Impact of Technology: met in the major by OEAS 220T

Upper-Division General Education

The professional education core satisfies the Upper-Division General Education requirement.

Requirements for Graduation

Requirements for graduation include completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better, completion of the Senior Assessment, a minimum cumulative 2.75 GPA, in the major area, and in the professional education core, with no grade less than a C in the major and C- in the professional education core; successful completion of the Teacher Candidate Internship and a minimum of 121 credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University. Note that a C (2.0) must be earned in all Ocean and Earth Science courses used to satisfy departmental requirements.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Professional Education Core Courses

STEM 103	Foundations of STEM Teaching: An Inquiry-Based Approach	2
STEM 201	Knowing and Learning in STEM Education	3
STEM 202	Classroom Interactions in STEM Education	3
STEM 401	Project Based Instruction in STEM Education	3
STEM 402	Perspectives on STEM	3
STEM 485	Apprentice Teaching	9
OEAS 468W	Research Methods in Math and Sciences	3
Total Credit Hours		26

Middle School Science Education Major (6-8)

General Education

Complete lower-division requirements	32-39

Complete upper-division requirements (met by the professional education core)

Professional Education Core

Complete professional education core requirements	26

Middle School Science Education

BIOL 121N & BIOL 122N	General Biology I and General Biology I Lab	4
BIOL 123N & BIOL 124N	General Biology II and General Biology II Lab	4
STAT 310	Introductory Data Analysis	3
PHYS 111N & PHYS 112N	Introductory General Physics and Introductory General Physics	8
OEAS 111N	Physical Geology	4
OEAS 112N	Historical Geology	4
OEAS 130G	Research Skills and Information Literacy for the Natural Sciences	3
OEAS 220T	Introduction to Meteorology	3
OEAS 306	Oceanography	3
OEAS 310	Global Earth Systems	4
OEAS 444	Communicating Ocean Science to Informal Audiences (satisfies oral communication requirement)	3
Additional upper-division science electives; 20 credits chosen from the following options		20

OEAS 303	Paleontology
OEAS 315	Minerals and Rocks
OEAS 320	Sedimentology and Stratigraphy
OEAS 403W	Aquatic Pollution
OEAS 452	Microbial Ecology of the Oceans
ASTP 408	Astronomy for Teachers
BIOL 291	Ecology
BIOL 292	Evolution
BIOL 294	Genetics
BIOL 307	Invertebrate Zoology
BIOL 308	Botany
PHYS 309	Physics on the Back of an Envelope

Total Credit Hours	121-128

Honors Program in Ocean and Earth Science

Students admitted by the faculty to the Ocean and Earth science honors program engage in supervised individual study in areas of their interest. Honors students must complete all courses required by the department with a minimum grade point average of 3.50 and a total of at least three credits in one of the following courses:

OEAS 487	Honors Research in Ocean and Earth Sciences	1-3
OEAS 497	Special Problems and Research	1-3

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
BIOL 121N and BIOL 122N		4
Human Creativity		3
Philosophy and Ethics		3
STEM 103	Foundations of STEM Teaching: An Inquiry-Based Approach	2
Credit Hours		15
Spring		
BIOL 123N and BIOL 124N		4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MATH 211 or MATH 205	Calculus I or Calculus for Life Sciences	3-4
OEAS 130G	Research Skills and Information Literacy for the Natural Sciences (Meets Information Literacy and Research)	3
Literature		3
Credit Hours		16-17

Sophomore		
Fall		
CHEM 121N and CHEM 122N		4
PHYS 111N	Introductory General Physics	4
OEAS 111N	Physical Geology	4
STEM 201	Knowing and Learning in STEM Education	3
Credit Hours		15
Spring		
CHEM 123N and CHEM 124N		4
PHYS 112N	Introductory General Physics	4
OEAS 112N	Historical Geology	4
STEM 202	Classroom Interactions in STEM Education	3
Credit Hours		15
Junior		
Fall		
STAT 310	Introductory Data Analysis	3
OEAS 220T	Introduction to Meteorology (Meets Impact of Technology)	3
OEAS 306	Oceanography	3
Upper-Division Science Electives (2)		6-7
Credit Hours		15-16
Spring		
OEAS 310	Global Earth Systems	4
Interpreting the Past		3
Upper-Division Science Electives (2)		6-7
OEAS 444 (satisfies oral communication)		3
Credit Hours		16-17
Senior		
Fall		
STEM 401	Project Based Instruction in STEM Education	3
OEAS 468W	Research Methods in Math and Sciences	3
Human Behavior		3
Upper-Division Science Elective (3)		8-9
Credit Hours		17-18
Spring		
STEM 402	Perspectives on STEM	3
STEM 485	Apprentice Teaching	9
Credit Hours		12
Total Credit Hours		121-125

Language and Culture I & II may be met in high school and are not included in this four-year plan. Please see requirement details.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits

toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Ocean and Earth Science with a Major in Oceanography (BS)

Richard Hale, Advisor

Students in the Ocean and Earth Science program focus on global systems that control environmental conditions on the planet. They also learn to develop solutions to complex environmental problems by working in interdisciplinary teams. All majors in the department complete courses in the basic sciences and mathematics and core courses in Earth systems science. Students majoring in Oceanography complete a course-based research experience including both field work and laboratory analysis. In addition, students complete a suite of specialty courses specified in each major. A minimum grade of C or higher in all major and prerequisite courses is required for graduation.

Ocean and Earth Science with a Major in Oceanography

The Oceanography major is designed for students considering graduate work or employment in the pure and applied fields of oceanography. Students in the Oceanography major are strongly encouraged to minor in either biology, chemistry, or applied mathematics, according to their interest in graduate school and future career plans.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3

Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: grade of C or better required in both courses

Mathematics: MATH 211.

Impact of Technology: met in the major by OEAS 220T

Information Literacy and Research: met in the major by OEAS 130G

The Nature of Science: CHEM 121N & CHEM 122N, CHEM 123N & CHEM 124N

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department), or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Oceanography Major

General Education

Complete lower-division requirements	36-42
Complete upper-division requirements (minimum of 6 credit hours)	6

Oceanography

BIOL 121N & BIOL 122N	General Biology I and General Biology I Lab	4

BIOL 123N & BIOL 124N	General Biology II and General Biology II Lab	4
MATH 212	Calculus II	4
OEAS 111N or OEAS 112N	Physical Geology Historical Geology	4
OEAS 130G	Research Skills and Information Literacy for the Natural Sciences	3
OEAS 220T	Introduction to Meteorology	3
OEAS 306	Oceanography	3
OEAS 307	Research Experience in Oceanography	3
PHYS 231N & PHYS 232N	University Physics I and University Physics II	8
OEAS 310	Global Earth Systems	4
STAT 310	Introductory Data Analysis	3
OEAS 406	Matlab	1
OEAS 451W	Data Collection and Analysis in Oceanography	4
Select two of the following Oceanography core courses:		6-7
OEAS 405	Physical Oceanography	
OEAS 410	Chemical Oceanography	
OEAS 425	Marine Geology	
OEAS 440	Biological Oceanography	

Upper-division electives outside Ocean and Earth Sciences

Students must take 9 credits at the 300-400 level in a science, math, or engineering discipline outside of the OES department (i.e., Chemistry, Biology, Physics, Engineering, Math, Geography, Computer Science). Select 200-level courses can be accepted with prior approval of the Chief Departmental Advisor.

Upper-division electives within Ocean and Earth Science

Students must take 9 or more credits at the 300-400 level in the OES department (excluding OEAS 302 and OEAS 468W). These can include any of the oceanography core courses (if not already taken as an elective above). Students interested in graduate school should strongly consider independent research (OEAS 487 or OEAS 497), and should consult with their academic advisor for additional information.

Total Credit Hours **114-121**

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

Honors Program in Ocean and Earth Science

Students admitted by the faculty to the Ocean and Earth science honors program engage in supervised individual study in areas of their interest. Honors students must complete all courses required by the department with a minimum grade point average of 3.50 and a total of at least three credits in one of the following courses:

OEAS 487	Honors Research in Ocean and Earth Sciences	1-3
OEAS 497	Special Problems and Research	1-3

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
BIOL 121N and BIOL 122N		4
OEAS 111N or OEAS 112N	Physical Geology or Historical Geology	4
Literature		3
Elective or Language & Culture I (if required)		3
Credit Hours		17
Spring		
BIOL 123N and BIOL 124N		4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
MATH 211	Calculus I	4
Elective or Language & Culture II (if required)		3
Credit Hours		14
Sophomore		
Fall		
CHEM 121N and CHEM 122N		4
PHYS 231N	University Physics I	4
MATH 212	Calculus II	4
OEAS 130G (Meets Information Literacy and Research)		3
Credit Hours		15
Spring		
CHEM 123N and CHEM 124N		4
PHYS 232N	University Physics II	4
OEAS 220T	Introduction to Meteorology (Meets Impact of Technology)	3
STAT 310	Introductory Data Analysis	3
Credit Hours		14
Junior		
Fall		
Human Creativity		3
Philosophy & Ethics		3
OEAS 306	Oceanography	3
OEAS 307	Research Experience in Oceanography	3
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)		3
Credit Hours		15
Spring		
OEAS 310	Global Earth Systems	4
OEAS 451W	Data Collection and Analysis in Oceanography (C or better required to meet University Writing Intensive requirement)	4
OEAS 406	Matlab	1
Interpreting the Past		3
OEAS 300-/400-level Elective		3
Credit Hours		15

Senior		
Fall		
OEAS 440 or OEAS 405	Biological Oceanography or Physical Oceanography	3-4
OEAS 300-/400-level Elective		3
Non-OEAS science elective		3
Non-OEAS science elective		3
Upper-Division General Education Course (Option D)		3
Credit Hours		15-16
Spring		
OEAS 300-/400-level Elective		3
OEAS 425 or OEAS 410	Marine Geology or Chemical Oceanography	3
Upper-Division General Education Course (Option D)		3
Human Behavior		3
Non-OEAS science elective		3
Credit Hours		15
Total Credit Hours		120-121

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Bachelor of Science Ocean and Earth Science with a Major in Secondary Earth Science Education (6-12) (BS)

Bachelor of Science—Ocean and Earth Science Major

Richard Hale, Advisor

Students in the Ocean and Earth Science program focus on global systems that control environmental conditions on the planet. They also learn to develop solutions to complex environmental problems by working in interdisciplinary teams. All majors in the department complete courses in the basic sciences and mathematics and core courses in Earth systems science, as well as a suite of specialty courses specified in each major. A minimum grade of C or higher in all major and prerequisite courses is required for graduation.

Ocean and Earth Science with a Major in Secondary Earth Science Education (6-12)

The secondary Earth science education major is designed for students preparing to teach Earth science in secondary schools. This program meets the requirements for teacher licensure in Virginia as established by the Virginia Board of Education licensure regulations.

Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the teacher preparation programs in the College of Sciences are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information from their advisors and the Office of Clinical Experiences website at www.odu.edu/oce (<http://www.odu.edu/oce/>).

Admission

Students must first declare Ocean and Earth Science with a major in secondary Earth science education with the chief departmental advisor. All students must apply for and be admitted into the approved secondary Earth science education program. Students must meet the required criteria for admission by earning the minimum required grade point averages (GPA).

Required grade point averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required - all Ocean, Earth and Atmospheric Sciences courses and all other science and mathematics content courses must be passed with a grade of C (2.0) or higher.
- A professional education GPA of 2.75 is required – all professional education courses must be passed with a grade of C- or higher.

Although students may enroll in a limited number of education courses, students must be admitted into the approved Earth science teacher preparation program prior to enrolling in any instructional strategies practicum education course. Students must also meet with an education advisor in the Office of Clinical Experiences.

Continuance

Students must maintain a cumulative GPA of 2.75, a major/content GPA of 2.75 and a professional education GPA of 2.75. Ocean and Earth Science content courses must be passed with a grade of C (2.0) or higher. Courses in the professional education core must be completed with a grade of C- or higher for continuance. A professional education GPA of 2.75 is required for continuance. Students must take and pass the Praxis Subject Assessment, Earth and Spaces Sciences content knowledge (formerly Praxis II) prior to or while enrolled in the instructional strategies course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <https://www.odu.edu/clinical-experiences/placement/background-checks> (<https://www.odu.edu/clinical-experiences/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs are advised to complete this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Virginia Board of Education Prescribed Assessments for Licensure

- Praxis Subject Assessment, Earth and Spaces Sciences content knowledge (test code: 5572) – passing score of 154 required.

To review more information on the Virginia Board of Education prescribed assessments visit the Office of Clinical Experiences website, www.odu.edu/oce (<http://www.odu.edu/oce/>).

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Written Communication: grade of C or better required in both courses

Oral Communication: met in the major by OEAS 444.

Mathematics: MATH 211 or MATH 205

Information Literacy and Research: met in the major by OEAS 130G

The Nature of Science: CHEM 121N & CHEM 122N, CHEM 123N & CHEM 124N

Impact of Technology: met in the major by OEAS 220T

Upper-Division General Education

The professional education core satisfies the Upper-Division General Education requirement.

Requirements for Graduation

Requirements for graduation include completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better, completion of the Senior Assessment, a minimum cumulative 2.75 GPA, in the major area, and in the professional education core, with no grade less than a C in the major and C- in the professional education core; successful completion of the Teacher Candidate Internship and a minimum of 120 credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University. Note that a C (2.0) must be earned in all Ocean and Earth Science courses used to satisfy departmental requirements.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Professional Education Core

STEM 103	Foundations of STEM Teaching: An Inquiry-Based Approach	2
STEM 201	Knowing and Learning in STEM Education	3
STEM 202	Classroom Interactions in STEM Education	3
STEM 401	Project Based Instruction in STEM Education	3
STEM 402	Perspectives on STEM	3
STEM 485	Apprentice Teaching	9
OEAS 468W	Research Methods in Math and Sciences	3
Total Credit Hours		26

Secondary Earth Science Education Major (6-12)

General Education

Complete lower-division requirements	32-39

Complete upper-division requirements (met in the major by the professional education core)

Professional Education Core

Complete professional education core requirements	26

Earth Science Education

BIOL 121N & BIOL 122N	General Biology I and General Biology I Lab	4
STAT 310	Introductory Data Analysis	3
PHYS 111N & PHYS 112N	Introductory General Physics and Introductory General Physics	8
OEAS 111N	Physical Geology	4
OEAS 112N	Historical Geology	4
OEAS 130G	Research Skills and Information Literacy for the Natural Sciences	3
OEAS 220T	Introduction to Meteorology	3
OEAS 303	Paleontology	3
OEAS 306	Oceanography	3
OEAS 310	Global Earth Systems	4
OEAS 315	Minerals and Rocks	4
OEAS 320	Sedimentology and Stratigraphy	4
OEAS 344W	Geomorphology	3
ASTP 408	Astronomy for Teachers	3

OEAS 444	Communicating Ocean Science to Informal Audiences (satisfies oral communication requirement)	3

Total Credit Hours	114-121

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

Honors Program in Ocean and Earth Science

Students admitted by the faculty to the Ocean and Earth science honors program engage in supervised individual study in areas of their interest. Honors students must complete all courses required by the department with a minimum grade point average of 3.50 and a total of at least three credits in one of the following courses:

OEAS 487	Honors Research in Ocean and Earth Sciences	1-3
OEAS 497	Special Problems and Research	1-3

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (C or better required)	3
BIOL 121N and BIOL 122N		4
Human Creativity		3
Philosophy and Ethics		3
STEM 103	Foundations of STEM Teaching: An Inquiry-Based Approach	2
Credit Hours		15
Spring		
MATH 211 or MATH 205	Calculus I or Calculus for Life Sciences	4
ENGL 211C or ENGL 231C	Writing, Rhetoric, and Research (C or better required) or Writing, Rhetoric, and Research: Special Topics	3
OEAS 130G	Research Skills and Information Literacy for the Natural Sciences (Meets Information Literacy and Research)	3
Literature		3
Credit Hours		13
Sophomore		
Fall		
CHEM 121N and CHEM 122N		4
PHYS 111N	Introductory General Physics	4
OEAS 111N	Physical Geology	4

STEM 201	Knowing and Learning in STEM Education	3
Credit Hours		15
Spring		
CHEM 123N and CHEM 124N		4
PHYS 112N	Introductory General Physics	4
OEAS 112N	Historical Geology	4
STEM 202	Classroom Interactions in STEM Education	3
Credit Hours		15
Junior		
Fall		
STAT 310	Introductory Data Analysis	3
OEAS 220T	Introduction to Meteorology (Meets Impact of Technology)	3
OEAS 320	Sedimentology and Stratigraphy	4
OEAS 315	Minerals and Rocks	4
OEAS 306	Oceanography	3
Credit Hours		17
Spring		
OEAS 303	Paleontology	3
OEAS 310	Global Earth Systems	4
Interpreting the Past		3
OEAS 344W	Geomorphology	3
OEAS 444 (satisfies oral communication)		3
Elective (OEAS 300/400 recommended)		2
Credit Hours		18
Senior		
Fall		
ASTP 408	Astronomy for Teachers	3
STEM 401	Project Based Instruction in STEM Education	3
OEAS 468W	Research Methods in Math and Sciences	3
Human Behavior		3
Elective		3
Credit Hours		15
Spring		
STEM 402	Perspectives on STEM	3
STEM 485	Apprentice Teaching	9
Credit Hours		12
Total Credit Hours		120

Language and Culture I & II may be met in high school and are not included in this four-year plan. Please see requirement details.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-

entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor Ocean and Earth Science Minor

Juniors and seniors with declared majors in biology, biochemistry, chemistry, computer science, engineering, mathematics, or physics are eligible to enter the minor program in Ocean and Earth Science. Specific course prerequisites will be strictly enforced and students with majors in other disciplines should consult with the chief departmental advisor in the Department of Ocean and Earth Sciences before applying to the program. Applicants must have already declared a major and have a minimum GPA of 2.00. Students wishing to pursue a minor in Ocean and Earth Science may elect to emphasize any aspect of biological, chemical, physical, or geological science from course offerings available to Ocean and Earth Science majors, and must complete 12 credit hours of OEAS coursework at the 300 and/or 400 level. The following courses do not satisfy the minor requirements: OEAS 302, OEAS 402, and OEAS 426.

For completion of a minor, a student must have a C or better in each course taken for the minor including prerequisites and a minimum overall cumulative grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses. A minimum of six hours in upper-level courses in the minor requirement must be completed through courses offered by Old Dominion University.

Certificate

Spatial Analysis of Coastal Environments Certificate

Certificate in Spatial Analysis of Coastal Environments

The certificate in spatial analysis of coastal environments provides an interdisciplinary program for students wishing to pursue careers in coastal management or research, remote sensing, or geographic information systems (GIS) applications. Rendered upon completion of the requirements, the certificate is an academic affidavit comprised of courses in geography and ocean and earth science and is administered by the two departments. Students must take courses in the areas listed below and complete them with a cumulative GPA of 3.00 or higher and no grade below a C (2.00). Students must complete a minimum of six hours in upper-level courses required for the certificate through courses offered by Old Dominion University.

The certificate is available to postgraduate professionals who meet the requirements. Students with comparable professional experience may be able to show competence in selected courses through examination.

Students seeking graduate certification should refer to the Graduate Catalog.

Requirements

Core Courses

GEOG 404	Digital Techniques for Remote Sensing	3
GEOG 462	Advanced Spatial Analysis	3

Interpretive Analysis Courses

Select two of the following:

BIOL 404	Conservation Biology and Sustainable Development	
GEOG 420	Marine Geography	
GEOG 422W	Coastal Geography	
GEOG 490	Applied Cartography/GIS *	
GEOG 495	Topics in Geography *	
OEAS 306	Oceanography	
OEAS 344W	Geomorphology	
OEAS 495	Special Topics *	

Capstone Seminar

GEOG/OEAS 419	Spatial Analysis of Coastal Environments	3

Total Credit Hours	15

* Advanced approval required

Physics

Web Site: <http://www.odu.edu/physics> (<http://www.odu.edu/physics/>)

Sebastian Kuhn, Chair

Perry Nerem, Chief Departmental Advisor

Stephen Bueltmann, Associate Departmental Advisor

The Department of Physics offers the following majors: physics, physics-professional, secondary physics education (6-12), and astrophysics. In addition, dual degrees with physics and electrical engineering and physics with the Master of Business Administration are offered.

Senior Thesis

An important feature of all majors is the Senior Thesis, which is based on individual research done under the supervision of a faculty advisor. The Senior Thesis is a capstone experience that gives a student the opportunity to apply knowledge and skills acquired in the classroom to real-life research problems in physics. This research can be done either in on-campus laboratories and facilities or at other scientific institutions in the region

where departmental faculty members perform research, such as the Thomas Jefferson National Accelerator Facility (including the Applied Research Center) or the Langley Research Center of NASA. On completion of the project, the student must prepare a written final report and make an oral presentation of the results to the department. The senior thesis can be completed in one semester, by taking PHYS 499W, or in two semesters, by taking the PHYS 489W & PHYS 490W sequence.

Advanced Placement

Advanced placement credit is awarded to students who earn qualifying scores on AP and IB subject examinations. See the equivalency charts on the ODU website at <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>).

Advanced placement credit for courses other than PHYS 111N-PHYS 112N and PHYS 231N-PHYS 232N may be received on the basis of examinations administered by the Department of Physics. Permission to take such an examination must be obtained from the chief departmental advisor. Students may also refer to the Policy on Prior Learning Assessment Credit Options at the Undergraduate Level found in this Catalog.

Clifford L. and Lillian R. Adams Scholarship

The Department of Physics selects one or more students each year to receive the Clifford L. and Lillian R. Adams Scholarship. The recipient must be a declared physics major and may be an entering freshman, a transfer student, or a continuing student. Selection is based on a student's academic record, relevant test scores, and recommendations. The award is renewable.

Programs

Bachelor of Science Programs

- Physics (BS) (p. 757)
- Physics and Master of Business Administration (BS, MBA) (p. 770)
- Physics with a Major in Astrophysics (BS) (p. 760)
- Physics with a Major in Physics and Electrical Engineering (BS, BSEE) (p. 764)
- Physics with a Major in Physics-Professional (BS) (p. 762)
- Physics with a Major in Secondary Physics Education (6-12) (BS) (p. 767)

Minor Program

- Physics Minor (p. 760)

Bachelor of Science Physics (BS)

The Physics major is designed primarily for students preparing to do graduate study in physics and related fields or for students preparing to work professionally upon completion of the BS degree in various technical fields requiring the strongest preparation in physics.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3

Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Mathematics: satisfied by the major

Information Literacy and Research: CS 120G or CS 121G or OEAS 130G

Nature of Science: satisfied by the major

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department), or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

All majors for the BS degree in physics require completion of a minimum of 120 credit hours (150 credit hours for the dual degree in physics and electrical engineering and the dual degree in physics and the Master of Business Administration), which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University, completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better, and Senior Assessment. Additionally, physics majors require completion of the Physics Exit Exam with a minimum score of 20th percentile, and the astrophysics major requires completion of the Astrophysics Exit Exam with a minimum score of 20th percentile. Additional hours may be required to meet the foreign language requirement. All majors require a minimum grade of C in PHYS 261N-PHYS 262N, PHYS 231N-PHYS 232N, or PHYS 226N-PHYS 227N. Except for the secondary physics education major, physics majors require a minimum cumulative grade point average of 2.00 overall and in the major. The secondary physics education major requires a minimum 2.75 grade point average overall, in the major, and in the professional education core, with no grade less than a C- in the major and professional education core. The professional education core satisfies the upper-level general education requirement.

Physics Major

General Education

Complete lower-division requirements		30-36
Complete upper-division requirements (minimum of 6 credit hours)		6
Physics Major		
MATH 211	Calculus I	4
MATH 212	Calculus II	4
MATH 312	Calculus III	4
or MATH 285	Transfer Credit for Calculus III	
MATH 307	Ordinary Differential Equations	3
or MATH 280	Transfer Credit for Ordinary Differential Equations	
Select one of the following:		3
MATH 316	Introductory Linear Algebra	

MATH 401	Partial Differential Equations	
MATH 421	Applied Mathematics II: Mathematical Modeling	
MATH 422	Applied Complex Variables	
CHEM 121N & CHEM 122N	Foundations of Chemistry I Lecture and Foundations of Chemistry I Laboratory	4
CHEM 123N & CHEM 124N	Foundations of Chemistry II Lecture and Foundations of Chemistry II Laboratory	4
PHYS 261N	Advanced University Physics I	4
or PHYS 231N	University Physics I	
or PHYS 226N	Honors: University Physics I	
CS 151	Introduction to Programming with Java	4
or CS 153	Introduction to Programming with Python	
PHYS 262N	Advanced University Physics II	4
or PHYS 232N	University Physics II	
or PHYS 227N	Honors: University Physics II	
PHYS 303	Intermediate Experimental Physics	3
PHYS 319	Analytical Mechanics	3
PHYS 323	Modern Physics	3
PHYS 355	Mathematical Methods of Physics	3
PHYS 413	Methods of Experimental Physics	3
PHYS 420	Introductory Computational Physics	3
PHYS 425	Electromagnetism I	3
PHYS 452	Introduction to Quantum Mechanics	3
PHYS 453	Electromagnetism II	3
PHYS 454	Thermal and Statistical Physics	3
PHYS 456	Intermediate Quantum Mechanics	3
PHYS 499W	Senior Thesis *	3
or PHYS 489W & PHYS 490W	Senior Thesis I and Senior Thesis II	
PHYS 120	Physics in the 21st Century	1
or PHYS 309	Physics on the Back of an Envelope	
Select two of the following: **		6
ASTP 313	Elements of Astrophysics	
PHYS 411	Introduction to Atomic Physics	
ASTP 414	Relativity and Cosmology	
PHYS 415	Introduction to Nuclear and Particle Physics	
PHYS 416	Introduction to Solid State Physics	
PHYS 417	Introduction to Particle Accelerator Physics	
ASTP 495	Special Topics in Astrophysics	
Total Credit Hours		117-123

* Grade of C or better required in PHYS 499W or both PHYS 489W and PHYS 490W

** At least one three-credit course must be at the 400-level.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

BS Degree with Honors

Qualified students may receive the BS degree with honors (to be noted on their diplomas) by completing specified additional requirements. At the time of application for this designation, a student must have a GPA of 3.50 or higher in physics, a GPA of 3.25 or higher overall, must have completed two contract honors courses, and must have completed 60 credit hours (of which at least 54 must be in grade-point graded courses) at Old Dominion University. (Contract honors courses are specialized courses of individual study under the direct supervision of a professor. Permission to take these courses is granted jointly by the Department of Physics and the Honors College.)

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 211	Calculus I	4
CHEM 121N and CHEM 122N		4
Oral Communication		3
Language & Culture I (May be waived; See requirement details)		0-3
Credit Hours		14-17
Spring		
MATH 212	Calculus II	4
Select one of the following:		4
PHYS 261N	Advanced University Physics I	
PHYS 231N	University Physics I	
PHYS 226N	Honors: University Physics I	
CHEM 123N and CHEM 124N		4
Philosophy and Ethics		3
Language & Culture II (May be waived; See requirement details)		0-3
Credit Hours		15-18
Sophomore		
Fall		
MATH 312 or MATH 285		4
Select one of the following:		4
PHYS 262N	Advanced University Physics II	
PHYS 232N	University Physics II	
PHYS 227N	Honors: University Physics II	
ENGL 211C or ENGL 231C (Grade of C or better required)		3
Impact of Technology		3
Select one of the following:		3
CS 120G	Introduction to Information Literacy and Research	
CS 121G	Introduction to Information Literacy and Research for Scientists	
OEAS 130G	Research Skills and Information Literacy for the Natural Sciences	
Credit Hours		17
Spring		
PHYS 319	Analytical Mechanics	3
CS 151 or CS 153	Introduction to Programming with Java or Introduction to Programming with Python	4
MATH 307 or MATH 280		3
Select one of the following:		1-2
PHYS 120	Physics in the 21st Century *	

PHYS 309	Physics on the Back of an Envelope *	
Human Creativity		3
Credit Hours		14-15
Junior		
Fall		
PHYS 355	Mathematical Methods of Physics	3
PHYS 303	Intermediate Experimental Physics	3
PHYS 323	Modern Physics	3
PHYS 425	Electromagnetism I	3
Literature		3
Credit Hours		15
Spring		
PHYS 413	Methods of Experimental Physics	3
PHYS 453	Electromagnetism II *	3
Select one of the following:		3
ASTP 313	Elements of Astrophysics *	
PHYS 411	Introduction to Atomic Physics	
PHYS 415	Introduction to Nuclear and Particle Physics	
PHYS 416	Introduction to Solid State Physics	
PHYS 417	Introduction to Particle Accelerator Physics	
Select one of the following:		3
MATH 316	Introductory Linear Algebra	
MATH 401	Partial Differential Equations	
MATH 421	Applied Mathematics II: Mathematical Modeling	
MATH 422	Applied Complex Variables	
Human Behavior		3
Credit Hours		15
Senior		
Fall		
PHYS 420	Introductory Computational Physics	3
PHYS 452	Introduction to Quantum Mechanics	3
PHYS 489W or PHYS 499W		1-3
Interpreting the Past		3
Upper-Division General Education Course (Option D)		3
Elective (if needed)		3
Credit Hours		16-18
Spring		
PHYS 456	Intermediate Quantum Mechanics *	3
PHYS 454	Thermal and Statistical Physics	3
Select one of the following:		3
ASTP 414	Relativity and Cosmology	
PHYS 411	Introduction to Atomic Physics	
PHYS 415	Introduction to Nuclear and Particle Physics	

PHYS 416	Introduction to Solid State Physics	
PHYS 417	Introduction to Particle Accelerator Physics	
PHYS 490W or PHYS 499W		2-3
Upper-Division General Education Course (Option D)		3
Credit Hours		14-15
Total Credit Hours		120-130

*PHYS 120 and PHYS 420 are offered fall semester only. ASTP 313, PHYS 309, PHYS 453, and PHYS 456 are offered spring semester only.

Minor Physics Minor

Requirements

PHYS 231N-PHYS 232N or PHYS 261N-PHYS 262N or PHYS 226N-PHYS 227N must be completed as prerequisites for the minor in physics and are not included in the calculation of the grade point average for the minor. The minor in physics requires completion of all courses specified as a requirement for the minor, with an overall cumulative grade point average of 2.00 or better in these courses exclusive of 100/200 level courses and prerequisite courses.

PHYS 319	Analytical Mechanics	3
PHYS 323	Modern Physics	3
Two 300 or 400-level PHYS courses		6
Total Credit Hours		12

Students must complete a minimum of six credit hours of 300-level or 400-level PHYS courses in the minor requirement through courses offered by Old Dominion University. Up to three credits can be in Independent Study courses, with approval of the chief departmental advisor. Any substitutions must be approved in writing by the chief departmental advisor.

Bachelor of Science Physics with a Major in Astrophysics (BS)

The Bachelor of Science in physics with a major in astrophysics is designed primarily for students preparing to do graduate study in astrophysics and related fields.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3

Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Mathematics: Satisfied by the major

Information Literacy and Research: CS 120G or CS 121G or OEAS 130G

Nature of Science: satisfied by the major

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department), or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

All majors for the BS degree in physics require completion of a minimum of 120 credit hours (150 credit hours for the dual degree in physics and electrical engineering and the dual degree in physics and the Master of Business Administration), which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University, completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better, and Senior Assessment. Additionally, physics majors require completion of the Physics Exit Exam with a minimum score of 20th percentile, and the astrophysics major requires completion of the Astrophysics Exit Exam with a minimum score of 20th percentile. Additional hours may be required to meet the foreign language requirement. All majors require a minimum grade of C in PHYS 261N-PHYS 262N, PHYS 231N-PHYS 232N, or PHYS 226N-PHYS 227N. Except for the secondary physics education major, physics majors require a minimum cumulative grade point average of 2.00 overall and in the major. The secondary physics education major requires a minimum 2.75 grade point average overall, in the major, and in the professional education core, with no grade less than a C- in the major and professional education core. The professional education core satisfies the upper-level general education requirement.

Astrophysics Major

General Education

Complete lower-division requirements	30-36
Complete upper-division requirements (minimum of 6 credit hours)	6

Astrophysics

MATH 211	Calculus I	4
MATH 212	Calculus II	4
MATH 312	Calculus III	4
or MATH 285	Transfer Credit for Calculus III	
MATH 307	Ordinary Differential Equations	3
or MATH 280	Transfer Credit for Ordinary Differential Equations	
Select one of the following:		3
MATH 316	Introductory Linear Algebra	
MATH 401	Partial Differential Equations	
MATH 421	Applied Mathematics II: Mathematical Modeling	
MATH 422	Applied Complex Variables	
CHEM 121N & CHEM 122N	Foundations of Chemistry I Lecture and Foundations of Chemistry I Laboratory	4
CS 151	Introduction to Programming with Java	4
or CS 153	Introduction to Programming with Python	

Select one of the following:	4
ASTP 103N Introductory Astronomy of the Solar System	
ASTP 104N Introductory Astronomy of Galaxies and Cosmology	
PHYS 120 Physics in the 21st Century	1
or PHYS 309 Physics on the Back of an Envelope	
PHYS 261N Advanced University Physics I	4
or PHYS 231N University Physics I	
or PHYS 226N Honors: University Physics I	
PHYS 262N Advanced University Physics II	4
or PHYS 232N University Physics II	
or PHYS 227N Honors: University Physics II	
PHYS 303 Intermediate Experimental Physics	3
PHYS 319 Analytical Mechanics	3
PHYS 323 Modern Physics	3
PHYS 355 Mathematical Methods of Physics	3
PHYS 420 Introductory Computational Physics	3
PHYS 425 Electromagnetism I	3
PHYS 452 Introduction to Quantum Mechanics	3
PHYS 454 Thermal and Statistical Physics	3
PHYS 499W Senior Thesis *	3
or PHYS 489W Senior Thesis I	
& PHYS 490W and Senior Thesis II	
ASTP 313 Elements of Astrophysics	3
ASTP 414 Relativity and Cosmology	3
Select two of the following:	6
PHYS 413 Methods of Experimental Physics	
PHYS 453 Electromagnetism II	
PHYS 456 Intermediate Quantum Mechanics	
ASTP 495 Special Topics in Astrophysics (Exoplanets / Atmospheric Spectroscopy / Satellite Remote Sensing)	3
Total Credit Hours	117-123

* Grade of C or better required in PHYS 499W or both PHYS 489W and PHYS 490W

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

BS Degree with Honors

Qualified students may receive the BS degree with honors (to be noted on their diplomas) by completing specified additional requirements. At the time of application for this designation, a student must have a GPA of 3.50 or higher in physics, a GPA of 3.25 or higher overall, must have completed two contract honors courses, and must have completed 60 credit hours (of which at least 54 must be in grade-point graded courses) at Old Dominion University. (Contract honors courses are specialized courses of individual study under the direct supervision of a professor. Permission to take these courses is granted jointly by the Department of Physics and the Honors College.)

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 211	Calculus I	4
CHEM 121N and CHEM 122N		4
Elective or Language & Culture I (May be waived; See requirement details)		3
Credit Hours		14
Spring		
MATH 212	Calculus II	4
Select one of the following:		4
PHYS 261N	Advanced University Physics I	
PHYS 231N	University Physics I	
PHYS 226N	Honors: University Physics I	
ASTP 103N or ASTP 104N	Introductory Astronomy of the Solar System or Introductory Astronomy of Galaxies and Cosmology	4
Elective or Language & Culture II (May be waived; See requirement details)		0-3
Credit Hours		12-15
Sophomore		
Fall		
ENGL 211C or ENGL 231C (Grade of C or better required)		3
MATH 312 or MATH 285		4
Select one of the following:		4
PHYS 262N	Advanced University Physics II	
PHYS 232N	University Physics II	
PHYS 227N	Honors: University Physics II	
Select one of the following:		3
CS 120G	Introduction to Information Literacy and Research	
CS 121G	Introduction to Information Literacy and Research for Scientists	
OEAS 130G	Research Skills and Information Literacy for the Natural Sciences	
Oral Communication		3
Credit Hours		17
Spring		
PHYS 319	Analytical Mechanics	3
MATH 307 or MATH 280		3
CS 151 or CS 153	Introduction to Programming with Java or Introduction to Programming with Python	4
PHYS 120 or PHYS 309 *		1
Human Creativity		3
Interpreting the Past		3
Credit Hours		17

Junior		
Fall		
PHYS 355	Mathematical Methods of Physics	3
PHYS 303	Intermediate Experimental Physics	3
PHYS 323	Modern Physics	3
PHYS 425	Electromagnetism I	3
Literature		3
Credit Hours		15
Spring		
ASTP 313	Elements of Astrophysics *	3
Select one of the following:		3
PHYS 413	Methods of Experimental Physics	
PHYS 453	Electromagnetism II *	
PHYS 456	Intermediate Quantum Mechanics *	
PHYS 499W or PHYS 489W & PHYS 490W (Grade of C or better required)		3
Select one of the following:		3
MATH 316	Introductory Linear Algebra	
MATH 401	Partial Differential Equations	
MATH 421	Applied Mathematics II: Mathematical Modeling	
MATH 422	Applied Complex Variables	
Human Behavior		3
Credit Hours		15
Senior		
Fall		
PHYS 452	Introduction to Quantum Mechanics	3
PHYS 420	Introductory Computational Physics	3
ASTP 414	Relativity and Cosmology	3
Impact of Technology		3
Upper-Division General Education Course (Option D)		3
Credit Hours		15
Spring		
Select one of the following:		3
PHYS 413	Methods of Experimental Physics	
PHYS 453	Electromagnetism II *	
PHYS 456	Intermediate Quantum Mechanics *	
PHYS 454	Thermal and Statistical Physics	3
Philosophy and Ethics		3
ASTP 495	Special Topics in Astrophysics	3
Upper-Division General Education Course (Option D)		3
Credit Hours		15
Total Credit Hours		120-123

*PHYS 120 and PHYS 420 are offered fall semester only. ASTP 313, PHYS 309, PHYS 453, and PHYS 456 are offered spring semester only.

Bachelor of Science Physics with a Major in Physics- Professional (BS)

The Physics-Professional major is designed for students who wish to create a specialized program of study that combines a strong foundation in physics with strong preparation in another field. Such other fields include engineering, medicine, computer science, business, and communications, to name a few.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Mathematics: Satisfied by the major

Information Literacy and Research: CS 120G or CS 121G or OEAS 130G

Nature of Science: satisfied by the major

Upper-Division General Education

- Option A. Approved Disciplinary Minor (a minimum of 12 hours determined by the department), or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C. An approved Certification Program such as teaching licensure
- Option D. Two Upper-Division Courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

All majors for the BS degree in physics require completion of a minimum of 120 credit hours (150 credit hours for the dual degree in physics and electrical engineering and the dual degree in physics and the Master of Business Administration), which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University, completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better, and Senior Assessment. Additionally, physics majors require completion of the Physics Exit Exam with a minimum score of 20th percentile, and the astrophysics major requires completion of the Astrophysics Exit Exam with a minimum score of 20th percentile. Additional hours may be required to

meet the foreign language requirement. All majors require a minimum grade of C in PHYS 261N-PHYS 262N, PHYS 231N-PHYS 232N, or PHYS 226N-PHYS 227N. Except for the secondary physics education major, physics majors require a minimum cumulative grade point average of 2.00 overall and in the major. The secondary physics education major requires a minimum 2.75 grade point average overall, in the major, and in the professional education core, with no grade less than a C- in the major and professional education core. The professional education core satisfies the upper-level general education requirement.

Math Minor

Physics-Professional majors wishing to complete a minor in applied mathematics can do so with just two additional math courses. Please consult the Department of Mathematics section of the Catalog for details.

Physics-Professional Major

General Education

Complete lower-division requirements	30-36
Complete upper-division requirements (minimum of 6 credit hours)	6

Physics-Professional Major

MATH 211	Calculus I	4
MATH 212	Calculus II	4
MATH 312	Calculus III	4
or MATH 285	Transfer Credit for Calculus III	
MATH 307	Ordinary Differential Equations	3
or MATH 280	Transfer Credit for Ordinary Differential Equations	
Select one of the following:		3
MATH 316	Introductory Linear Algebra	
MATH 401	Partial Differential Equations	
MATH 421	Applied Mathematics II: Mathematical Modeling	
MATH 422	Applied Complex Variables	
CHEM 121N & CHEM 122N	Foundations of Chemistry I Lecture and Foundations of Chemistry I Laboratory	4
CHEM 123N & CHEM 124N	Foundations of Chemistry II Lecture and Foundations of Chemistry II Laboratory	4
PHYS 261N	Advanced University Physics I	4
or PHYS 231N	University Physics I	
or PHYS 226N	Honors: University Physics I	
CS 151	Introduction to Programming with Java	4
or CS 153	Introduction to Programming with Python	
PHYS 262N	Advanced University Physics II	4
or PHYS 232N	University Physics II	
or PHYS 227N	Honors: University Physics II	
PHYS 323	Modern Physics	3
PHYS 319	Analytical Mechanics	3
PHYS 303	Intermediate Experimental Physics	3
PHYS 355	Mathematical Methods of Physics	3
PHYS 413	Methods of Experimental Physics	3
PHYS 425	Electromagnetism I	3
PHYS 452	Introduction to Quantum Mechanics	3
PHYS 454	Thermal and Statistical Physics	3
Select one of the following:		3
PHYS 420	Introductory Computational Physics	
PHYS 453	Electromagnetism II	
PHYS 456	Intermediate Quantum Mechanics	
PHYS 499W	Senior Thesis **	3
or PHYS 489W & PHYS 490W	Senior Thesis I and Senior Thesis II	
PHYS 120	Physics in the 21st Century	1
or PHYS 309	Physics on the Back of an Envelope	

Select two of the following: ** 6

ASTP 313	Elements of Astrophysics
ASTP 414	Relativity and Cosmology
ASTP 495	Special Topics in Astrophysics
PHYS 411	Introduction to Atomic Physics
PHYS 415	Introduction to Nuclear and Particle Physics
PHYS 416	Introduction to Solid State Physics
PHYS 417	Introduction to Particle Accelerator Physics

Total Credit Hours 111-117

- * Grade of C or better required in PHYS 499W or both PHYS 489W and PHYS 490W
- ** At least one three credit course must be at the 400-level.

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

BS Degree with Honors

Qualified students may receive the BS degree with honors (to be noted on their diplomas) by completing specified additional requirements. At the time of application for this designation, a student must have a GPA of 3.50 or higher in physics, a GPA of 3.25 or higher overall, must have completed two contract honors courses, and must have completed 60 credit hours (of which at least 54 must be in grade-point graded courses) at Old Dominion University. (Contract honors courses are specialized courses of individual study under the direct supervision of a professor. Permission to take these courses is granted jointly by the Department of Physics and the Honors College.)

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 211	Calculus I	4
PHYS 120 or PHYS 309	Physics in the 21st Century * or Physics on the Back of an Envelope	1
CS 151 or CS 153	Introduction to Programming with Java or Introduction to Programming with Python	4
Language & Culture I (May be waived; See requirement details)		0-3
Credit Hours		12-15
Spring		
ENGL 211C or ENGL 231C (Grade of C or better required)		3
MATH 212	Calculus II	4
Select one of the following:		4
PHYS 261N	Advanced University Physics I	
PHYS 231N	University Physics I	
PHYS 226N	Honors: University Physics I	
Human Behavior		3

Language & Culture II (May be waived; See requirement details)	0-3
Credit Hours	14-17
Sophomore	
Fall	
CHEM 121N and CHEM 122N	4
Select one of the following:	4
PHYS 262N	Advanced University Physics II
PHYS 232N	University Physics II
PHYS 227N	Honors: University Physics II
MATH 312 or MATH 285	4
Select one of the following:	3
CS 120G	Introduction to Information Literacy and Research
CS 121G	Introduction to Information Literacy and Research for Scientists
OEAS 130G	Research Skills and Information Literacy for the Natural Sciences
Credit Hours	15
Spring	
CHEM 123N and CHEM 124N	4
MATH 307 or MATH 280	3
PHYS 319	Analytical Mechanics
Interpreting the Past	3
Oral Communication	3
Credit Hours	16
Junior	
Fall	
PHYS 303	Intermediate Experimental Physics
PHYS 323	Modern Physics
PHYS 355	Mathematical Methods of Physics
Select one of the following:	3
PHYS 420	Introductory Computational Physics *
PHYS 453	Electromagnetism II *
PHYS 456	Intermediate Quantum Mechanics *
Philosophy and Ethics	3
Credit Hours	15
Spring	
PHYS 413	Methods of Experimental Physics
Select one of the following:	3
MATH 316	Introductory Linear Algebra
MATH 401	Partial Differential Equations
MATH 421	Applied Mathematics II: Mathematical Modeling
MATH 422	Applied Complex Variables
Select one of the following:	3
ASTP 313	Elements of Astrophysics *
ASTP 414	Relativity and Cosmology
ASTP 495	Special Topics in Astrophysics

PHYS 411	Introduction to Atomic Physics
PHYS 415	Introduction to Nuclear and Particle Physics
PHYS 416	Introduction to Solid State Physics
PHYS 417	Introduction to Particle Accelerator Physics
Upper-Division General Education Course or Course for Minor	3
Human Creativity	3
Credit Hours	15
Senior	
Fall	
PHYS 425	Electromagnetism I
PHYS 452	Introduction to Quantum Mechanics
Select one of the following: (C or better required)	3
PHYS 499W	Senior Thesis
PHYS 489W & PHYS 490W	Senior Thesis I and Senior Thesis II
Upper-Division General Education Course or Course for Minor	3
Impact of Technology	3
Elective (if needed)	3
Credit Hours	18
Spring	
Select one of the following:	3
ASTP 313	Elements of Astrophysics *
ASTP 414	Relativity and Cosmology
ASTP 495	Special Topics in Astrophysics
PHYS 411	Introduction to Atomic Physics
PHYS 415	Introduction to Nuclear and Particle Physics
PHYS 416	Introduction to Solid State Physics
PHYS 417	Introduction to Particle Accelerator Physics
Literature	3
Course for Minor or Elective	3
Course for Minor or Elective	3
PHYS 454	Thermal and Statistical Physics
Credit Hours	15
Total Credit Hours	120-126

*PHYS 120 and PHYS 420 are offered fall semester only. ASTP 313, PHYS 309, PHYS 453, and PHYS 456 are offered spring semester only.

Bachelor of Science Physics with a Major in Physics and Electrical Engineering (BS, BSEE)

The dual degree program in physics and electrical engineering is a five-year program. Students will receive a BS degree and a BSEE degree upon graduation. The dual degree program provides the highest level of preparation for both graduate school and positions in industry.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

General education requirements for mathematics, nature of science, information literacy and research, impact of technology, and philosophy and ethics are met through the major. Additional information can be found in the Electrical and Computer Engineering section of the College of Engineering and Technology.

Upper-Division General Education

The Upper-Division General Education requirement is met by the dual degree requirements.

Requirements for Graduation

All majors for the BS degree in physics require completion of a minimum of 120 credit hours (150 credit hours for the dual degree in physics and electrical engineering and the dual degree in physics and the Master of Business Administration), which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University, completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better, and Senior Assessment. Additionally, physics majors require completion of the Physics Exit Exam with a minimum score of 20th percentile, and the astrophysics major requires completion of the Astrophysics Exit Exam with a minimum score of 20th percentile. Additional hours may be required to meet the foreign language requirement. All majors require a minimum grade of C in PHYS 261N-PHYS 262N, PHYS 231N-PHYS 232N, or PHYS 226N-PHYS 227N. Except for the secondary physics education major, physics majors require a minimum cumulative grade point average of 2.00 overall and in the major. The secondary physics education major requires a minimum 2.75 grade point average overall, in the major, and in the professional education core, with no grade less than a C- in the major and professional education core. The professional education core satisfies the upper-level general education requirement.

Dual Degree in Physics and Electrical Engineering

Students in this major must earn a minimum of 150 credit hours.

General Education

Complete lower-division requirements	21-27

Complete upper-division requirements (met by dual degree requirements)

Physics and Electrical Engineering

Common Course Requirements

CHEM 121N & CHEM 122N	Foundations of Chemistry I Lecture and Foundations of Chemistry I Laboratory	4
MATH 211	Calculus I	4
MATH 212	Calculus II	4
MATH 312 or MATH 285	Calculus III Transfer Credit for Calculus III	4
MATH 307 or MATH 280	Ordinary Differential Equations Transfer Credit for Ordinary Differential Equations	3
ENGN 122	Computer Programming for Engineering	4
PHYS 261N or PHYS 231N or PHYS 226N	Advanced University Physics I University Physics I Honors: University Physics I	4
PHYS 262N or PHYS 232N or PHYS 227N	Advanced University Physics II University Physics II Honors: University Physics II	4

Physics Course Requirements

CHEM 123N & CHEM 124N	Foundations of Chemistry II Lecture and Foundations of Chemistry II Laboratory	4
PHYS 319	Analytical Mechanics	3
PHYS 323	Modern Physics	3
PHYS 355	Mathematical Methods of Physics	3
PHYS 413	Methods of Experimental Physics	3
PHYS 420	Introductory Computational Physics	3
PHYS 425	Electromagnetism I	3
PHYS 452	Introduction to Quantum Mechanics	3
PHYS 453 or ECE 323	Electromagnetism II Electromagnetics	3
PHYS 454	Thermal and Statistical Physics	3
PHYS 456	Intermediate Quantum Mechanics	3
PHYS 499W or PHYS 489W & PHYS 490W	Senior Thesis * Senior Thesis I and Senior Thesis II	3

Select one of the following: 3

PHYS 411	Introduction to Atomic Physics	
PHYS 415	Introduction to Nuclear and Particle Physics	
PHYS 416	Introduction to Solid State Physics	
PHYS 417	Introduction to Particle Accelerator Physics	

Engineering Course Requirements

ENGN 121	Introduction to Engineering and Technology	4
ECE 201	Circuit Analysis I	3
ECE 202	Circuit Analysis II	3
ECE 241	Fundamentals of Computer Engineering	4
ECE 287	Fundamental Electric Circuit Laboratory	2
ECE 302	Linear System Analysis	3
ECE 303	Introduction to Electrical Power	3
ECE 304	Probability, Statistics, and Reliability	3
ECE 313	Electronic Circuits	4
ECE 332	Microelectronic Materials and Processes	3
ECE 381	Introduction to Discrete-time Signal Processing	3
ECE 451	Communication Systems	3
ECE 461	Automatic Control Systems	3
ECE 481W	Preparatory ECE Senior Design	3
ECE 482	ECE Senior Design	3
ECE Tech Elective I, II, III, IV		12

ENMA 480	Ethics and Philosophy in Engineering Applications (meets philosophy and ethics requirement)	3

Total Credit Hours 154-160

* Grade of C or better required in PHYS 499W or both PHYS 489W and PHYS 490W

BS Degree with Honors

Qualified students may receive the BS degree with honors (to be noted on their diplomas) by completing specified additional requirements. At the time of application for this designation, a student must have a GPA of 3.50 or higher in physics, a GPA of 3.25 or higher overall, must have completed two contract honors courses, and must have completed 60 credit hours (of which at least 54 must be in grade-point graded courses) at Old Dominion University. (Contract honors courses are specialized courses of individual study under the direct supervision of a professor. Permission to take these courses is granted jointly by the Department of Physics and the Honors College.)

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGN 121	Introduction to Engineering and Technology ¹	4
CHEM 121N	Foundations of Chemistry I Lecture	3
CHEM 122N	Foundations of Chemistry I Laboratory	1
MATH 211	Calculus I (Grade of C or better required)	4
ENGL 110C	English Composition (Grade of C or better required)	3
Credit Hours		15
Spring		
ENGN 122	Computer Programming for Engineering	4
MATH 212	Calculus II (Grade of C or better required)	4
PHYS 261N or PHYS 231N or PHYS 226N	Advanced University Physics I or University Physics I or Honors: University Physics I	4
COMM 101R	Public Speaking	3
Credit Hours		15
Sophomore		
Fall		
MATH 307 or MATH 280	Ordinary Differential Equations or Transfer Credit for Ordinary Differential Equations	3
CHEM 123N	Foundations of Chemistry II Lecture	3
CHEM 124N	Foundations of Chemistry II Laboratory	1

ECE 201	Circuit Analysis I	3
ENGL 231C or ENGL 211C	Writing, Rhetoric, and Research: Special Topics (Grade of C or better required) or Writing, Rhetoric, and Research	3
PHYS 262N or PHYS 232N or PHYS 227N	Advanced University Physics II or University Physics II or Honors: University Physics II	4
Credit Hours		17
Spring		
ECE 202	Circuit Analysis II	3
ECE 287	Fundamental Electric Circuit Laboratory ²	2
ECE 241	Fundamentals of Computer Engineering	4
PHYS 319	Analytical Mechanics	3
MATH 312 or MATH 285	Calculus III or Transfer Credit for Calculus III	4
Credit Hours		16
Junior		
Fall		
ECE 302	Linear System Analysis	3
ECE 303	Introduction to Electrical Power	3
PHYS 323	Modern Physics	3
PHYS 355	Mathematical Methods of Physics	3
PHYS 425	Electromagnetism I ³	3
Credit Hours		15
Spring		
ECE 313	Electronic Circuits	4
ECE 381	Introduction to Discrete-time Signal Processing	3
ECE 323 or PHYS 453	Electromagnetics ⁴ or Electromagnetism II	3
PHYS 411 or PHYS 415 or PHYS 416 or PHYS 417		3
Literature Way of Knowing		3
Credit Hours		16
Senior		
Fall		
ECE 304	Probability, Statistics, and Reliability	3
ECE 461	Automatic Control Systems	3
ECE Technical Elective I ⁵		3
PHYS 452	Introduction to Quantum Mechanics	3
ENMA 480	Ethics and Philosophy in Engineering Applications ⁶	3
Credit Hours		15
Spring		
ECE 451	Communication Systems	3
PHYS 413	Methods of Experimental Physics	3
PHYS 456	Intermediate Quantum Mechanics ⁴	3

PHYS 499W or PHYS 489W and PHYS 490W		3
Human Behavior Way of Knowing		3
Credit Hours		15
Fifth Year		
Fall		
ECE 332	Microelectronic Materials and Processes	3
ECE 481W	Preparatory ECE Senior Design (Grade of C or better required to meet the University Writing Intensive requirement)	3
ECE Technical Elective II ⁵		3
PHYS 420	Introductory Computational Physics	3
Human Creativity Way of Knowing		3
Credit Hours		15
Spring		
ECE 482	ECE Senior Design	3
ECE Technical elective III ⁵		3
ECE Technical elective IV ⁵		3
PHYS 454	Thermal and Statistical Physics	3
Interpreting the Past Way of Knowing		3
Credit Hours		15
Total Credit Hours		154

*	Does not include the University's General Education language and culture requirement. Additional hours may be required.
1	ENGN 121 satisfies both the Physics Approved Seminar requirement and the PHYS Information Literacy and Research requirement in the Physics curriculum.
2	ECE 287 satisfies the PHYS 303 requirement in the Physics curriculum.
3	PHYS 425 satisfies the Nonmajor Engineering Elective requirement in the Electrical Engineering curriculum.
4	PHYS 453 and PHYS 456 offered spring semester only.
5	Electrical Engineering students need four technical elective courses selected from one of two options: (1) four 400-level ECE technical elective courses; (2) three 400-level ECE technical elective courses and one 300-level ECE technical elective course or one approved 300- or 400-level CS/MATH/Engineering course.
6	ENMA 480 satisfies the PHYS Philosophy & Ethics requirement in the Physics curriculum.

The General Education requirements in information literacy and research, impact of technology, and philosophy and ethics are met through the Electrical Engineering major/degree. The upper-division General Education requirement is met through the completion of a second major/degree.

Electrical engineering majors must earn a grade of C or better in all 200-level ECE courses prior to taking the next course in the sequence.

Any ECE course registration issues are to be resolved with the ECE Academic Coordinator and Program Manager.

Bachelor of Science Physics with a Major in Secondary Physics Education (6-12) (BS)

The secondary physics education major is designed for students who are preparing to be high school physics teachers. This curriculum provides a solid foundation in both contemporary physics and in education pedagogy.

Physics with a Major in Secondary Physics Education (6-12)

Due to changing University requirements, national accreditation standards, and the Virginia Board of Education licensure regulations, the teacher preparation programs in the College of Sciences are under constant revision. Any changes resulting from these factors supersede the program requirements described in this Catalog. Students are encouraged to obtain current program information from their advisors and the Office of Clinical Experiences website at <https://www.odu.edu/oce> (<https://www.odu.edu/oce/>).

Admission

Students must first declare secondary physics education as their major with the physics departmental advisor. All students must apply for and be admitted into the approved secondary physics education program. Students must meet the required criteria for admission by earning the minimum required grade point averages (GPA).

Required Grade Point Averages (GPA)

- A cumulative GPA of 2.75 is required.
- A major/content GPA of 2.75 is required - all physics courses and all other science content courses must be passed with a grade of C- or higher.
- A professional education GPA of 2.75 is required – all professional education courses must be passed with a grade of C- or higher.

Although students may enroll in a limited number of education courses, students must be admitted into the approved physics teacher preparation program prior to enrolling in any instructional strategies practicum education course. Students must also meet with an education advisor in the Office of Clinical Experiences.

Continuance

Students must maintain a cumulative GPA of 2.75, a major/content GPA of 2.75 and a professional education GPA of 2.75. Physics courses must be passed with a grade of C- or higher. The remaining courses required for the major and in the professional education core must be completed with a grade of C- or higher for continuance. A professional education GPA of 2.75 is required for continuance. Students must take and pass the Praxis Subject Assessment, Physics content knowledge (formerly Praxis II) prior to or while enrolled in the instructional strategies course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

Background Clearance Requirement

Old Dominion University requires a background clearance check of candidates interested in many of the professional education programs. Professional education programs have several field experiences that are required for continuance and graduation from the program. The background clearance must be successfully completed prior to a field experience placement. Candidates will be provided a field experience placement when the background check process is completed with resolution of any issues. The process to complete the ODU clearance background check is located at: <http://www.odu.edu/success/academic/teacher-education/placement/background-checks> (<http://www.odu.edu/success/academic/teacher-education/placement/background-checks/>). The ODU clearance process includes: an FBI fingerprint, a child protective service/social service review, and a Virginia State Police sex offender registry review. Candidates interested in the professional education programs are advised to complete

this clearance process immediately upon entry into the program since the clearance process takes a minimum of eight weeks to complete.

Virginia Board of Education Prescribed Assessments for Licensure

Praxis Subject Assessment, Physics content knowledge (test code: 5266) – passing score of 145 is required.

To review more information on the Virginia Board of Education prescribed assessments visit the Office of Clinical Experiences website, www.odu.edu/oce (<http://www.odu.edu/oce/>).

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Mathematics: satisfied by the major

Information Literacy and Research: CS 120G, CS 121G or OEAS 130G

Nature of Science: satisfied by the major

Upper-Division General Education

The professional education core satisfies the Upper-Division General Education requirement.

Requirements for Graduation

Requirements for graduation include completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better, completion of the Senior Assessment, completion of the Physics Exit Exam with a minimum score of 20th percentile, a minimum cumulative 2.75 GPA, in the major area, and in the professional education core, with no grade less than a C- in the major and the professional education core; successful completion of the Teacher Candidate Internship and a minimum of 120 credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University.

Licensure requirements also include certificate of completion in First Aid/AED/CPR, Dyslexia Awareness Training, Child Abuse and Neglect Recognition and Intervention Training, and Regulations Governing the Use of Restraint and Seclusion in Elementary and Secondary Schools, and Cultural Competence Training.

Professional Education Core

STEM 103	Foundations of STEM Teaching: An Inquiry-Based Approach	2
STEM 201	Knowing and Learning in STEM Education	3
STEM 202	Classroom Interactions in STEM Education	3
STEM 401	Project Based Instruction in STEM Education	3
STEM 485	Apprentice Teaching	9
STEM 402	Perspectives on STEM	3
PHYS 468W	Research Methods in Mathematics and Sciences	3
Total Credit Hours		26

Secondary Physics Education Major

General Education

Complete lower-division requirements	30-36

Complete upper-division requirements (met by the professional education core)

Professional Education Core

Complete the professional education core requirements	26

Secondary Physics Education

MATH 211	Calculus I	4
MATH 212	Calculus II	4
MATH 307	Ordinary Differential Equations	3
or MATH 280	Transfer Credit for Ordinary Differential Equations	
MATH 312	Calculus III	4
or MATH 285	Transfer Credit for Calculus III	
CHEM 121N & CHEM 122N	Foundations of Chemistry I Lecture and Foundations of Chemistry I Laboratory	4
CHEM 123N & CHEM 124N	Foundations of Chemistry II Lecture and Foundations of Chemistry II Laboratory	4
CS 151	Introduction to Programming with Java	4
or CS 153	Introduction to Programming with Python	
ASTP 103N	Introductory Astronomy of the Solar System	4
or ASTP 104N	Introductory Astronomy of Galaxies and Cosmology	
PHYS 261N	Advanced University Physics I	4
or PHYS 231N	University Physics I	
or PHYS 226N	Honors: University Physics I	
PHYS 262N	Advanced University Physics II	4
or PHYS 232N	University Physics II	
or PHYS 227N	Honors: University Physics II	
PHYS 323	Modern Physics	3
PHYS 319	Analytical Mechanics	3
PHYS 303	Intermediate Experimental Physics	3
PHYS 120	Physics in the 21st Century	1
or PHYS 309	Physics on the Back of an Envelope	
PHYS 355	Mathematical Methods of Physics	3
PHYS 413	Methods of Experimental Physics	3
PHYS 425	Electromagnetism I	3
PHYS 499W	Senior Thesis *	3
or PHYS 489W & PHYS 490W	Senior Thesis I and Senior Thesis II	
Total Credit Hours		117-123

* Grade of C or better required in PHYS 499W or both PHYS 489W and PHYS 490W

Elective Credit

Elective credit may be needed to meet the minimum requirement of 120 credit hours.

BS Degree with Honors

Qualified students may receive the BS degree with honors (to be noted on their diplomas) by completing specified additional requirements. At the time of application for this designation, a student must have a GPA of 3.50 or higher in physics, a GPA of 3.25 or higher overall, must have completed two contract honors courses, and must have completed 60 credit hours (of which at least 54 must be in grade-point graded courses) at Old Dominion University. (Contract honors courses are specialized courses of individual study under the direct supervision of a professor. Permission to take these courses is granted jointly by the Department of Physics and the Honors College.)

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 211	Calculus I	4
Human Creativity		3
Human Behavior		3
Credit Hours		13
Spring		
ENGL 211C or ENGL 231C (Grade of C or better required)		3
MATH 212	Calculus II	4
CS 151 or CS 153	Introduction to Programming with Java or Introduction to Programming with Python	4
Literature		3
STEM 103	Foundations of STEM Teaching: An Inquiry-Based Approach	2
Credit Hours		16
Sophomore		
Fall		
CHEM 121N and CHEM 122N		4
Select one of the following:		4
PHYS 261N	Advanced University Physics I	
PHYS 231N	University Physics I	
PHYS 226N	Honors: University Physics I	
Select one of the following:		3
CS 120G	Introduction to Information Literacy and Research	
CS 121G	Introduction to Information Literacy and Research for Scientists	
OEAS 130G	Research Skills and Information Literacy for the Natural Sciences	

STEM 201	Knowing and Learning in STEM Education	3
Credit Hours		14
Spring		
CHEM 123N and CHEM 124N		4
Select one of the following:		4
PHYS 262N	Advanced University Physics II	
PHYS 232N	University Physics II	
PHYS 227N	Honors: University Physics II	
Interpreting the Past		3
STEM 202	Classroom Interactions in STEM Education	3
Credit Hours		14
Junior		
Fall		
MATH 312 or MATH 285		4
PHYS 303	Intermediate Experimental Physics	3
PHYS 323	Modern Physics	3
PHYS 355	Mathematical Methods of Physics	3
Oral Communication		3
Credit Hours		16
Spring		
MATH 307 or MATH 280		3
PHYS 319	Analytical Mechanics	3
ASTP 103N or ASTP 104N	Introductory Astronomy of the Solar System or Introductory Astronomy of Galaxies and Cosmology	4
PHYS 468W	Research Methods in Mathematics and Sciences	3
Philosophy and Ethics		3
Credit Hours		16
Senior		
Fall		
PHYS 425	Electromagnetism I	3
PHYS 413	Methods of Experimental Physics	3
Select one of the following:		3
PHYS 499W	Senior Thesis	
PHYS 489W	Senior Thesis I	
PHYS 490W	Senior Thesis II	
PHYS 120* or PHYS 309* *		1
Impact of Technology		3
STEM 401	Project Based Instruction in STEM Education	3
Credit Hours		16
Spring		
STEM 485	Apprentice Teaching	9
STEM 402	Perspectives on STEM	3

Elective or Language and Culture course if needed	3
Credit Hours	15
Total Credit Hours	120

Language and Culture I & II may be met in HS and are not included in this 4-year plan. Please see requirement details.

*PHYS 120 is offered fall semester only. PHYS 309 is offered spring semester only.

Physics and Master of Business Administration (BS, MBA)

The Bachelor of Science in physics and Master of Business Administration dual degree program is a five-year program. After students have satisfactorily completed their undergraduate requirements, they complete the remaining requirements in the MBA program. Students must earn a minimum of 150 credits (120 discrete credits for the undergraduate degree and 30 discrete credits for the graduate degree).

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

Mathematics: satisfied by the major

Information Literacy and Research: CS 120G, CS 121G, or OEAS 130G

Nature of Science: satisfied by the major

Upper-Division General Education

The upper-division general education requirement is met by the MBA coursework.

Requirements for Graduation

All majors for the BS degree in physics require completion of a minimum of 120 credit hours (150 credit hours for the dual degree in physics and electrical engineering and the dual degree in physics and the Master of Business Administration), which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University, completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better, and Senior Assessment. Additionally, physics majors require completion of the Physics Exit

Exam with a minimum score of 20th percentile, and the astrophysics major requires completion of the Astrophysics Exit Exam with a minimum score of 20th percentile. Additional hours may be required to meet the foreign language requirement. All majors require a minimum grade of C in PHYS 261N-PHYS 262N, PHYS 231N-PHYS 232N, or PHYS 226N-PHYS 227N. Except for the secondary physics education major, physics majors require a minimum cumulative grade point average of 2.00 overall and in the major. The secondary physics education major requires a minimum 2.75 grade point average overall, in the major, and in the professional education core, with no grade less than a C- in the major and professional education core. The professional education core satisfies the upper-level general education requirement.

Physics and MBA Dual Degree

Students in this major must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

General Education

Complete lower-division requirements 30-36

Complete upper-division requirements (satisfied by MBA coursework)

Physics and MBA Dual Degree

Physics Course Requirements

MATH 211	Calculus I	4
MATH 212	Calculus II	4
MATH 312	Calculus III	4
or MATH 285	Transfer Credit for Calculus III	
MATH 307	Ordinary Differential Equations	3
or MATH 280	Transfer Credit for Ordinary Differential Equations	
Select one of the following:		3
MATH 316	Introductory Linear Algebra	
MATH 401	Partial Differential Equations	
MATH 421	Applied Mathematics II: Mathematical Modeling	
MATH 422	Applied Complex Variables	
CHEM 121N & CHEM 122N	Foundations of Chemistry I Lecture and Foundations of Chemistry I Laboratory	4
CHEM 123N & CHEM 124N	Foundations of Chemistry II Lecture and Foundations of Chemistry II Laboratory	4
CS 151	Introduction to Programming with Java	4
or CS 153	Introduction to Programming with Python	
PHYS 261N	Advanced University Physics I	4
or PHYS 231N	University Physics I	
or PHYS 226N	Honors: University Physics I	
PHYS 262N	Advanced University Physics II	4
or PHYS 232N	University Physics II	
or PHYS 227N	Honors: University Physics II	
PHYS 323	Modern Physics	3
PHYS 319	Analytical Mechanics	3
PHYS 303	Intermediate Experimental Physics	3
PHYS 355	Mathematical Methods of Physics	3
PHYS 413	Methods of Experimental Physics	3
PHYS 425	Electromagnetism I	3
PHYS 452	Introduction to Quantum Mechanics	3
PHYS 454	Thermal and Statistical Physics	3
Select one of the following:		3
PHYS 420	Introductory Computational Physics	
PHYS 453	Electromagnetism II	
PHYS 456	Intermediate Quantum Mechanics	
PHYS 499W	Senior Thesis *	3

or PHYS 489W & PHYS 490W	Senior Thesis I and Senior Thesis II	
Approved Physics Seminar		1
Select one of the following:		3
ASTP 313	Elements of Astrophysics	
PHYS 411	Introduction to Atomic Physics	
ASTP 414	Relativity and Cosmology	
PHYS 415	Introduction to Nuclear and Particle Physics	
PHYS 416	Introduction to Solid State Physics	
PHYS 417	Introduction to Particle Accelerator Physics	
MBA Coursework		
Complete MBA coursework		45
Total Credit Hours		147-153

* Grade of C or better required in PHYS 499W or both PHYS 489W and PHYS 490W

MBA Coursework

MBA courses may be taken beginning with the second semester of the junior year. Students must maintain a 3.0 grade point average in these courses to continue in the program. Additional information can be found in the section on BS/MBA Linked Program at the beginning of the College of Sciences section of this Catalog and the Strome College of Business section in the Graduate Catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>).

Degree Program Guide

Course	Title	Credit Hours
Freshman		
Fall		
ENGL 110C	English Composition (Grade of C or better required)	3
MATH 211	Calculus I	4
Human Creativity		3
Oral Communication		3
Elective or Language & Culture I (May be waived; See requirement details)		3
Credit Hours		16
Spring		
ENGL 211C or ENGL 231C (Grade of C or better required)		3
MATH 212	Calculus II	4
CS 151 or CS 153	Introduction to Programming with Java or Introduction to Programming with Python	4
Human Behavior		3
Elective or Language & Culture II (May be waived; See requirement details)		0-3
Credit Hours		14-17
Sophomore		
Fall		
CHEM 121N and CHEM 122N*		4
PHYS 261N or PHYS 231N or PHYS 226N	Advanced University Physics I or University Physics I or Honors: University Physics I	4
Information Literacy and Research: CS 120G or CS 121G or OEAS 130G		3

Literature		3
Credit Hours		14
Spring		
CHEM 123N and CHEM 124N*		4
MATH 312 or MATH 285		4
PHYS 262N or PHYS 232N or PHYS 227N	Advanced University Physics II or University Physics II or Honors: University Physics II	4
Impact of Technology		3
Credit Hours		15
Junior		
Fall		
MATH 307 or MATH 280		3
PHYS 323	Modern Physics	3
PHYS 303	Intermediate Experimental Physics	3
PHYS 355	Mathematical Methods of Physics	3
PHYS 425	Electromagnetism I	3
Credit Hours		15
Spring		
PHYS 319	Analytical Mechanics	3
PHYS 413	Methods of Experimental Physics	3
MATH 316 or MATH 401 or MATH 421 or MATH 422		3
MBA Course		1
Interpreting the Past		3
Philosophy and Ethics		3
Credit Hours		16
Senior		
Fall		
PHYS 452	Introduction to Quantum Mechanics	3
ASTP 414 or PHYS 411 or PHYS 420 *		3
PHYS 499W or PHYS 489W and PHYS 490W (C or better required)*		3
MBA courses		7
Credit Hours		16
Spring		
ASTP 313 or PHYS 415 or PHYS 416 or PHYS 417 *		3
PHYS 454	Thermal and Statistical Physics	3
Approved Physics Seminar*		1
MBA courses		9
Credit Hours		16
Fifth Year		
Fall		
MBA courses		14
Credit Hours		14
Spring		
MBA courses		14
Credit Hours		14
Total Credit Hours		150-153

*PHYS 420 is offered fall semester only. ASTP 313, PHYS 453, and PHYS 456 are offered spring semester only.

Psychology

<http://www.odu.edu/psychology> (<http://www.odu.edu/psychology/advising/>)

George Noell, Chair
Suzanne Morrow, Chief Departmental Advisor
Krystall Dunaway, Undergraduate Program Director

The BS in Psychology is designed to provide a knowledge base of current methods, content areas, and theories. It seeks to facilitate the development of intellectual skills and characteristics that enhance the student's lifelong personal and career success. The program begins with a general psychology course and includes courses in quantitative methods and experimental design. Additional coursework is selected from a broad range of available courses. Students are encouraged to pursue breadth across the areas of psychology, particularly when planning for advanced study in psychology. The department does, however, identify sets of courses particularly relevant for students interested in health, clinical, industrial/organizational, or human factors (engineering) psychology.

Psychology Awards

The Alan L. Chaikin Psychology Honors Thesis Award is given each year to a student in the Department of Psychology for the outstanding honors thesis.

The Elizabeth C. Guy Outstanding Psychology Service Award is given each year to the student selected by the faculty who has contributed significant service to the department or field of psychology. Service is primarily defined as participation in departmental, University, community, or professional organizations. However, other qualifications, such as research activity, may be considered. Eligible students must have a minimum overall grade point average of 3.0 and 18 credits in psychology at Old Dominion University.

The Elizabeth C. Guy Outstanding Psychology Academic Award is given each year to the graduating senior with the highest overall grade point average. To be eligible, a student will have completed a minimum of 60 hours at Old Dominion University by graduation. Further, the student will have completed a minimum of 18 psychology credits at Old Dominion University. In the case where two or more students meet the criteria and have identical GPAs, the student with the highest number of credit hours earned at Old Dominion University will receive the award.

The Michael Greenspan/ODU Psychology Study Abroad Award is given each year to a selected psychology major to study psychology at one of ODU's partner institutions in the United Kingdom. Students interested in this opportunity should contact the ODU Office of Study Abroad.

Advanced Placement

The Department of Psychology offers course credit for PSYC 201S and PSYC 203S through testing procedures or a qualifying score on AP and IB subject examinations. See the equivalency charts on the ODU website at <https://www.odu.edu/academics/academic-records/score-analysis/ap-ib> (<https://www.odu.edu/academics/academic-records/score-analysis/ap-ib/>). Students may also earn credit for some courses via prior learning assessment options. Interested students should visit the Undergraduate Program office MGB 246 for more information or refer to the section on Prior Learning Assessment Credit Options at the Undergraduate Level in this Catalog.

Programs

Bachelor of Science Program

- Psychology (BS) (p. 772)

Minor Program

- Psychology Minor (p. 775)

Certificate Program

- Human Factors Certificate (p. 775)

Bachelor of Science Psychology (BS)

A student who intends to major in psychology must attend a Major Declaration Session in the Department of Psychology. Freshmen with 0-30 Earned Hours need to meet with an advisor from the College of Sciences advising team for pre-registration advising for their first academic year. Once students have earned 30 hours with an overall GPA of 2.0 or higher and a psychology GPA of 2.0 or higher, and completed MATH 102M or MATH 103M (or a higher math), PSYC 201S, and both composition courses, earning a C or better in each, they will need to attend a Major Declaration Session.

For further information about the major and advising schedules, visit/call MGB 246 (757 683-4441), refer to the bulletin board across from MGB 246, email psychadvising@odu.edu, or visit the Psychology Department advising web page at <http://www.odu.edu/psychology/advising>. (<http://www.odu.edu/psychology/advising/>)

Goals for the Psychology Major

1. Students will be able to define, interpret, and apply major concepts, theories, and findings in psychology.
2. Students will be able to compute, analyze, and interpret quantitative and qualitative psychological data.
3. Students will be able to recognize, analyze, and design experimental and non-experimental research in psychology.
4. Students will be able to interpret and produce scientific writing in psychology using standard APA format.
5. Students will be able to identify, recognize, and apply principles of ethics and respect for individual, social, and cultural differences.
6. Students will be able to apply discipline information to decisions about careers in psychology and related fields.

Requirements

Lower-Division General Education

Written Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#written)	6
Oral Communication (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#oral)	3
Mathematics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#math)	3
Language and Culture (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#language)	0-6
Information Literacy and Research (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#information)	3
Human Behavior (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#behavior)	3
Human Creativity (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#creativity)	3
Interpreting the Past (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#interpret)	3
Literature (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#literature)	3
Philosophy and Ethics (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#philosophy)	3
The Nature of Science (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#nature)	8
Impact of Technology (http://catalog.odu.edu/undergraduate/requirements-undergraduate-degrees/#impact)	3

A grade of C (2.0) or better is required in all courses meeting the Written Communication requirement.

Mathematics: MATH 102M/MATH 103M or higher with a grade of C (2.0) or better is required.

Upper-Division General Education

- Option A: Approved Disciplinary Minor (a minimum of 12 hours determined by the department) or second degree or second major.
- Option B: Interdisciplinary Minor (specifically 12 hours, 3 of which may be in the major)
- Option C: An approved Certification Program such as teaching licensure
- Option D: Two Upper-Division Courses from outside the College of Sciences and not required by the major (6 hours)

Requirements for Graduation

Requirements for graduation include the following:

- Minimum of 120 credit hours.
- Minimum of 30 credit hours overall and 12 credit hours of upper-level courses in the major program from Old Dominion University.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward the major.
- Minimum overall cumulative grade point average of C (2.00) in all courses taken toward a minor.
- Completion of ENGL 110C, ENGL 211C or ENGL 231C, and the writing intensive (W) course in the major with a grade of C or better. The W course must be taken at Old Dominion University.
- Completion of Senior Assessment.

Psychology Major

A grade of C (2.0) or better is required in all psychology courses. Students must achieve an overall grade point average of 2.0, including all psychology courses. No 200-level psychology courses outside PSYC 201S can count toward the major in psychology.

General Education

Complete lower-division requirements	41-47
Complete upper-division requirements (minimum of 6 credit hours)	6

Psychology

PSYC 201S	Introduction to Psychology	3
PSYC 317	Quantitative Methods	4
PSYC 318W	Research Methods in Psychology	4

Areas

Students must select one course from each of the following four Areas:

Area 1: Biological Bases and Cognition		3
PSYC 410	Human Cognition	
PSYC 413	Sensation and Perception	
PSYC 424	Physiological Psychology	
Area 2: Personality and Social Processes		3
PSYC 304	Social Psychology	
PSYC 408	Theories of Personality	
PSYC 420	Cross-Cultural Psychology	
Area 3: Developmental Changes		3
PSYC 322	The Psychology of Adolescence	
PSYC 351	Child Psychology	
PSYC 353	The Psychology of Adulthood and Aging	
Area 4: Applied Psychology		3
PSYC 303	Industrial/Organizational Psychology	
PSYC 306	Health Psychology	
PSYC 344	Human Factors	
PSYC 405	Psychopathology	

Total Credit Hours

85-91

Elective Credit

General elective credit will be needed to meet the minimum requirement of 120 credit hours. No 200-level psychology courses outside of PSYC 201S (<https://catalog.odu.edu/search/?P=PSYC%20201S>) can count toward the major in psychology. Students with 200-level psychology courses can use these hours as general elective credit.

Additional Requirements and Information

Psychology Assessment

The Psychology Assessment is sent to students via email during their graduating semester approximately one month prior to graduation. Students must complete the assessment in the time frame (typically two weeks) provided in the email. Students must have applied for graduation in order to receive the assessment. The department will make all reasonable efforts to assure that students have ample opportunity to complete the assessment. However, any student who applies for graduation after the deadline set by the Office of the Registrar must email psychadvising@odu.edu to request the link to complete the assessment within an indicated time frame.

Honors Program in Psychology

Qualified undergraduate psychology majors have the opportunity to participate in the Honors Program in Psychology (program chair: Dr. Mary Still). Students who complete the program and also meet the University's standards for graduation with honors (see description in this Catalog) may earn the designation of departmental honors on their diplomas. This program is a two- to three-course sequence that involves working on a research project under the supervision of a psychology faculty member.

Interested students should discuss their interests with a psychology faculty member who agrees to serve as the research supervisor for PSYC 497. In PSYC 497 (see prerequisites under course listing), the potential Honors student gains research experience and develops an Honors Project proposal. At the end of PSYC 497, the student submits the proposal and application for admission to the Honors Program in Psychology and, pending approval of the program chair, enrolls in PSYC 487.

In this course, the student finalizes the proposal, presents it to the Psychology Honors Program committee, secures research ethics approval, begins the thesis research, and, if the research and thesis paper are completed, may present to the Psychology Honors Program committee for approval.

Students whose projects require more than one semester to complete may enroll in PSYC 488.

Eligibility for the Honors Program in Psychology includes:

- Completion of PSYC 317 and PSYC 318W
- At least 23 hours earned in psychology
- A 3.50 GPA in the psychology major (with no grades of "Incomplete")
- A 3.25 cumulative GPA
- Completion of PSYC 497 with an Honors Project Proposal ready for submission to the Honors Program chair

Students can enroll in PSYC 487 when the submitted application and project proposal have been approved by the Honors Committee chair.

Degree Program Guide

The Degree Program Guide is a suggested curriculum to complete this degree program in four years. It is just one of several plans that will work and is presented only as broad guidance to students. Each student is strongly encouraged to develop a customized plan in consultation with their academic advisor. Additional information can also be found in Degree Works.

This sample schedule assumes that the Language and Culture requirements have been met by high school language courses (see Lower-Division General

Education Requirements – Language and Culture section of this Catalog). If not, then language credits must be taken as electives.

Course	Title	Credit Hours
Freshman		
Fall		
PSYC 201S	Introduction to Psychology	3
ENGL 110C	English Composition (Grade of C or better required)	3
Information Literacy and Research		3
Elective or Language and Culture I (May be waived)		3
MATH 102M	College Algebra (or MATH 103M)	3
Credit Hours		15
Spring		
Literature		3
Oral Communication		3
Select one of the following:		3
ENGL 211C	Writing, Rhetoric, and Research	
ENGL 231C	Writing, Rhetoric, and Research: Special Topics	
Elective or Language and Culture II (May be waived)		3
PSYC Elective *		3
Credit Hours		15
Sophomore		
Fall		
PSYC 317	Quantitative Methods	4
PSYC (Area 1 course)		3
Nature of Science I		4
PSYC Elective *		3
Human Creativity		3
Credit Hours		17
Spring		
PSYC 318W	Research Methods in Psychology (C or better required)	4
PSYC (Area 2 course)		3
Nature of Science II		4
Interpreting the Past		3
Impact of Technology		3
Credit Hours		17
Junior		
Fall		
PSYC (Area 3 course)		3
Human Behavior (PSYC 201S and PSYC 203S may not be used to satisfy this requirement)		3
PSYC Elective *		3
PSYC Elective *		3
Upper-Division General Education or Minor **		3
Credit Hours		15
Spring		
PSYC (Area 4 course)		3
Philosophy and Ethics		3

PSYC Elective *	3
Upper-Division General Education or Minor **	3
Minor** or Elective	3
Credit Hours	15
Senior	
Fall	
Minor** or Elective	3
Electives	9
Credit Hours	12
Spring	
Electives	14
Credit Hours	14
Total Credit Hours	120

* PSYC electives (may include additional Area Courses).
 ** A minor is recommended for completion of upper-division general education but is not required.

BA or BS to MBA (Master of Business Administration) Linked Program

The linked BA/MBA or BS/MBA program is an early entry to the MBA program of study. The early-entry program is designed for well qualified non-business undergraduate ODU students to start their MBA program prior to completing their undergraduate degree. Well qualified non-business undergraduate students may take MBA-level courses as early as three semesters prior to graduation and count up to 12 graduate credits toward their undergraduate degree. Students participating in the early-entry program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree). Early-entry program students should carefully consider their undergraduate degree program requirements when planning their course of study. Students in the early-entry program work in close consultation with the MBA Program Office and should refer to information in the Strome College of Business section in the graduate catalog (<http://catalog.odu.edu/graduate/stromecollegeofbusiness/>) to develop an individualized plan of study based on the required coursework.

BA or BS to MPA (Master of Public Administration) Linked Program

The linked BA/MPA or BS/MPA program provides qualified Old Dominion University undergraduate students with the opportunity to earn a master's degree in public administration while taking credits in the MPA program as an undergraduate student. The program is designed for highly motivated students with the desire to immediately continue their education after the bachelor's degree. The program is especially relevant to individuals seeking to work (or currently working) in the public or non-profit sectors, but is suitable for students from any undergraduate major. Graduate courses may be taken during the fall and spring semester of the student's senior undergraduate year. Up to 12 graduate credits can count toward both the undergraduate and graduate degree and can meet upper-level General Education requirements. After receiving the undergraduate degree, a student will continue with the MPA program, taking MPA courses until completing the required 39 credit hours. Students in the linked program must earn a minimum of 150 credit hours (120 discrete credit hours for the undergraduate degree and 30 discrete credit hours for the graduate degree).

Requirements for admission to the graduate program can be found in the School of Public Service section of the Graduate Catalog (<http://catalog.odu.edu/graduate/business/public-service/>). For additional information, please contact the School of Public Service in the Strome College of Business.

Minor

Psychology Minor

Requirements

PSYC 201S must be completed as a prerequisite for the minor in psychology and is not included in the calculation of the grade point average for the minor. The minor in psychology requires at least one course from each of the four Areas. Refer to the section for the major in psychology on required psychology courses for a listing of the courses in each area. PSYC 201S is a prerequisite for most 300- and 400-level psychology courses. Additional prerequisite courses may also be required. A student must earn a minimum overall cumulative grade point average of 2.00 in all psychology courses taken exclusive of 200-level courses and prerequisite courses. A minimum of six hours in the minor must be taken through courses offered by Old Dominion University. Courses in the minor may not be taken on a Pass/Fail basis.

Certificate

Human Factors Certificate

The Undergraduate Certificate in Human Factors will introduce students to how psychology is applied to the design of technical systems (e.g., developing user-friendly interface displays). Students will be introduced to the ways humans think about and perceive their surroundings. Students will be educated in fundamental principles (i.e., predictability, consistency) from human factors and human-computer interaction research fields. Students will also learn to apply theory to the design of technology using a human-centered process across various application domains (e.g., transportation and cybersecurity). Graduates will be able to assist with the design or redesign of technology to improve the usability of digital systems for example, website pages or mobile application displays.

Course requirements are as follows.

PSYC 307	Institutionalization of Human-Centered Computing	3
PSYC 344	Human Factors	3
PSYC 410	Human Cognition	3
PSYC 413	Sensation and Perception	3
Total Credit Hours		12

For completion of the certificate, students must have a minimum cumulative grade point average of 2.00 in all courses specified as a requirement for the certificate and complete a minimum of six hours in upper-level courses required for the certificate through courses offered by Old Dominion University.

School of Supply Chain, Logistics, and Maritime Operations

Holly Handley, Dean (Interim)

Kuntal Bhattacharyya, Director - School of Supply Chain, Logistics, and Maritime Operations (SSCLMO)

ODU's School of Supply Chain, Logistics and Maritime Operations is uniquely positioned at the crossroads of digital transformation in the maritime industry of Coastal Virginia to support the Commonwealth of Virginia's efforts towards upskilling and developing the blue economy in the region and beyond. The school addresses the growing demand for a skilled workforce in the supply chain and logistics sector by offering a truly interdisciplinary approach to supply chain and maritime education which cross pollinates diverse career pathways in industry 4.0, maritime and military logistics, port and ship operations, cybersecurity, data science, and supply chain informatics/analytics, among others.

Maritime Institute

Ricardo Ungo, Director

The institute provides a focal point for educational services and research programming that is responsive to the port and shipping-related needs of Hampton Roads, Virginia, and other port and shipping-related facilities in the world. Serving as a positive link with port-related business and public administration communities, the institute provides a catalyst for the delivery of education, training, research, and service programs in both the credit and non-credit arenas. The Maritime Institute also serves as a hub for applied education, training, and research related to the development and management of transportation and storage systems, with ports serving as centers of internationally complex activities. Courses are available at the undergraduate and graduate levels and are listed in this Catalog and the Graduate Catalog. Professional, executive-level seminars, workshops, and short courses will also be offered.

Continuing Education

Web Site: <http://www.odu.edu/cepd> (<http://www.odu.edu/cepd/>)

Renee R. Felts, Associate Vice President, Continuing Education
Robert Doherty, Director, Continuing Education

Continuing Education is focused on delivering practical, applied knowledge through its non-credit and credit-bearing courses, certificates and certification preparatory classes. Staff interact with each of the academic colleges to utilize the existing courses in an interdisciplinary fashion, frequently at the request of the military, businesses and various industry sectors.

Mission

To meet the evolving needs of our local, regional and global community via online and face-to-face offerings. We help students, professionals and lifelong learners move ahead and stay ahead.

Vision

Continuing Education will seek to add value to University programs by engaging with students, faculty, and alumni to help achieve their personal and professional goals.

Bachelor of Science in Interdisciplinary Studies with a Major in Leadership

Continuing Education coordinates with the College of Arts and Letters to offer a Bachelor of Science in Interdisciplinary Studies with a major in Leadership. For detailed information on the degree program, please refer to the College of Arts and Letters Interdisciplinary Studies (<http://catalog.odu.edu/undergraduate/collegeofartsletters/interdisciplinarystudies/>) section of this Catalog.

Prior Learning Assessment

The Prior Learning Assessment unit awards Credit for Prior Learning (CPL) and offers students the opportunity to have their prior learning assessed and applied for academic credit. Visit odu.edu/prior-learning-assessment (<https://www.odu.edu/prior-learning-assessment/>) for more information.

Center for Professional Development

The primary mission of the Center for Professional Development (CPD) is to develop interdisciplinary certificate programs targeted for specific groups of professionals. The CPD will work across the ODU campus, including all academic colleges as well as ODUGlobal, in developing new multidisciplinary certificates. An undergraduate certificate program in Professional Leadership is administered by the Center and the Continuing Education unit.

Please refer to the course listings in this Catalog for Center for Professional Development (CPD) courses.

Programs

Certificate Program(s)

- Cultural Competency Leadership Certificate (p. 781)
- Digital Forensics Certificate (p. 781)
- Professional Leadership Certificate (p. 782)

Non-Credit Continuing Education Programs

Hospitality Management Programs

XHSP 3000- Hospitality Management Certificate- The Hospitality Management Certificate is broken down into 3 Courses that each contain 4 Modules and last 4 weeks. The courses include Sales & Marketing, Hotel Operations, and Personnel & Financial Management. The content includes an explanation of both the management and operational functions of lodging operations, an overview of the history and challenges of the lodging

industry, identifies traits and behaviors of successful lodging leaders, gives a strong base for revenue management, labor and operational budgeting, safety and security, and an exploration of the future of the industry.

Health Science Programs

XCMA 2000- Certified Medical Assistant- Our program includes three in-demand healthcare certifications: Clinical Medical Assistant, EKG Technician and Phlebotomy Technician. The program combines convenient online course with in-person clinical experience supervised by health professionals. In as little as five months, students are prepared to sit for nationally recognized exams through the National Health Career Association.

XMBC 3000- Medical Billing and Coding- This program includes two in-demand healthcare certifications: Certified Professional Biller (CPB) and Certified Professional Coder (CPC). Throughout the 30-week online course, students will learn about health insurance, billing principles, medical terminology, medical records, and professional coding services for medical providers, along with job preparation guidance. The program is taught by industry experts from the credentialing body, AAPC, and includes textbooks, practice exams, certification exams, real-world practice software, and career services.

XHLC 2060- Dental Assistant- The Dental Assistant program enables learners to embark on a career in dental healthcare by providing the essential knowledge and skills needed to prepare for the Registered Dental Assistant (RDA) certification examination. Included in this course is the Registered Dental Assistant (RDA) certification.

XHLC 2080- Sterile Processing Technician- The Sterile Processing Technician program equips you for employment in surgical environments across a range of settings, including hospitals, surgical centers, clinics, and other medical facilities. Included in this course is the Certified Registered Central Services Technician (CRCST) certification.

XHLC 2090- Behavior Technician and the Medical Office- The Behavior Technician and Medical Office dual-certification training course offers a comprehensive curriculum that encompasses both front office skills and expertise in working within the behavioral health field. Included in this program are the Registered Behavior Technician (RBT) and Certified Medical Administrative Assistant (CMAA) certifications.

XHLC 2100- Behavior Technician Specialist- The Behavior Technician Specialist certification enables you to conduct individual patient sessions and provide behavior analysis services, all supervised by a licensed Board Certified Behavior Analyst (BCBA). Included in this course is the Registered Behavior Technician (RBT) certification.

XHLC 2110- Allied Healthcare Professional- The Allied Healthcare Professional program serves as a gateway into the healthcare sector, integrating the expertise of pharmacy technician, electronic health records management, billing and coding, and medical office administration. Included in this program are the CMAA (Certified Medical Administrative Assistant), CEHRS (Certified Electronic Health Records Specialist, CPhT (Certified Pharmacy Technician Certification), and MCBC (Medical Coder & Biller Certification) certifications.

XHLC 2120- Electronic Health Records Specialist- The Electronic Health Records Specialist program prepares individuals for healthcare careers by offering thorough training in the management of electronic health records. Included in this course is the CEHRS (Certified Electronic Health Records Specialist) certification.

XHLC 2150- Health Unit Coordinator- The Health Unit Coordinator program equips individuals to excel in coordinating healthcare units, imparting the essential skills and knowledge needed for efficient administration within healthcare environments. Included in this program are the Certified Health Unit Coordinator (CHUC) and Certified Electronic Health Records Specialist (CEHRS) certifications.

XHLC 2180- Medical Front Office Administration Specialist- The Medical Front Office Administrative Specialist program offers an ideal introduction to the front office setting within the healthcare

industry. Included in this course is the Certified Medical Administrative Assistant (CMAA) certification.

XHLC 2190- Medical Front Office and Electronic Health Records-

The Medical Front Office and Electronic Health Records program prepares individuals for proficient management of patient data, essential handling of health records, medical office procedures, and other critical aspects of healthcare roles. Included in this program are the Certified Medical Administrative Assistant (CMAA) and Certified Electronic Health Records Specialist (CEHRS) certifications.

XHLC 2200- Medication Care Coordinator-

The Medication Care Coordinator program readies participants to offer outstanding assistance within a pharmacy context, emphasizing the importance of seamless service and optimal patient engagement. Included in this program are the Certified Pharmacy Technician (CPhT) and Certified Medical Administrative Assistant (CMAA) certifications.

XHLC 2210- Medical Front Office Assistant and Administration

Specialist- The Medical Front Office Assistant and Administrative Specialist program unveils the pathway for individuals to embark on a promising journey within the administrative realm of the healthcare industry, focusing on the critical roles at the front office. Included in this program are the Medical Coder and Biller Certification (MCBC) and Certified Medical Administrative Assistant (CMAA) certifications.

XHLC 2230- Pharmacy Technician Professional (ASHP/ACPE)-

The Pharmacy Technician Professional program provides practical skills crucial for employment in pharmacies, including the management of medication orders and customer assistance, all within this ASHP/ACPE Accredited curriculum.

XHLC 2240- Pharmacy Technician Specialist-

The Pharmacy Technician Specialist program imparts essential skills in managing medications and providing support in pharmacy environments, equipping students with the expertise needed for professional success. Included in this course is the Certified Pharmacy Technician (CPhT) certification.

XHLC 2250- NASM Personal Trainer & Nutrition Coach-

The NASM Personal Trainer and Nutrition Coach program prepares participants for a fulfilling journey into the growing fields of fitness and nutrition, setting the stage for a rewarding career in health and wellness. Included in this program are the Certified Personal Trainer (CPT) and Certified Nutrition Coach (CNC) certifications.

XHLC 2260- Mental Health Support Specialist-

The Mental Health Support Specialist program offers specialized training to assist psychiatrists, therapists, and clients in the care and management of mental health and substance use disorders, contributing valuable skills to support healing and recovery processes. Included in this course is the Mental Health Technician Certified (MHTC) certification.

XHLC 2270- Mental Health Support Professional-

The Mental Health Support Professional program delivers a thorough education designed to jump start a career in the mental health field, with a special focus on the utilization and management of electronic health records to enhance patient care. Included in this program are the Mental Health Technician Certified (MHTC) and Certified Electronic Health Records Specialist (CEHRS) certifications.

Registered Play Therapy

The Registered Play Therapy Program provides professionals and students in the community with the opportunity to learn more about play therapy or to receive the training necessary to become a Registered Play Therapist (RPT). The Play Therapy program is offered as a series of eight (8) weekend workshops worth 19 continuing education hours each (16 contact CE's and 3 non-contact CE's). Individuals can attend one or all of the workshops. Old Dominion University is approved by the Association for Play Therapy to offer continuing education specific to play therapy (APT Approved Provider #08-234).

The Registered Play Therapy workshops are aligned with the guidelines established by the *Association for Play Therapy* and pertain to five main areas:

- Play Therapy History
- Play Therapy Seminal or Historically Significant Theories
- Play Therapy Skills and Methods
- Play Therapy Special Topics
- Cultural & Social Diversity

XPCL 4000-Workshop #1: Principles of Play Therapy-

This workshop will provide information about the rationale, philosophy, history, and theoretical underpinnings specific to the application of play therapy with various populations and in different settings. Basic facilitation skills, specific goals, and the role of the play therapist will be explored and practiced in relation to specific theories and in terms of general process of play therapy.

XPCL 4010-Workshop #2: Expressive Arts in Play Therapy-

The therapeutic power of selected games, structured activities and expressive arts will be explored as they pertain to play therapy. Techniques specific to art, drama, children's literature, puppets, and music will be illuminated as ideal mediums through which children and adolescents express and heal themselves through the process of play therapy. Basic techniques and strategies for incorporating such tools and techniques will be described, demonstrated, and practiced.

XPCL 4005-Workshop #3: Games, Activities, and Narrative Techniques in Play Therapy-

The therapeutic power of selected games, structured activities, and narrative techniques will be explored as they pertain to play therapy. Basic techniques and strategies for incorporating such tools and techniques will be described, demonstrated, and practiced.

XPCL 4015- Workshop #4: Systematic Interventions: Family Play

Therapy and Filial Therapy- Fundamental, theoretical, and philosophical concepts related to systems theory and utilizing play therapy techniques in family counseling will be presented. Basic skills and methods to incorporate in family play therapy will be described, demonstrated, and practiced. In addition, methods will be covered illustrating how to implement filial therapy for parents to become healthy agents in their children's lives.

XPCL 4030- Workshop #5: Group Play Therapy: Play Therapy Skills

and Methods in Group Work- Theoretical and philosophical concepts of Group Play Therapy with children, adolescents, and adults will be discussed. Group logistics, process, conflict resolution, and group facilitation skills will be described. Basic skills and methods to incorporate in group play therapy will be described, demonstrated, and practiced. In addition, multicultural and ethical considerations in group play therapy will be addressed.

XPCL 4025- Workshop #6: Play Therapy and Creative Interventions

with Adolescents, Teens, and Adults- Research has indicated that play therapy is an effective treatment modality with people of all ages. This workshop will explore the process of play therapy and creative interventions when working with adolescents and adults. Basic skills and methods to incorporate in play therapy with adolescents and adults will be described, demonstrated, and practiced. Multicultural considerations and societal influences that specifically pertain to this population will also be addressed.

XPCL 4020- Workshop #7: Utilizing Sandtray in Play Therapy-

Through experiential sand tray exercises and didactic methods, information about the rationale, history, and general application of sand tray in play therapy will be illustrated. Basic facilitation skills, theoretical constructs, and strategies for processing sand tray will be discussed, demonstrated, and practiced.

XPCL 4045- Workshop #8: Addressing Trauma, Grief, and Loss

Through Play Therapy- This workshop will investigate specific issues faced by children, adolescents, and families affected by difficult environmental and systematic situations. The implications of trauma, grief, and loss as a result of abuse, crisis, death and divorce will be reviewed as they pertain to the process. The process of play, techniques, treatment plans and consultation procedures will also be explored. Skills and methods to

incorporate play therapy techniques to address trauma, grief, and loss will be described, demonstrated, and practiced.

Business/Executive Development Programs

Executive Certificate in Financial Planning

XEDC 1511- General Financial Planning Principles, Professional

Conduct, and Regulation- This course examines basic financial planning concepts for developing client relationships; gathering, analyzing, and evaluating financial documents, statements, and other information; developing and communicating relevant recommendations to clients; implementing recommendations through the use of a financial planning team; and monitoring the financial plan on a periodic basis, all within CFP Board professional and regulatory standards. Students will develop a pragmatic perspective of the field of financial planning as they learn to analyze personal financial statements, understand time value of money concepts, explore education funding techniques, advise clients regarding the management of debt, apply behavioral finance concepts, gain an understanding of federal and state regulatory requirements, learn the ethical environment of financial planning and integrate the legal and economic aspects of financial planning within a practice.

XEDC 1512- Risk Management, Insurance, and Employee Benefits

Planning- This course explores fundamental insurance, annuity, and employee benefit concepts and products. Students will gain knowledge of the principles of risk and insurance; learn how to analyze and evaluate risk exposures; and understand the concepts of personal and business insurance for life, health, disability, long-term care and property insurance. Students will also develop perspectives regarding the integration of social insurance (e.g. Medicare, workers compensation) within the framework of financial planning. Equity-based compensation, non-qualified deferred compensation and other employee benefits will also be presented and discussed.

XEDC 1513- Investment Planning- This course examines the characteristics, uses and taxation of investment vehicles: stocks, bonds, cash and cash equivalents, promissory notes, guaranteed investment contracts, real estate, and alternative investments. Students will also develop an understanding of the various types of risk: systematic and unsystematic, purchasing power, interest rate, business, and financial risk. Students are introduced to quantitative investment concepts, measures of investment returns, bond and stock valuation concepts, investment theory, portfolio development and analysis, investment strategies, asset allocation, and asset pricing models.

XEDC 1514- Tax Planning- This course focuses on income tax fundamentals and calculations, tax accounting, characteristics and income taxation of business entities, basis, depreciation, and cost recovery concepts. The impact of the alternative minimum tax (AMT), passive activity, at-risk rules, charitable contributions and charitable deductions on a client's financial plan is also studied. Students will gain an understanding of the tax consequences of like-kind exchanges and the disposition of property and will learn how the loss of a spouse through death or divorce affects a client's tax status.

XEDC 1515- Retirement Savings and Income Planning- Students will be exposed to retirement needs analyses, types and characteristics of retirement plans, qualified plan rules and options, and provisions of tax-advantaged plans. The effects of ERISA on retirement plans is examined and the impact of Social Security on a client's retirement plan is also discussed. Students will gain an understanding of plan distribution options, rules, alternatives, and taxation, and will also explore key factors affecting plan selection for businesses and investment considerations for retirement plans.

XEDC 1516- Estate Planning- This course analyzes the various techniques and strategies used in developing estate plans based on client criteria and needs. Property titling, property transfer at death, gifting strategies, and sources of estate liquidity are discussed. Students will also gain insight on wills, probate, and the types, uses and taxation of trusts during estate planning.

XEDC 1517- Capstone: Financial Plan Development Course- Students participate in a case analysis and evaluation in which the following major areas of financial planning are integrated:

- General Financial Planning Principles, Professional Conduct, and Regulation
- Risk Management, Insurance, and Employee Benefits Planning
- Investment Planning
- Income Tax Planning
- Retirement Savings and Income Planning
- Estate Planning

SHRM Learning System

XEDC 1165- SHRM Learning System- The SHRM Learning System for SHRM-CP and SHRM-SCP includes five modules covering the comprehensive SHRM Body of Competency and Knowledge™ (SHRM BoCK™) so you'll learn everything you need for the SHRM-CP or SHRM-SCP exam. Study with learning modules that provide an in-depth exploration of the knowledge domains and behavioral competencies tested on the SHRM exams. SHRM Certified Professional (SHRM-CP™) and SHRM Senior Certified Professional (SHRM-SCP™) are the new standard for all HR professionals around the globe, as it is among the first HR certification that is focused on the practical, real-life information HR professionals need to excel in their careers today, including behavioral competencies, knowledge and skills.

XEDC 1164- SHRM Essentials- The perfect course for managers who need to know basic HR concepts BEFORE disciplinary action is required and HR has to get involved. This program provides a broad overview of the human resource function. Key topic areas include: Essentials of HR Management, Employment Law, Effective Recruitment, Basics of Compensation, and Orienting and Training your employees.

Paralegal Certificate Program

XLGL 3010- Paralegal Certificate Program- This face-to-face offering is taught by an esteemed faculty of judges and attorneys. Students learn legal processes, court structure, interviewing, investigation, document preparation, file maintenance, correspondence, research, writing and analysis, as well as substantive topics of law, such as Tort Law, Contract Law and Civil Procedures. Students will be trained in online legal research with individual subscriptions to LexisNexis and Westlaw.

XLGL 3020- Paralegal Certificate Program, Self-Paced- The self-paced version of our Paralegal Certificate program is designed for students to study when convenient for them and can be done completely online. Students will be assigned their own attorney/judge liaison and learn legal processes, court structure, interviewing, investigation, document preparation, file maintenance, correspondence, research, writing and analysis, as well as substantive topics of law, such as Tort Law, Contract Law and Civil Procedures. Students will be trained in online legal research with individual subscriptions to LexisNexis and Westlaw.

Project Management and Lean Six Sigma Certificates

XLSS 5010- Lean Six Sigma Green Belt Certification- This program focuses on managing quality projects utilizing the fundamentals of Lean and Six Sigma methodologies. Lean topics include the concepts of the elimination of waste and reduction of cycle time in organizational processes. Six Sigma principles consist of problem solving techniques, data collection and analysis, reduction of process variation, process capability and control, and continual improvement.

XLSS 5040- Lean Six Sigma Black Belt Certification- Build upon the process improvement skills acquired during the Green Belt certification with our industry-leading Lean Six Sigma Black Belt certification. In just seven sessions over the course of two to three months, you'll master the tools to mentor Green Belts and other team members using real-world process improvement methods. Black belts leverage the tools and concepts in their lean six sigma "toolbox" to successfully lead projects that deliver meaningful results to the organization.

XITS 4100- Project Management Essentials- Project Management Essentials equips participants with the crucial skills needed to manage and direct projects successfully across various industries, ensuring effective

leadership and organizational outcomes. This offering includes the following certification(s): Certified Associate in Project Management (CAPM)

XIPJ 5000- PMP Exam Preparation- Old Dominion University's Project Management Professional (PMP)® Exam Preparation course prepares you for the PMP® exam offered through the Project Management Institute (PMI®). The PMP® credential has become the most recognized certification in Project Management in the world and is considered the gold standard of PM qualifications. Recognized and demanded by organizations worldwide, the PMP® validates your competence to perform in the role of a project manager, leading and directing projects and teams. To earn your PMP® credential, you must meet the experience and education requirements, and pass the PMP® examination.

Professional Development Programs

XGEN 2060- Au Pair Career Development Strategies for Personal & Professional Success- This Au Pair weekend class will help you develop a successful plan for your personal and career goals. Become more aware of who you are and what you want in your life and career. This class will help you become more aware, competitive and employable in any part of the world by developing key soft skills.

Digital Career Programs

Cybersecurity

XCYS 2500- Cybersecurity Fundamentals- This course is designed to introduce participants to the critical field of cybersecurity, emphasizing the skills and knowledge needed to navigate the evolving threat landscape. It adopts a workshop format to ensure a comprehensive learning experience, incorporating a mix of lectures, case studies, and hands-on labs. The course aims to prepare learners for the ISACA Cybersecurity Fundamentals Certificate Exam by covering a wide range of topics, from cybersecurity principles and privacy to risk management and security architecture.

XCYS-3000 Cybersecurity Audit- The Cybersecurity Audit Certificate equips audit and assurance professionals with the necessary expertise to thrive in assessing cybersecurity processes, policies, and tools. It aids in fortifying organizational infrastructure against cyber threats. Additionally, this certificate offers IT risk professionals insights into cyber-related risks and strategies for mitigating them.

XCYS 3010- Cybersecurity Bootcamp- The Cybersecurity Bootcamp is a 24-week part-time program designed to prepare participants for careers in the fast-growing field of cybersecurity. It includes courses on fundamentals, advanced networking and cryptography, security operations and incident response, and certification preparation for the CompTIA Security+ exam. The program emphasizes hands-on learning through labs, projects, and a real-world capstone project, ensuring practical skills in areas like penetration testing, incident response, and secure network design. Participants receive unlimited career support, including resume assistance, interview preparation, and salary negotiation coaching. Graduates can pursue diverse roles in industries such as finance, healthcare, and technology with competitive salaries and job stability.

Digital Marketing Bootcamp

XDGM 2020- Digital Marketing Bootcamp- The Digital Marketing Bootcamp is a part-time Career Bootcamp that teaches the essential skills necessary to launch a digital marketing career. Learners will start with the fundamentals and progress through a variety of strategies and topics to solve complex marketing challenges within the evolving tech space.

Software Development Bootcamp

XSWD 2010- Software Development Bootcamp- 24 Week Part-Time- Over the course of 24 weeks, you will learn how to build, test, and deploy software applications using JavaScript on the client- (front-end) and server-side (back-end) of an application. Starting with fundamentals, you will quickly move into more complex programming concepts that are solidified through challenges, such as: pair programming, weekly projects, lab exercises, and code reviews. The projects that you create throughout the program will be used to build your portfolio, which will serve as a showcase of your work and be a valuable asset in your post-bootcamp job hunt. You will also receive time with a professional career mentor through one-on-

one coaching sessions and bi-weekly workshops. In the final four weeks, you will work with a client and your classmates on a team to develop a real product. This is what we call your “capstone project”. At the end of the program, you will demonstrate your capstone project to an audience of hiring partners and tech community members at our Demo Day. This bootcamp part-time bootcamp is typically held during the weekday evenings and weekends.

Data Analytics Bootcamp

XDAB 2010- Data Science and Analytics Bootcamp, Extended Class-

The Data Analytics Bootcamp is a part-time, flex, mentor-led, Career Bootcamp that covers a variety of tools used to drive and guide complex, big data-oriented decisions. Learners will become experts in analysis, cleaning, mining, synthesis, and decision-making in order to influence key decisions with an increasingly complex business environment.

UX/UI Design Bootcamp

XUIX 2010- UX/UI Design Bootcamp- The process for creating the outward facing appearance of a website or application is referred to as user interface (UI) design, while the process of gathering research and using data to inform design decisions is referred to as user experience (UX) design. In this program, you will learn both. Starting with the fundamentals, you will quickly advance through topics of increasing complexity, applying creative problem-solving skills to design, and iterating on your designs based on research. You will learn how to defend your designs with data using performance metrics that you create. Lastly, you will leave this program knowing how to clearly implement every step of the design process, from concept to full-scale design prototypes.

General IT Related Programs

XITS 3400- AWS Cloud Foundations- AWS Academy Cloud Foundations is intended for students who seek an overall understanding of cloud computing concepts, independent of specific technical roles. It provides a detailed overview of cloud concepts, AWS core services, security, architecture, pricing, and support.

XITS 3410- AWS Solutions Architect- AWS Academy Solutions Architect is focused on the design of cost and performance optimized solutions. This is an ideal starting point for candidates with AWS Cloud or strong on-premises IT experience.

XITS 4000- IT Systems Support Specialist- Our online, asynchronous program is designed to equip you with the necessary skills and knowledge to become an IT Support Specialist. The program comprises multiple modules that cover essential topics such as technical support, hardware and operating systems, software, programming and databases, networking and storage, cybersecurity essentials, and cloud computing.

XITS 4020- Microsoft Office Specialist- The Microsoft Office Specialist program provides essential computer skills, along with training in business communication, etiquette, and problem-solving, covering a broad range of topics necessary for proficiency in the modern workplace. This offering includes the following certification(s): Microsoft Office Specialist (MOS)

XITS 4040- Red Hat Linux System Administrator I- The first of two courses covering the core system administration tasks needed to manage Red Hat Enterprise Linux servers Red Hat System Administration I is designed for IT professionals without previous Linux system administration experience. The course provides students with Linux administration competence by focusing on core administration tasks. This course also provides a foundation for students who plan to become full-time Linux system administrators by introducing key command-line concepts and enterprise-level tools. This course is the first of a two-course series that takes a computer professional without Linux system administration knowledge to become a fully capable Linux administrator.

XITS 4050- Red Hat Linux System Administrator II- Red Hat System Administration II is the second part of the RHCSA training track for IT professionals who have already attended Red Hat System Administration I. The course goes deeper into core Linux system administration skills in storage configuration and management, installation and deployment of Red Hat Enterprise Linux, management of security features such as SELinux,

control of recurring system tasks, management of the boot process and troubleshooting, basic system tuning, and command-line automation and productivity. This course assumes that students have attended Red Hat System Administration I.

XITS 4070- Cybersecurity Analyst (CySA+)- The Cybersecurity Analyst program prepares participants for a profession in cybersecurity, with a focus on defensive tactics designed to protect organizations against emerging threats and vulnerabilities. This offering includes the following certification(s): CompTIA CySA+

XITS 4080- Ethical Hacker (PenTest+)- The Ethical Hacker program prepares participants for a cybersecurity career, focusing on offensive tactics designed to proactively defend organizations from potential threats and ensure their digital assets remain secure. This offering includes the following certification(s): CompTIA PenTest+

XITS 4160- IT Helpdesk Administrator- The IT Help Desk Administrator program serves as an ideal entry point into the IT field, concentrating on the development and upkeep of network systems for businesses and organizations, preparing participants for critical support roles. This offering includes the following certification(s): CompTIA Network+, CompTIA A+

XITS 4210- CompTIA Security+ Preparation- The new CompTIA Security+ (SY0-701) represents the latest and greatest in cybersecurity, covering the most in-demand skills related to current threats, automation, zero trust, IoT, risk – and more. Once certified, you’ll understand the core skills needed to succeed on the job – and employers will notice too. The Security+ exam verifies you have the knowledge and skills required to: Assess the security posture of an enterprise environment and recommend and implement appropriate security solutions. Monitor and secure hybrid environments, including cloud, mobile, Internet of Things (IoT), and operational technology. Operate with an awareness of applicable regulations and policies, including principles of governance, risk, and compliance. Identify, analyze, and respond to security events and incidents. CompTIA Security+ is compliant with ISO 17024 standards and approved by the U.S. DoD to meet Directive 8140.03M requirements.

XCLO-2000 Cloud Fundamentals- The Cloud Fundamentals Certificate program is designed to help students learn essential cloud computing principles, covering concepts, governance, security, and service support. Explore how the cloud facilitates remote connection of critical services and data, enabling businesses globally to pursue digital transformation and enhance agility.

XDAT-2000 Data Science Fundamentals

With the Data Science Fundamentals Certificate, you'll showcase your comprehension of vital data analysis principles and techniques for leveraging data in guiding strategic business choices. You'll be able to articulate data attributes, classifications, applications, and frameworks, delineate various data management systems, and discuss fundamental principles and protocols of data governance.

XITA-2000 IT Audit Fundamentals- The IT Audit Fundamentals Certificate establishes a groundwork of knowledge and expertise essential for a successful career as an IT auditor. It encompasses fundamental audit principles, effective control utilization for conducting objective audits, and the hands-on application of audit principles in real-world scenarios.

XITR-2000 IT Risk Fundamentals- The IT Risk Fundamentals Certificate is designed for individuals seeking to gain insight into risk and information and technology (I&T)-related risk. It can be used as a pathway to the CRISC® certification.

XNET-2000 Networks and Infrastructure Fundamentals- Through the Networks and Infrastructure Fundamentals Certificate, you'll bolster and validate your comprehension of network architecture, infrastructure, and components, along with mastering the foundational terminology of networking.

XISA-5000 Certified Information Systems Auditor® (CISA®)- Certified Information Systems Auditor® (CISA®) is globally recognized as the gold standard for auditing, monitoring, and evaluating IT and business systems. Earning a CISA certification demonstrates your expertise and ability to

apply a risk-based approach to audit engagements. Registration includes Online Course, Review Manual, Certification Exam, QAE Database, and Student Membership.

XISM-5000 Certified Information Security Manager® (CISM®)- Certified Information Security Manager® (CISM®) validates your capacity to evaluate risks, establish robust governance, and proactively handle incidents. It emphasizes emerging technologies like AI and blockchain, ensuring your skillset aligns with evolving security challenges and industry standards. By addressing critical issues such as data breaches and ransomware attacks, CISM keeps IT professionals ahead of the curve.

XRIS-5000 Certified in Risk and Information Systems Control® (CRISC®)- The Certified in Risk and Information Systems Control® (CRISC®) certification will elevate your proficiency in Risk Management. By delving into a proactive strategy rooted in Agile methodology, you'll acquire the skills to bolster your company's resilience, provide value to stakeholders, and streamline Risk Management practices throughout the organization.

Certificate
Cultural Competency Leadership
Certificate

This certificate equips students with the knowledge, skills, and tools to drive meaningful organizational change, empowering leaders to foster a more effective and adaptable workplace culture that supports long-term success. Through a comprehensive curriculum, students will develop strategic leadership capabilities, enhance their decision-making skills, and learn best practices for managing change in dynamic environments. This certificate stacks upon the Professional Leadership certificate, and completely integrates into the IDS Leadership Major.

Requirements

Required Courses:		
COMM 351	Interpersonal Communication in Organizations	3
CPD/PAS 409	Leadership and Cultural Competence	3
CPD 415	Women in Leadership	3
CRJS 448	Women, Sex Discrimination and the Law	3
Total Credit Hours		12

An overall grade point average of 2.0 or above in all courses specified as a requirement for the certificate is required for the award of the certificate. Students must complete a minimum of six hours in upper-level courses required for the certificate through courses offered by Old Dominion University.

Certificate
Digital Forensics Certificate

The undergraduate certificate in Digital Forensics will prepare students for careers as digital forensic analysts. Students will gain experience practicing the forensics process as outlined by the National Institute of Science and Technology. This process includes collecting and examining digital evidence using forensic tools, analyzing evidence collected, and reporting the findings of an analysis to an audience. Students will also gain knowledge of the technological, legal, and social context surrounding the practice of digital forensics. For example, students will be introduced to some of the common types of cybercrimes where analyzing digital evidence is important. They will also learn the legal basis for searching and seizing digital artifacts, and techniques for interviewing individuals in connection to cybercrimes.

Requirements

Required Courses (6 credits)		
CYSE 404	Law and Digital Forensics	3
CYSE 407	Digital Forensics	3

Electives		
Select two of the following:		6
CYSE 301	Cybersecurity Techniques and Operations	
CRJS 340	White-Collar Crime	
CYSE/CRJS 409	Crime and Computer Applications	
Total Credit Hours		12

An overall grade point average of 2.0 or above in all courses specified as a requirement for the certificate is required for the award of the certificate. Students must complete a minimum of six hours in upper-level courses required for the certificate through courses offered by Old Dominion University.

Certificate

Professional Leadership Certificate

Robert Doherty, Coordinator

The certificate in Professional Leadership is designed to provide students with key concepts related to leadership in work and/or experiential settings. The curriculum focuses on educating students about specific aspects of leadership, including ethics, law and trends in leadership. Students will also gain critical thinking and analytical skills related to decision-making. Courses in the certificate address key areas of leadership to those aspiring to leadership roles in current or future work positions. Coursework provides opportunities for students to formalize their leadership strategies within ethical and legal realms, and to understand the value of critical thinking in leadership roles.

Requirements

Required Courses		
CPD 400	Foundations of Leadership	3
CPD 410	Leadership Ethics	3
CPD 412	Leadership and Law	3
CPD 417	Digital Leadership	3
or CYSE 417	Digital Leadership	
Total Credit Hours		12

An overall grade point average of 2.0 or above in all courses specified as a requirement for the certificate is required for the award of the certificate. Students must complete a minimum of six hours in upper-level courses required for the certificate through courses offered by Old Dominion University.

Graduate School

Web Site: <http://www.odu.edu/graduateschool> (<http://www.odu.edu/graduateschool/>)

Marisol P. Perez, Ph.D., Dean

TBD, Associate Dean

TBD, Director for Administration & Academic Services

Liz Smith, Director of Interdisciplinary Initiatives

Patricia Schiaffini-Vedani, Director of International Collaborations

2102 Monarch Hall, 757-683-4885

Laura Ray, Director, English Language Center

1108 Dragas Hall, 757-683-4424

Overview

One mission of the Old Dominion University Graduate School is to serve graduate students and graduate programs in an interdisciplinary framework that coordinates and optimizes available resources and enhances the visibility and value of graduate education across the region and world. The purpose of the Graduate School is to advocate for graduate students and graduate programs in a centralized manner so that policies and practices are consistently developed and applied across the academic colleges and schools. The work includes ongoing support for the university's forward-focused vision.

A second mission is to expand international collaborations via prestigious scholarships for undergraduates and graduate students, and support faculty who seek international teaching collaborations. Further, the English Language Center provides support for international recruiting, an intensive English language program for pre-matriculated students, an academic pathway program for conditionally admitted students (the Monarch English Transition Program), coursework for ODU students with interest in teaching multilingual students, and short-term contract programs focused on language and culture.

For more information regarding graduate programs or services, contact the Graduate School at 757-683-4885 or graduateschool@odu.edu.

Patricia and Douglas Perry Honors College

Web Site: <http://www.odu.edu/honors> (<http://www.odu.edu/honors/>)

Zaryab Iqbal, Ph.D., Dean

The Patricia and Douglas Perry Honors College offers a program where admitted high achieving incoming, currently enrolled, and transfer students enjoy the opportunity to personalize and co-design their honors experience at Old Dominion. Throughout their Honors College experience, students are encouraged to participate in experiential learning opportunities such as undergraduate research, internships and/or study abroad as a part of their honors education. Honors College students have the opportunity to apply for research apprenticeships and develop a credit-earning civic learning project in consultation with the Dean of the Honors College. Contract courses are available for Honors College students to deepen their knowledge and individualize course content for courses on the 300/400 level that are three credits or more. In their senior year, Honors College students participate in a three-credit senior honors colloquium, departmental capstone course, or honors thesis, which provides them with the opportunity to hone their research skills and assess their academic strengths in preparation for graduate school, international scholarship opportunities, and future employment. Throughout their time in the Honors College, students will create and maintain an E-Portfolio, which will be showcased in their senior year prior to graduation.

The online application for admission into the Honors College is available on the Honors College website: <https://www.odu.edu/honors/apply> (<https://www.odu.edu/honors/apply/>). All students must submit a minimum of one letter of recommendation attesting to the applicant's scholastic ability from an instructor; however, students may submit more letters of recommendation, and they are invited to submit a portfolio showcasing their accomplishments.

Being an Honors College graduate is a prestigious accomplishment, one that is viewed favorably by graduate schools and potential employers everywhere. Additional benefits include:

- Honors College students can apply to live in Honors Housing. Applications for Honors Housing must be made directly to the Office of Housing and Residence Life. The Office of Housing and Residence Life prioritizes requests based on the date BOTH the application and housing deposit are received.
- Honors College students have the ability to schedule an appointment with the Dean of the Honors College for personalized letters of recommendation.
- Honors College students enjoy faculty privileges at the library.
- Tuition scholarships for HNRS courses, including study abroad.
- All Honors College students may register for classes on the first day of the registration period.
- Exclusive scholarship opportunities, including the John and Kate Broderick Opportunity Scholarship: <https://www.odu.edu/honors/scholarship> (<https://www.odu.edu/honors/scholarship/>).
- Honors College students can apply for travel grants to offset the costs of travel to a national or international conference at which they are presenting.
- Honors College students may apply for up to \$500 to offset the costs of equipment and supplies for the completion of research related to a research apprenticeship, honors contract course, or a senior honors thesis/project.
- Upon completion of the requirements of the Honors College, students are awarded a certificate, a medal, and a silver tassel.

Competition for acceptance into the Honors College is keen. The criteria used to select the limited number of first-year students admitted annually include high school grade point average and curriculum, Scholastic Aptitude Test scores, letters of recommendation, and a written personal statement.

The minimum admission requirements for continuing and transfer students are as follows: a 3.5 college grade point average, the ability to complete at

least 48 additional credit hours at Old Dominion University, and letters of recommendation from college faculty members. Honors College students must maintain at least a 3.25 cumulative grade point average.

Honors College Requirements

Honors General Education and Honors Contract Course Requirements

Four honors courses *	
Capstone Requirement (select one in addition to the ePortfolio**):	
Capstone Course (Colloquium, Thesis, or Departmental Capstone Course)	
HNRS 499	Senior Honors Thesis
Experiential Learning Component (select one in addition to HNRS 387):	
HNRS 387	Honors Civic Learning Project
Honors College options for: Study Abroad, Teacher Preparation, Practicum, or Internship may be developed to fulfill the experiential learning component requirements.	
Undergraduate Research: Complete two of the following	
Approved Undergraduate Research Course	
HNRS 226	Undergraduate Research Apprenticeship
Out of Class Educational Poster or Oral Presentation	
Successful application for and completion of an Undergraduate Research Grant Project	
Publication of an article in a research journal	
HNRS 201	Monarch Think Tank I
HNRS 301	Monarch Think Tank II
HNRS 497	Honors Independent Study
HNRS 498	Honors Independent Study
Campus Events ***	

- * Either honors general education or honors contract.
- ** An ePortfolio is a digital collection of student work developed across varied contexts (classes, internships, social activities, etc.) over time. As students progress through a course of study at ODU, an ePortfolio can serve as a repository for their work. As a result, when the need arises for students to reflect on and display their experiences, they may draw on the archived material, crafting a showcase portfolio for potential employers and faculty writing recommendations. Due to its digital nature, an ePortfolio allows students to create and share multi-media elements, such as videos, audio files, animation, and so forth. Honors College students will create and maintain an ePortfolio showcasing work in and out of class while in the Honors College, which will be reviewed each semester. The Honors College provides workshops, as well as individualized support to assist students in the development of the ePortfolio.
- *** Honors College students are required to attend one campus event per semester for up to 8 semesters.

Undergraduate Research Program

Under the leadership of the Perry Honors College, the undergraduate research program includes an annual symposium, undergraduate research courses, a journal, a recognition program for faculty mentors and student researchers, as well as a robust grant program. The Undergraduate Research Program promotes, supports, and funds the involvement of undergraduate students in the active research community at Old Dominion University. It provides undergraduates with hands-on experience working with faculty on a wide variety of research projects. Faculty mentors help students to acquire research skills early in their undergraduate careers. Later in their academic careers, students use and develop these skills through research-oriented course work, collaborative and faculty-sponsored research, and their own independent research projects, which can be potentially funded through Old

Dominion's Undergraduate Research and Creativity Grant Program. The Undergraduate Research Symposium and Undergraduate Research Journal provide students with the opportunity to present and publish their work under the supervision of the University's distinguished faculty. Additional information regarding undergraduate research opportunities is available on the Undergraduate Research Program's website: <https://www.odu.edu/honors/research> (<https://www.odu.edu/honors/research/>).

Contract Honors Courses

Students with a grade point average of at least 3.25 may transform any upper-division course into an Honors course on an individual basis. With the advice and consent of the instructor, students take one or more courses that can be converted into Honors. No grade below B is accepted for Honors designation. In addition, contract honors courses may be used to meet requirements for departmental honors. Interested students should contact the Honors College for additional information.

The Perry Honors College (PHC) and Batten College of Engineering & Technology Engineering Honors Program (EHP)

A partnership between the Perry Honors College and the Batten College of Engineering and Technology, the Engineering Honors Program (PHC/EHP) offers a program for select incoming freshmen, current ODU students, and transfer students. The program has been designed for students who intend to make a difference in the world and who would enjoy the opportunity to ready themselves for future leadership positions in the field of engineering.

Throughout their PHC/EHP experience, students will have the opportunity to network with industry leaders, and they are encouraged to participate in undergraduate research, as well as experiential learning (such as engineering competitions, community engagement, internships, and study abroad). In their freshman year, PHC/EHP students may elect to live in the Honors Engineering living learning community, and they will enjoy an honors engineering course that focuses on hands-on learning in engineering labs and Engineering Makerspace & Invention Center. In their sophomore and junior years, PHC/EHP students will extend their learning beyond the classroom by participating in research apprenticeships and by developing a one-credit civic learning project in consultation with the Dean of the Honors College. In their sophomore and junior years, Contract courses (courses that are not labeled as honors but that the instructor can adapt to an honors student to make it an honors course) are available for PHC/EHP students to deepen their knowledge of course material for courses on the 300/400 level that are three credits or more. In their senior year, PHC/EHP students can request a faculty member to generate a senior elective honors three-credit contract course where student will hone their research skills and assess their academic strengths in preparation for graduate school and future employment.

The online application for admission into the Engineering Honors Program is available on the Perry Honors College website: <https://www.odu.edu/honors/apply> (<https://www.odu.edu/honors/apply/>). All students must submit a resume, an essay describing how engineers might help to solve a contemporary real-world problem, and one letter of recommendation from an instructor attesting to the applicant's scholastic ability in an area relevant to engineering and their potential as a future leader in the field of engineering. As applications are reviewed holistically, students are encouraged to submit a portfolio showcasing their accomplishments in leadership, research, or in activities related to the field of engineering; a LinkedIn page with pictures and videos of projects and experiences is an optional solution to organize such portfolio

Eligibility

First-year Students

- Application and acceptance into ODU
- Application to the PHC/EHP
- 3.5 unweighted High School GPA in math and science courses

- Students must have an intended major in the Batten College of Engineering and Technology and placement in Calculus I (MATH 211) or higher before the start of their first semester.

Transfer Students

- Application and acceptance into ODU
- Application to the PHC/EHP
- 3.5 cumulative GPA and 3.5 in math and science courses, including completion of Calculus I (MATH 211) before joining ODU.

Current ODU Students:

- Application to the PHC/EHP
- 3.5 cumulative GPA (ODU) and 3.5 GPA (ODU) in math and science courses, including completion of Calculus I (MATH 211) with a minimum grade of C.

Benefits

- A stipend of \$250 per semester for up to eight semesters as an undergraduate student
- PHC/EHP students can apply to live in the Honors Engineering Living Learning Community. Applications for the LLC must be made directly to the Office of Housing and Residence Life. The Office of Housing and Residence Life prioritizes requests based on the date BOTH the application and housing deposit are received. Students will have preference to select single rooms.
- PHC/EHP students can schedule an appointment with the Dean of the Honors College and the Dean's Office of the College of Engineering and Technology for personalized letters of recommendation.
- PHC/EHP students enjoy faculty privileges at the library.
- Honors advising services that focus on opportunities and helping the student develop a portfolio of accomplishment at Old Dominion.
- Tuition scholarships for HNRS courses, including HNRS 396 (honors study abroad).
- PHC/EHP students may register for classes on the first day of the registration period following their first semester at Old Dominion.
- PHC/EHP students have exclusive scholarship opportunities, including the John and Kate Broderick Opportunity Scholarship: <https://www.odu.edu/honors/scholarship> (<https://www.odu.edu/honors/scholarship/>).
- PHC/EHP students can apply for travel grants to offset the costs of travel to a national or international conference at which they are presenting.
- PHC/EHP students may apply to the Honors College for up to \$500 to offset the costs of equipment and supplies for the completion of research related to a research apprenticeship, honors contract course, or a senior honors thesis/project.
- Reserved study time in a studio at the Engineering Systems Building.
- Special access to the Engineering Makerspace & Invention Center activities.
- Early acceptance in the linked undergraduate – graduate programs in engineering.
- Special funding for projects and entrepreneurial activities.
- Mentoring program with faculty and opportunities to mentor other engineering students.
- Upon completion of the requirements of the Perry Honors College/ Engineering Honors Program, students are awarded a certificate, a medal, and a silver tassel, and they will receive a special transcript designation.
- Students with significant accomplishments in undergraduate research may petition to have the designation "Research Honors Scholar" placed on their transcript. For additional information, students may contact the Perry Honors College or review the Undergraduate Research Honors Scholar information on the Perry Honors College website.
- Upon completion of the requirements of the Perry Honors College/ Engineering Honors Program, PHC/EHP students who meet the following requirements may also apply for an honors designation on

their diploma (departmental honors): Minimum cumulative GPA of 3.25; Minimum GPA in the major of 3.50; completion of at least two 300/400-level courses designated by the department to be honors; and completion of at least 60 credit hours at Old Dominion, 54 of which must be in grade-point graded courses. Note: To determine eligibility for departmental honors, the student's complete record, including grades and hours for courses that have been forgiven or adjusted, will be evaluated to calculate the final grade point average.

Program Requirements

Requirement 1: Perry Honors College/Engineering Honors Program ePortfolio/LinkedIn*

Requirement 2: Honors Courses (four required): Honors ENGN 121 (required for first-year students); select three from the following: ENGL 231C: Honors Section of Technical Communication, HNRS Independent Study (if approved by Honors College), honors general education courses, honors contract courses in engineering, engineering graduate courses taken as an undergraduate (e.g., those taken as part of a linked program).

Requirement 3: Experiential Learning and Leadership (select at least two from the following): engineering internship (may be repeated), participation in engineering competitions (e.g. concrete canoe, solar decathlon, motorsports, SAE aero, and Intelligent Ground Vehicle) or engineering projects with social impact (e.g., engineers without borders), HNRS 387 (Civic Learning Project), HNRS 396 (study abroad, when connected to engineering)

Requirement 4: Undergraduate Research (select at least two from the following): HNRS 226 (undergraduate research apprenticeship) or equivalent experience, poster or oral presentation at a regional/ national/ international conference, successful application for and completion of an Undergraduate Research Grant project (see undergraduate research program webpage for additional information), authorship or co-authorship of an article accepted or published in a peer-reviewed journal or conference proceedings, a Research Experience for Undergraduates (REU) for fall, spring, or summer. Note: Successful work in a faculty member's lab or a research-oriented internship may also be counted toward this requirement.

Requirement 5: Campus Events. PHC/EHP student are required to attend at least one campus event (e.g., internship fair, engineering club meeting, the PHC's undergraduate research symposium) per semester.

Optional requirement: Contract Course - Honors Engineering Senior Elective.

*An ePortfolio is a digital collection of student work developed across varied contexts (classes, internships, social activities, etc.) over time. As students progress through a course of study at ODU, an ePortfolio can serve as a repository for their work. As a result, when the need arises for students to reflect on and display their experiences, they may draw on the archived material, crafting a showcase portfolio for potential employers and for faculty writing recommendations. Due to its digital nature, an ePortfolio allows students to create and share multi-media elements, such as videos, audio files, animation, and so forth. Honors College students will create and maintain an ePortfolio showcasing work in and out of class while in the Honors College, which will be reviewed each semester. The Honors College provides workshops, as well as individualized support to assist students in the development of the ePortfolio. Placing all e-portfolio information on the student LinkedIn page is a requirement.

For additional information about the Honors College, visit the web site at <http://www.odu.edu/honors> (<http://www.odu.edu/honors/>) or contact:

Zaryab Iqbal, Ph.D.
Dean of The Patricia and Douglas Perry Honors College
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(757) 683-3033

Officers of the Administration and Department Chairs

Officers of the Administration

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Chad A. Reed, M.P.A., *Executive Vice President for Administration and Finance and Chief Financial Officer*

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Jeffrey W. Fergus, Ph.D., *Dean of the Batten College of Engineering and Technology*

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Gail Dodge, Ph.D., *Dean of the College of Sciences*

Zaryab Iqbal, Ph.D., *Dean of the Perry Honors College*

Rene Love, Ph.D., *Dean of the Ellmer School of Nursing*

Li-Wu Chen, Ph.D., *Dean of the Joint School of Public Health*

Holly A. Handley, Ph.D., *Interim Dean of Interdisciplinary Schools*

Marisol P. Perez, Ph.D., *Dean of the Graduate School*

Timothy A. Hackman, M.L.S., M.A., *Dean of University Libraries*

Department and School Chairs

HONG (KIM) DUONG, Ph.D., *School of Accountancy (Interim)*

JOHN ROTH, M.F.A., *Art*

HOLLY D. GAFF, Ph.D., *Biological Sciences*

CRAIG A. BAYSE, Ph.D., *Chemistry and Biochemistry*

SANDEEP KUMAR, Ph.D., *Civil and Environmental Engineering*

TIM J. ANDERSON, Ph.D., *Communication and Theatre Arts*

JAMES D. BLANDO, Ph.D., *Epidemiology, Biostatistics, and Environmental Health*

RAVI MUKKAMALA, Ph.D., *Computer Science*

MARK C. REHFUSS, Ph.D., *Counseling and Human Services*

DANIEL TAKABI, Ph.D., *School of Cybersecurity*

FRANK Y. LIU, Ph.D., *School of Data Science*

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BRUCE RUBIN, Ph.D., *Finance*

BRIAN C. MARTIN, Ph.D., *Health Behavior, Policy, and Management (Interim)*

INGO HEIDBRINK, Ph.D., *History*

XIHE ZHU, Ph.D., *Human Movement Studies and Special Education*

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SHAOMIN LI, Ph.D., *Management*

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MARWAN AL-HAIK, Ph.D., *Mechanical and Aerospace Engineering*

HAROLD C. RIETHMAN, Ph.D., *School of Medical Diagnostic and Translational Sciences*

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BRIAN C. BECKER, M.B.A., *Naval Science*

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RUTH A. TRIPLETT, Ph.D., *Sociology and Criminal Justice*

STACIE RAYMER, Ph.D., *School of Speech-Language Pathology*

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KUNTAL BHATTACHARYYA, Ph.D., *School of Supply Chain, Logistics, and Maritime Operations*

ANGELA L. ECKHOFF, Ph.D., *Teaching and Learning*

ELIZABETH GROENEVELD, Ph.D., *Women's and Gender Studies*

ELIZABETH C. BLACK, Ph.D., *World Languages and Cultures*

Faculty

Please see the A to Z directory on the ODU website for Faculty information: <https://www.odu.edu/directory> (<https://www.odu.edu/directory/>).

Emeriti Faculty and Administrators

A

Eileen P. Abrahamsen, *Associate Professor Emerita of Communication Disorders & Special Education**

John A. Adam, *University Professor Emeritus and Professor Emeritus of Mathematics & Statistics*

Clifford L. Adams, *Professor Emeritus of Physics**

Kimberly Adams Tufts, *Professor Emerita of Nursing*

Cephas J. Adkins, Jr., *Professor Emeritus of Psychology**

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Dwight W. Allen, *Eminent Scholar Emeritus of Educational Reform and Professor Emeritus**

Claire J. Anderson, *Associate Professor Emerita of Management*

Eric E. Anderson, *Associate Professor Emeritus of Economics*

Michael C. Andrews, *Eminent Scholar Emeritus and Louis I. Jaffe Professor Emeritus of English*

Robert P. Arnett, *Associate Professor Emeritus of Communication and Theatre Arts*

Robert L. Ash, *Eminent Scholar Emeritus and Professor Emeritus of Mechanical and Aerospace Engineering*

Steven K. Atiyah, *Assistant Professor Emeritus of Mathematics and Statistics**

Larry P. Atkinson, *Eminent Scholar Emeritus and Professor Emeritus of Ocean, Earth and Atmospheric Sciences**

Roy E. Aycok, *Professor Emeritus of English**

B

Howard W. Baeumler, *Associate Professor Emeritus of Mathematics**

Virginia S. Bagley, *Associate Professor Emerita of Biological Sciences**

Han P. Bao, *Professor Emeritus of Mechanical and Aerospace Engineering and Mitsubishi Kasei Professor Emeritus of Engineering Manufacturing*

Peter Stephen Barna, *Professor Emeritus of Mechanical Engineering and Mechanics**

Barbara R. Bartkus, *University Professor Emerita and Associate Professor Emerita of Management*

William S. Bartolotta, *Associate Professor Emeritus of Music*

David R. Basco, *Professor Emeritus of Civil and Environmental Engineering*

Deborah "Debbie" B. Bauman, *Assistant Dean Emerita of Health Sciences and Associate Professor Emerita of Dental Hygiene*

Nancy Topping Bazin, *Eminent Scholar Emerita and Professor Emerita of English*

Jacob Becher, *Associate Professor Emeritus of Physics*

William W. Beck, *Professor Emeritus of Civil Engineering Technology**

Walter Herman Bell, Sr., *Professor Emeritus of French Language and Literature**

Charles E. Bell, Jr., *Professor Emeritus of Chemistry and Biochemistry**

Richardean S. Benjamin, *Associate Dean Emerita, College of Health Sciences, and Associate Professor Emerita of Nursing*

Linda K. Bennington, *Clinical Associate Professor Emerita of Nursing*

Maurice R. Berube, *Eminent Scholar Emeritus and Professor Emeritus of Educational Leadership*

Samuel Bieber, *Professor Emeritus of Biological Sciences**

Richard Hugh Bigelow, *Professor Emeritus of Civil Engineering**

Frank William Billmyer, Jr., *Professor Emeritus of Chemical Sciences**

Janet M. Bing, *University Professor Emerita and Professor Emerita of English*

Ray S. Birdsong, *Professor Emeritus of Biological Sciences and Oceanography**

Carvel H. Blair, *Associate Professor Emeritus of Oceanography**

Charles P. Blicht, *Professor Emeritus of Economics**

Thomas W. Blossom, *Professor Emeritus of History**

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Darwin F. Bostick, *Associate Professor Emeritus of History (posthumous)**

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Wayne E. Bowman, *Associate Professor Emeritus of English**

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C

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Reuben Cooper, *Professor Emeritus of Speech**

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D

Ram C. Dahiya, *Eminent Scholar Emeritus and Professor Emeritus of Mathematics and Statistics*

Dayle A. Daines, *Associate Professor Emerita of Biological Sciences*

Kenneth G. Daley, *University Professor Emeritus and Professor Emeritus of Art**

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John J. Davye, *Professor Emeritus of Music**

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Ralph deBedts, *Professor Emeritus of History**

Dianne DeBeixedon, *Associate Professor Emerita of Art*

Charles M. DeHority, *Professor Emeritus of Management**

David E. Delzell, *Professor Emeritus of Biological Sciences**

Ayodeji "Deji" O. Demuren, *Professor Emeritus of Mechanical and Aerospace Engineering*

Valerian Derlega, *Professor Emeritus of Psychology*

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Amin N. Dharamsi, *Professor Emeritus of Electrical and Computer Engineering*

Beth Ann Dickie, *Director Emerita, Office of Educational Accessibility*

Gail K. Dickinson, *Professor Emerita of STEM Education and Professional Studies*

Terry L. Dickinson, *Professor Emeritus of Psychology*

Paul A. Dicklin, *Associate Professor Emeritus of Speech Communication and Theater Arts (posthumous)**

Fred C. Dobbs, *Professor Emeritus of Ocean and Earth Sciences*

Leonard E. Dobrin, *Associate Professor Emeritus of Sociology and Criminal Justice**

Carol A. Doll, *Professor Emerita of Teaching and Learning*

Frances McGrath Dolloph, *Community and Student Success Director Emerita, Distance Learning*

John Mark Dorrepaal, *Professor Emeritus of Mathematics and Statistics*

Lawrence G. Dotolo, *President Emeritus of the Virginia Tidewater Consortium*

Michael J. Doviak, *Associate Professor Emeritus of Mathematics and Statistics*

Suzanne D. Doviak, *Senior Lecturer Emerita of Mathematics and Statistics**

Lynn H. Doyle, *Associate Professor Emerita of Educational Leadership*

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James "Jim" P. Duffy, *Associate Vice President Emeritus for Academic Affairs*

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Thomas H. Dunham, *Associate Professor Emeritus of Ocean, Earth and Atmospheric Sciences*

Robert "Bob" F. Dunker, *Medical Director Emeritus of Student Health Services*

ReNeé S. Dunman, *Assistant Vice President Emerita for Equity and Diversity*

William M. Dunstan, Jr., *Professor Emeritus of Ocean, Earth and Atmospheric Sciences**

E

Carolyn S. Eakin, *Director Emerita of Technology and Data Analysis*

John L. Echternach, *Eminent Scholar Emeritus of Physical Therapy**

Patricia A. Edwards, *Senior Lecturer Emerita of Art*

Mary C. Enderson, *Professor Emerita of Teaching and Learning*

A. James "Jim" English, *Associate Professor Emeritus of Community and Environmental Health**

Elizabeth H. Esinhart, *Senior Lecturer Emerita of Political Science and Geography*

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Natalie W. Etheridge, *Associate Professor Emerita of Health, Physical Education and Recreation**

Rodney "Rod" L. Evans, Jr., *Senior Lecturer Emeritus of Philosophy and Religious Studies*

F

John A. Fahey, *Associate Professor Emeritus of Foreign Languages and Literatures**

Joong Fang, *Professor Emeritus of Philosophy**

Anita C. Fellman, *Professor Emerita of History*

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T. Ross Fink, *Professor Emeritus of Education**

Charlene E. Fleener, *Associate Professor Emerita of Teaching and Learning*

Ike L. Flory, *Associate Professor Emeritus of Engineering Technology*

Beverly "Bev" Forbes, *Associate Director Emerita for Experiential Education Programs*

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Stephen J. Foster, *Professor Emeritus of Foreign Languages and Literatures*

Willard C. Frank, *Associate Professor Emeritus of History**

Mark Fravel, *Professor Emeritus of Educational Curriculum and Instruction**

Frederick G. Freeman, *Professor Emeritus of Psychology*

Justin C. Friberg, *Professor Emeritus of Political Science and Geography**

Morel A. Fry, *Assistant University Librarian Emerita for Administration*

Agnes Rose Fuller Wynne, *Master Lecturer Emerita of Music**

G

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Ann E. Gargett, *Professor Emerita of Ocean, Earth and Atmospheric Sciences*

Lucille L. Garner, *Librarian III Emerita**

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Vance E. Grover, *Professor Emeritus of Accounting**

Elizabeth C. Guy, *Associate Professor Emerita of Psychology (posthumous)**

H

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Bismarck Myrick, *Lecturer Emeritus of Political Science and History**

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Joyce L. Neff, *Professor Emerita of English*

Christianne Nesbitt, *Associate Professor Emerita of Nursing*

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Wolfgang Pindur, *Professor Emeritus of Urban Studies and Public Administration (posthumous)**

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Stanley R. Pliska, *Professor Emeritus of History**

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Mary K. Swartz, *Registrar Emerita*

James R. Sweeney, *Associate Professor Emeritus of History*

John J. Swetits, *Professor Emeritus of Mathematics and Statistics*

Deborah L. Swiecinski, *Associate Vice President Emerita for Financial Services*

Donald J. Swift, *Eminent Scholar Emeritus and Professor Emeritus of Ocean, Earth and Atmospheric Sciences**

T

John R. Tabb, *Professor Emeritus of Economics and Dean Emeritus of the College of Business and Public Administration**

Wayne K. Talley, *Eminent Scholar Emeritus and Professor Emeritus of Economics*

Michael "Mike" Tamburello, *Associate Professor Emeritus of Rehabilitation Sciences*

John "Jeff" F. Tanner, Jr., *Dean Emeritus, Strome College of Business, and Professor Emeritus of Marketing*

James Albert Tatem, Jr., *Associate Professor Emeritus of Health, Physical Education, and Recreation**

Albert Teich, Jr., *Professor Emeritus of Finance**

Lee J. Tepley, *Lecturer Emeritus of Music**

Gerald Wayne Thompson, *Associate Professor Emeritus of Educational Curriculum and Instruction**

Lenora Hicks Thompson, *Senior Executive Director Emerita of Counseling Services*

Sophie K. Thompson, *Associate Professor Emerita of Medical Diagnostic and Translational Sciences*

George William "GW" Thompson, III, *Director Emeritus of the Center for Major Exploration*

William H. Thornton, *Associate Professor Emeritus of Engineering Technology**

Surenda N. Tiwari, *Eminent Scholar Emeritus and Professor Emeritus of Mechanical Engineering**

Shunichi Toida, *Associate Professor Emeritus of Computer Science*

Susan Lynn Tolle, *Professor Emerita of Dental Hygiene and University Professor Emerita*

Alan Rufus Tonelson, *Professor Emeritus of Education**

Stephen "Steve" W. Tonelson, *Professor Emeritus of Communication Disorders and Special Education*

Patrick K. Tow, *Associate Professor Emeritus of Health, Physical Education and Recreation (posthumous)**

Alfred S. Townsend, *Associate Professor Emeritus of Music*

Cecelia Taliaferro Tucker, *Assistant to the President Emerita for Community Relations*

Kimberly Adams Tufts, *Professor Emerita of Nursing*

Andrew C. Tunogi, *Professor Emeritus of Philosophy**

Charles "Charlie" G. Turner, *Associate Professor Emeritus of Economics*

John E. Turner, *Associate Professor Emeritus of Occupational and Technical Studies*

John Tweed, *Professor Emeritus of Mathematics and Statistics*

Joseph M. Tyrrell, *Professor Emeritus of History**

V

Margaret Daugherty Van Damm, *Associate Professor Emerita of English**

John D. Van Norman, *Professor Emeritus of Chemical Sciences**

Jay Wallace Van Orden, *Eminent Scholar Emeritus and Professor Emeritus of Physics*

Karen Vaughan, *Faculty Administrator Emerita, University Libraries*

Paul Thomas Vernier, *Research Professor Emeritus of the Frank Reidy Research Center for Bioelectronics*

Charles E. Vogan, *Professor Emeritus of Music**

Leposava Vuškovi#, *Eminent Scholar Emerita and Professor Emerita of Physics*

W

Nancy L. Wade, *Associate Professor Emerita of Biological Sciences**

William H. Wagner, *Associate Professor Emeritus of Art*

John R. Waitekus, *Physician Emeritus of Student Health Services*

Alice P. Wakefield, *Associate Professor Emerita of Teaching and Learning*

Martha L. Walker, *Associate Professor Emerita of Rehabilitation Sciences*

Leon R. L. Wang, *Professor Emeritus of Civil and Environmental Engineering**

Stanley E. Warner, Jr., *Professor Emeritus of Accounting**

Sandra "Sandy" Miller Waters, *Executive Director Emerita for Advising Administration and Academic Partnerships*

Harold Q. Webb, *Professor Emeritus of Management**

Lewis W. Webb, Jr., *President Emeritus**

Katarina E. Wagar, *Associate Professor Emerita of Sociology and Criminal Justice*

Stanley E. Weinstein, *Professor Emeritus of Mathematics and Statistics**

Thomas L. Wells, *Associate Professor Emeritus of Political Science and Geography**

Marek Wermus, *Associate Professor Emeritus of Information Technology and Decision Sciences*

Terri N. Wheaton, *Director Emerita of Intake and Student Success Online*

Rogers D. Whichard, *Professor Emeritus of French Language and Literature**

William F. Whitbeck, *Professor Emeritus of Marketing**

Debbie Harmison White, *Senior Associate Athletic Director Emerita for External Relations*

Edward L. White, *Professor Emeritus of the School of Engineering**

Garland White, *Associate Professor Emeritus of Sociology and Criminal Justice**

Frederick D. Whitehurst, *Professor Emeritus of Accounting*

George William "Bill" Whitehurst, *George M. and Linda H. Kaufman University Lecturer Emeritus of Public Affairs*

George "Rich" R. Whittecar, *University Professor Emeritus and Associate Professor Emeritus of Ocean, Earth and Atmospheric Sciences*

John Christian Wild, *Associate Professor Emeritus of Computer Science*

Melvin H. Williams, *Eminent Scholar Emeritus and Professor Emeritus of Exercise Science, Physical Education and Recreation**

Roy L. Williams, *Professor Emeritus of Chemistry and Biochemistry**

Daniel S. Wilson, *Associate Professor Emeritus of English**

Harold S. Wilson, *Professor Emeritus of History*

Jack H. Wilson, *Professor Emeritus of English*

Larry W. Wilson, *Associate Professor Emeritus of Computer Science*

Charles E. Wilson, Jr., *University Professor Emeritus, Dean Emeritus of the College of Arts and Letters, and Professor Emeritus of English*

Conrad S. Wilson, Jr., *Associate Professor Emeritus of English**

Barbara A. Winstead, *Professor Emerita of Psychology*

Konrad G. Winters, *Associate Professor Emeritus of Communication and Theatre Arts**

Pauline K. Wise, *Associate Professor Emerita of Elementary Education**

Philip R. Wohl, *Associate Professor Emeritus of Mathematics and Statistics**

Denny T. Wolfe, Jr., *Professor Emeritus of Educational Curriculum and Instruction*

Lloyd Wolfenbarger, Jr., *Professor Emeritus of Biological Sciences*

George T. Wong, *Professor Emeritus of Ocean, Earth and Atmospheric Sciences*

Ronald R. Woodard, *Director Emeritus of Transfer Services, Distance Learning*

Robert J. Wunderlin, *Associate Professor Emeritus of Psychology**

X

Li D. Xu, *Professor Emeritus of Information Technology and Decision Sciences*

Y

Betty J. H. Yarborough, *Eminent Scholar Emeritus and Constance and Colgate Darden Professor of Education Emeritus**

Steve A. Yetiv, *University Professor Emeritus, Louis I. Jaffe Professor Emeritus of Arts & Letters, and Professor Emeritus of Political Science and Geography (posthumous)**

Gilbert "Gil" R. Yochum, *Professor Emeritus of Economics*

Robert F. Young, *Associate Professor Emeritus of Music**

James H. Yuan, *Professor Emeritus of Chemistry and Biochemistry*

Helen Yura, *Professor Emerita of Nursing**

Z

Jacques S. Zaneveld, *Professor Emeritus of Oceanography**

Donald "Don" J. Zeigler, *Professor Emeritus of Political Science and Geography**

Dennis Zeisler, *University Professor Emeritus and Professor Emeritus of Music**

Douglas E. Ziegenfuss, *Professor Emeritus of Accountancy*

Michele L. Zimmerman, *Associate Professor Emerita of Nursing*

* Deceased

Course Index and Course Search

Courses of Instruction

Course Search (<http://catalog.odu.edu/course-search/>)

Courses numbered 100 are primarily for freshmen, 200 for sophomores, 300 for juniors, 400 for seniors. 500-, 600-, 700-, and 800-level courses are generally for graduate credit. Courses at the 500 level are cross-listed to undergraduate 400-level courses, with additional work and higher-level outcomes required for 500-level courses.

General education courses are designated by the fourth digit in the course number. At the lower division, the following designations are used: for Skills courses, C=Composition, F=Language and Culture, G=Information Literacy and Research, M=Mathematics, and R=Oral Communication; for Ways of Knowing courses, A=Human Creativity, H=Interpreting the Past, L=Literature, N=The Nature of Science, P and E=Philosophy and Ethics, S=Human Behavior, and T=Impact of Technology. Writing intensive courses are designated by a W in the fourth digit.

Some of the courses listed indicate the semester the course will be offered. Every attempt will be made to offer the courses in the semester(s) indicated. However, this may not always be possible. Please consult the academic advisor or graduate program director for course offerings.

The University reserves the right to withdraw any course for which there is insufficient registration.

- AAST - African-American Studies
- ACCT - Accounting
- AI - Artificial Intelligence
- AL - Arts and Letters
- AMST - American Studies
- ANTR - Anthropology
- ARAB - Arabic
- ARTE - Art Education
- ARTH - Art History
- ARTS - Art, Studio
- ASIA - Asian Studies
- ASTP - Astrophysics
- AT - Athletic Training
- BDA - Big Data Analytics
- BIOE - Bioelectrics
- BIOL - Biological Sciences
- BM - Biomedical Sciences (Medical Masters)
- BME - Biomedical Engineering
- BMS - Biomedical Sciences
- BNAL - Business Analytics
- BP - Biomedical Research (MS & PhD)
- BUSN - Business Administration
- CAT - Counseling and Art Therapy
- CCL - Community College Leadership
- CDSE - Communication Disorders and Special Education
- CEE - Civil and Environmental Engineering
- CET - Civil Engineering Technology
- CGE - Center for Global Engagement
- CHAE - Contemporary Human Anatomy Education
- CHEM - Chemistry and Biochemistry
- CHIN - Chinese
- CL - Conservation Leadership
- COMM - Communications
- COUN - Counseling
- CPD - Center for Professional Development
- CPSY - Clinical Psychology

- CRIM - Criminology
- CRJS - Criminal Justice
- CS - Computer Science
- CSD - Communication Sciences and Disorders
- CYSE - Cybersecurity
- CYTO - Cytotechnology
- DANC - Dance
- DASC - Data Science
- DHSC - Doctor of Health Sciences
- DMSC - Medical Science
- DNTH - Dental Hygiene
- ECE - Electrical and Computer Engineering
- ECON - Economics
- EDUC - Education
- EET - Electrical Engineering Technology
- ELS - Educational Leadership and Services
- ENGL - English
- ENGN - Engineering
- ENGT - Engineering Technology
- ENMA - Engineering Management
- ENTR - Entrepreneurship
- ENVH - Environmental Health
- EXSC - Exercise Science
- FAST - Filipino-American Studies
- FIN - Finance
- FOUN - Foundations of Education
- FR - French
- GAME - Gaming
- GDES - Graphic Design
- GEOG - Geography
- GER - German
- GRAD - Graduate
- HADM - Healthcare Administration
- HEBR - Hebrew
- HIED - Higher Education
- HIST - History
- HLSC - Health Sciences
- HLTH - Health
- HMS - Human Movement Sciences
- HMSV - Human Services
- HNRS - Honors
- HPE - Health and Physical Education
- HSR - Health Services Research
- HUM - Humanities
- IDS - Interdisciplinary Studies
- IDT - Instructional Design and Technology
- INBU - International Business
- IPEH - Interprofessional Education-Health
- IS - International Studies
- IT - Information Technology
- ITAL - Italian
- JAPN - Japanese
- JST - Jewish Studies
- KIN - Kinesiology
- KRS - Kinesiology and Rehabilitation Sciences
- LAS - Latin American Studies
- LATN - Latin
- LIBS - Library Science

- MAE - Mechanical and Aerospace Engineering
- MAPD - Math Pedagogy
- MATH - Mathematical Sciences
- MBA - Master of Business Administration
- MDPM - Molecular Diagnostics and Precision Medicine
- MDTs - Medical Diagnostic and Translational Sciences
- MET - Mechanical Engineering Technology
- MFET - Manufacturing Engineering Technology
- MGMT - Management
- MHPE - Medical and Health Professions Education
- MIDE - Middle Eastern Studies
- MKTG - Marketing
- MLAS - Laboratory Animal Science
- MLS - Medical Laboratory Science
- MPAS - Physician Assistant
- MPH - Master of Public Health
- MPHO - Master of Public Health
- MSA - Surgical Assisting
- MSCM - Maritime and Supply Chain Management
- MSIM - Modeling and Simulation
- MSL - Military Science and Leadership
- MUSA - Music, Applied
- MUSC - Music
- MUSE - Music Education
- NAVS - Naval Science
- NMED - Nuclear Medicine Technology
- NURA - Nurse Anesthesia
- NURS - Nursing
- OCCT - Occupational Therapy
- OEAS - Ocean and Earth Sciences
- OPMT - Operations Management
- PADM - Public Administration
- PAS - Public Affairs and Service
- PATH - Pathology
- PAUP - Public Administration and Urban Policy
- PE - Physical Education
- PHIL - Philosophy
- PHYS - Physics
- POLS - Political Science
- PORT - Maritime, Ports and Logistics Management
- PPCM - Public Procurement and Contract Management
- PRTG - Portuguese
- PRTS – Parks, Recreation and Tourism Studies
- PSYC - Psychology
- PT - Physical Therapy
- PUBH - Public Health
- QUST - Queer Studies
- RCS - Reproductive Clinical Science
- READ - Reading
- REL - Religious Studies
- REST - Real Estate
- RMI - Risk Management and Insurance
- RT - Recreational Therapy
- RUS - Russian
- SCI - Sciences
- SCLM - Supply Chain, Logistics, and Maritime Operations
- SEPS - STEM Education and Professional Studies
- SMGT - Sport Management

- SOC - Sociology
- SPAN - Spanish
- SPED - Special Education
- STAT - Statistics
- STEM - Science, Technology, Engineering, and Mathematics Education
- TAX - Taxation
- THEA - Theatre
- TLCI - Teaching & Learning - Curriculum & Instruction
- TLED - Teaching & Learning-Education
- UNIV - University
- WCS - World Cultural Studies
- WGS - Women's and Gender Studies
- WLC - World Languages Cultures

AAST - African-American Studies

AAST 100S Introduction to African American Studies (3 Credit Hours)

An interdisciplinary examination of the African American experience in America. The course examines the historical and contemporary conditions of African American people. It also explores the various modes of artistic expression, values and philosophical underpinnings of African American culture.

AAST 105H Interpreting the African Past (3 Credit Hours)

This course offers students a critical approach to interpreting the history of Africa. A fast-paced survey of African history, it affords students a grounding in the major themes of African history. The course focuses on the major economic, social, and political institutions of Africa, past and present, and explores how historical developments assist comprehension of present-day Africa.

AAST 201 Introduction to Historical Methods (3 Credit Hours)

Required of all history and secondary education social studies majors. Recommended prior to upper-division course work. Examines methods of historical research and primary and secondary source analysis, inclusive of internet usage. Explores historiography and historical writing. Introduces students to issues in the philosophy of history.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

AAST 308 Research Design (3 Credit Hours)

Covers the design and implementation of quantitative and qualitative methods of inquiry in social sciences.

Prerequisites: AAST 100S or permission of the instructor

AAST 310 Human Rights and Social Change in Africa (3 Credit Hours)

This course examines historical social movements in Africa such as economic, ethnic, women's, political, and religious social movements. This course will also link micro-level, meso-level, and macro-level implications for the social structures and cultures of various African nations and communities.

Prerequisites: General Education human behavior course

AAST 316 Politics of Africa (3 Credit Hours)

This course is intended to familiarize students with the struggles, advances, and setbacks of African peoples for state-building and socioeconomic development during the colonial and post-independence eras.

Prerequisites: AAST 100S or permission of the instructor

AAST 320 Introduction to Research Methods (3 Credit Hours)

This course is an introduction to social research methods. The primary purpose of this course is to survey the major research designs and research techniques that are the core of contemporary approaches used to study social phenomena as well as the lives and experiences of African Americans. Ethical implications of social research and data analysis will also be covered.

Prerequisites: General Education human behavior course

AAST 323 Sociology of Minority Families (3 Credit Hours)

Examination and explanation of minority families' lives in relationship to other societal institutions and historical developments. The course focuses on issues of minority families and places these issues in a sociological framework, e.g., stratification, poverty and gender.

Prerequisites: SOC 201S or permission of the instructor

AAST 361 African-American History to 1865 (3 Credit Hours)

The course examines African-American history from the African background through the Civil War. Emphasis is placed on an analysis of African-Americans' role in the political, economic, social and cultural life of the United States.

Prerequisites: AAST 100S or permission of the instructor

AAST 368 Internship (3 Credit Hours)

Individual practical experience in community-based organizations, public bureaucracies, administrative agencies and other organizations and firms. Student can gain exposure in the not-for-profit and profit sectors.

Prerequisites: Permission of program director

AAST 381 Africa in the 20th Century (3 Credit Hours)

This course surveys the political, social and cultural history of colonial and post-independent Africa. Major themes include colonization and resistance, anti-colonial movements, social and cultural transformations, urbanization and popular culture and post colonial challenges.

Prerequisites: AAST 100S or permission of the instructor

AAST 395 Topics in African American Studies (3 Credit Hours)

These courses are open to majors and non-majors. Ethnic studies majors may take these courses to satisfy requirements for the concentration. These courses will appear in the course schedule, and will be more fully described in information distributed to all academic advisors.

Prerequisites: AAST 100S or permission of the instructor

AAST 396 Topics in African American Studies (3 Credit Hours)

These courses are open to majors and non-majors. Ethnic studies majors may take these courses to satisfy requirements for the concentration. These courses will appear in the course schedule, and will be more fully described in information distributed to all academic advisors.

Prerequisites: AAST 100S or permission of the instructor

AAST 410 Africana Intellectual Thought and Economic Development (3 Credit Hours)

This course examines Africana philosophical and theoretical thought as it pertains to issues of race, labor and production. Through an examination of the social and economic legacy of slavery and colonialism, this course investigates how systems of exploitation have influenced the underdevelopment of Africa, the Caribbean and North America in its contribution to Western Capitalism.

Prerequisites: General Education human behavior course

AAST 412 Politics of the Civil Rights Movement (3 Credit Hours)

Examines the political activities which resulted in the passage of the nation's second Civil Rights policy, the 1960 and 1964 Civil Rights Acts, the 1965 Voting Rights Act and the 1968 Fair Housing Act. The course will analyze the underpinnings, leadership, and political strategies of the Civil Rights Movement.

Prerequisites: Six hours in human behavior and junior standing

AAST 420W African American Political and Social Thought (3 Credit Hours)

This course is designed to introduce students to the historical and contemporary experiences of "Blackness" as it has been constructed, contested and affirmed in various historical, political and narrative contexts. Embracing the theme of duality, the course examines what it means for a culture and people to be both integral to and excluded from the American political and social community. This is a writing intensive course.

Prerequisites: Grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C and a General Education human behavior course

AAST 426 Minority Group Relations (3 Credit Hours)

The study of the process of and responses to the oppression of racial, religious, ethnic, and national minorities in a variety of countries within a historical and comparative perspective. Special emphasis given to American minorities and especially African Americans.

Prerequisites: SOC 201S or permission of the instructor

AAST 451 Race, Ethnicity, Crime and Justice (3 Credit Hours)

This course will examine the intersectionality of race, ethnicity, crime, justice and the operation of the criminal justice system and will critically assess controversial issues surrounding race, ethnicity, crime, and justice. Students will discuss contemporary social justice issues as they relate to race, ethnicity, crime, and justice. The theoretical frameworks that explain the intersection between race, ethnicity, crime and justice will be examined. The course will also investigate the broad range of policy issues and recommendations impacting communities of color and the administration of criminal and social justice.

Prerequisites: CRJS 215S or SOC 201S or permission of the instructor

AAST 452 Diversity in Criminal Justice Organizations (3 Credit Hours)

This course examines the impact of diversity, culture, and ethnic origin in criminal justice organizations. The course is designed to better prepare students to meet the challenge of diversity in criminal justice organizations.

Prerequisites: SOC 201S or CRJS 215S or permission of the instructor

AAST 460 Psychology of African Americans (3 Credit Hours)

This course examines the issues and perspectives related to the psychological evolution of African Americans in the United States. Particular emphasis is placed on exploring the discipline of psychology from an Afrocentric focus.

Prerequisites: AAST 100S and junior standing or permission of the instructor

AAST 488 Introduction to Critical Race and Media Studies (3 Credit Hours)

In this course, students examine how media culture - both historic and contemporary - contribute to the intersectional production of race in the United States. A guiding question will be: How do media and popular culture - as texts, practices, industries, and sites of identity formation and pleasure - construct race? Although students will theorize the politics of representation, they will also work to situate texts within a larger historic, political, and discursive context in order to assess the type of cultural work they perform.

Prerequisites: AAST 100S and junior standing or permission of the instructor

AAST 490 Senior Seminar (3 Credit Hours)

This course will introduce students to the key concepts involved in developing and executing an interdisciplinary research project. Students will read and interpret research literature, execute a research project, write a final research paper, and present research findings in a professional setting.

Prerequisites: AAST 320

AAST 495 Topics in African American Studies (3 Credit Hours)

This course focuses on a variety of selected topics in African American Studies. These courses will appear in the course schedule, and will be more fully described in information distributed to all academic advisors.

Prerequisites: Senior standing

AAST 497/597 Independent Study (1-3 Credit Hours)

Students are exposed to opportunities to conduct independent research and/or study in areas focused on the political, social and cultural experiences of people of African descent in the U.S. and the African Diaspora.

Prerequisites: Junior standing or permission of instructor

ACCT - Accounting

ACCT 201 Principles of Financial Accounting (3 Credit Hours)

Elementary financial accounting concepts and procedures used in the preparation of financial statements; elementary financial statement analysis; and use of financial accounting information for special-purpose decision making.

Prerequisites: Qualifying score on the math placement test, or completion of MATH 101M or higher

ACCT 202 Principles of Managerial Accounting (3 Credit Hours)

Elementary managerial accounting concepts and procedures; operational accounting; and use of accounting data for special-purpose internal decision making.

Prerequisites: ACCT 201 or ACCT 226

ACCT 226 Honors: Principles of Financial Accounting (3 Credit Hours)

Open only to students in the Honors College. Special honors section of ACCT 201. Elementary financial accounting concepts and procedures used in the preparation of financial statements; elementary financial statement analysis; and use of financial accounting information for special-purpose decision making.

ACCT 227 Honors: Principles of Managerial Accounting (3 Credit Hours)

Open only to students in the Honors College. Special honors section of ACCT 202. Elementary managerial accounting concepts and procedures; operational accounting; and use of accounting data for special-purpose internal decision making.

Prerequisites: Completion of ACCT 201 or ACCT 226

ACCT 300 Accounting for Entrepreneurs (3 Credit Hours)

This course is for non-accounting students who wish to start their own businesses. The course is designed to support entrepreneur activities such as: producing meaningful financial statements and management accounting reports to measure firm performance; choosing the appropriate business entity type; basic tax issues and planning in starting and running a small business; establishing an effective governance structure; and setting up an anti-fraud prevention program. Accounting majors or minors cannot use this course as an accounting elective, but can use the course as a 300-400 business elective. This course will not be used in the calculation of grade point average for an accounting major or accounting minor.

Prerequisites: Completion of MATH 102M or higher, or STAT 130M, or qualified to enroll in Math 162M or higher, and a declared major in the University or permission of the Chair's Office of the School of Accountancy

ACCT 301 Intermediate Accounting I (3 Credit Hours)

This course is required for students following the accounting curriculum in the 2015-16, 2016-17, 2017-18, and 2018-19 Catalogs and should be taken only by these students. The course covers financial statement and managerial accounting information preparation for external and internal users in accordance with prevailing accounting standards established by recognized accounting bodies. Students who have not had ACCT 201 and ACCT 202 within two years of planning to enroll in ACCT 301 are strongly encouraged to retake these courses in preparation for ACCT 301. Students must have a C or better in ACCT 301 to proceed to other upper-level accounting courses. Students in the Accounting Major Professional (AP) program or seeking acceptance in the MSA program must achieve a B- or better in ACCT 301.

Prerequisites: ACCT 201 and ACCT 202 or ACCT 226 and ACCT 227, and a declared major in the University or permission of the Dean's Office

ACCT 302 Intermediate Accounting II (3 Credit Hours)

This course is required for students following the accounting curriculum in the 2015-16, 2016-17, 2017-18, and 2018-19 Catalogs and should be taken only by these students. Preparation of financial statements and other reports in accordance with prevailing accounting standards established by the accounting profession. Students must have a C- or better grade in ACCT 302 to graduate with a major in accounting. Students in the Accounting Major Professional concentration or seeking admission to the MSA program must earn a grade of B- or better.

Prerequisites: ACCT 201 and ACCT 202 or ACCT 226 and ACCT 227; ACCT 301 with a C or better; and a declared major in the University or permission of the Dean's Office

ACCT 305 Essentials of Financial Accounting I (3 Credit Hours)

This course is the gateway to the undergraduate accounting program at Old Dominion University. It is the first of three financial accounting courses designed to strengthen the technical, communication, and critical thinking skills required to succeed in accounting-related careers. This course covers the theoretical foundation, concepts, and principles that underlie financial statement preparation. It exposes students to accounting by providing an in-depth study of the accounting cycle, income statement and balance sheet. Students gain an understanding of how financial statements are prepared using Excel, including an introduction to data analysis using Excel and authoritative sources to support an accounting position. Students who have not had ACCT 201 and ACCT 202 within two years of planning to enroll in ACCT 305 are strongly encouraged to retake these courses in preparation for ACCT 305. Students must have a C or better in ACCT 305 to proceed to other upper-level accounting courses. Students seeking acceptance to the MSA program must achieve a B- or better in ACCT 305.

Prerequisites: ACCT 201 and ACCT 202 or ACCT 226 and ACCT 227, and a declared major in the University or permission of the Dean's Office

ACCT 306 Essentials of Financial Accounting II (3 Credit Hours)

This is the second of the three-course financial accounting series and continues the study of financial statement preparation. Selected topics include: inventories; property, plant, and equipment; investments; and current and long-term liabilities. Students gain an in-depth understanding of how these topics are presented in the financial statements and use the FASB Accounting Standards Codification to support an accounting position. Students gain an understanding of how financial statements are prepared using Excel, including an introduction to data analysis using Excel and authoritative sources to support an accounting position. Students must have a C- or better in ACCT 306 to proceed to other upper-level accounting courses. Students seeking acceptance to the MSA program must achieve a B- or better in ACCT 306.

Prerequisites: ACCT 201 and ACCT 202 or ACCT 226 and ACCT 227; ACCT 305 with a C or better; and a declared major in the University or permission of the Dean's Office

ACCT 307 Essentials of Financial Accounting III (3 Credit Hours)

This is the third of the three-course financial accounting series and continues the study of financial statement preparation. Selected topics include leases, pensions, accounting for income taxes, stockholders' equity, earnings per share, the Statement of Cash Flows, and other corporate reporting issues. Students gain an in-depth understanding of how these topics are presented in the financial statements and use the FASB Accounting Standards Codification to support an accounting position. Students gain an understanding of how financial statements are prepared using Excel, including an introduction to data analysis using Excel and authoritative sources to support an accounting position. Students must have a C- or better grade in ACCT 307 to graduate with a major in accounting. Students seeking admission to the MSA program must earn a grade of B- or better in ACCT 307.

Prerequisites: ACCT 201 and ACCT 202 or ACCT 226 and ACCT 227; ACCT 305 with a C or better; ACCT 306 with a C- or better; and a declared major in the University or permission of the Dean's Office

ACCT 311 Managerial Accounting (3 Credit Hours)

This course is required for students following the accounting curriculum in the 2015-16, 2016-17, 2017-18, and 2018-19 Catalogs and should be taken only by these students. This course focuses on recording and allocating costs within traditional managerial accounting systems. Common and joint cost allocations are performed under job order, process and standard costing systems. Income models are developed for exploring cost-volume-profit relationships. Students must have a C- or better in ACCT 311 to graduate with a major in accounting. Students in the Accounting Major Professional concentration or seeking admission to the MSA program must earn a grade of B- or better.

Prerequisites: ACCT 201 and ACCT 202 or ACCT 226 and ACCT 227; ACCT 301 with a C or better or ACCT 305 with a C or better; BNAL 206; junior standing; and a declared major in the University or permission of the Dean's Office

ACCT 367 Cooperative Education (1-6 Credit Hours)

May be repeated for credit and available for pass/fail grading only. Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures as formally determined by the department and the Center for Career & Leadership Development prior to the semester in which the work experience is to take place.

Prerequisites: ACCT 301 with a C or better; or ACCT 305 with a C or better and ACCT 306 with a C- or better; and a declared major in the University or permission of the Dean's Office; approval of the Center for Career & Leadership Development; transfer students must have completed one semester at Old Dominion University

ACCT 368 Student Internship (1-3 Credit Hours)

Student participation in a professional work experience. Approval for enrollment and allowable credits are determined by the department. Additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment.

Prerequisites: ACCT 301 with a C or better; or ACCT 305 with a C or better and ACCT 306 with a C- or better; and a declared major in the University or permission of the Dean's Office; transfer students must have completed a minimum of one semester at Old Dominion University

ACCT 369 Practicum (1-3 Credit Hours)

Student participation in a professional work experience. Approval for enrollment and allowable credits are determined by the department. Additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment.

Prerequisites: ACCT 301 with a C or better; or ACCT 305 with a C or better and ACCT 306 with a C- or better; junior standing and permission of the chief departmental advisor; transfer students must have completed a minimum of one semester at Old Dominion University

ACCT 405/505 Accounting and Auditing in the Public/Nonprofit Sector (3 Credit Hours)

The application of accounting principles to governmental funds and not-for-profit organizations. Emphasis is placed on budgeting and control as well as auditing concerns for such entities. Students must have a C- or better in ACCT 405 to graduate with a major in accounting. Students in the Accounting Major Professional concentration or seeking acceptance to the MSA program must achieve a B- or better in ACCT 405.

Prerequisites: ACCT 301 with a C or better; or ACCT 305 with a C or better and ACCT 306 with a C- or better; senior standing; and a declared major in the University or permission of the Dean's Office

ACCT 411/511 Financial Auditing (3 Credit Hours)

Current financial auditing processes are emphasized, and Generally Accepted Accounting Principles (GAAP) are used to evaluate the fairness of financial statements. Additionally, standards and ethics of the public accounting profession, generally accepted auditing standards, and public reporting are covered. Students must have a C- or better grade in ACCT 411 to graduate with a major in accounting.

Prerequisites: ACCT 305 with a C or better and ACCT 306 with a C- or better; or ACCT 301 with a C or better; Junior or Senior standing; and a declared major in the University or permission of the Dean's Office

ACCT 421/521 Taxation (3 Credit Hours)

This course is required for students following the accounting curriculum in the 2015-16, 2016-17, 2017-18, and 2018-19 Catalogs and should be taken only by these students. An analysis of federal income tax law and its application to personal and business tax situations. Reconciliation of tax and accounting concepts. Students must have a C- or better in ACCT 421 to graduate with a major in accounting. Students in the Accounting Major Professional concentration or seeking admission to the MSA program must earn a grade of B- or better.

Prerequisites: ACCT 301 with a C or better for accounting majors or FIN 431 with a C or better and a declared major in the University or permission of the Dean's Office

ACCT 422/522 Tax Research (3 Credit Hours)

An intensive course in taxation. Focuses on the choice of business entity by covering taxation of corporations (both C and S corporations), partnerships and sole proprietorships. The course emphasizes research skills and professional ethics. Students must have a C- or better in ACCT 422 to graduate with a major in accounting.

Prerequisites: ACCT 301, ACCT 302 and ACCT 421 with a C or better; or ACCT 305 with a C or better and ACCT 306, ACCT 307, ACCT 425, and ACCT 426 with a C- or better; senior standing; and a declared major in the University or permission of the Dean's Office

ACCT 425 Taxation of Individuals (3 Credit Hours)

An analysis of federal income tax law and its application to personal and business tax situations. Reconciliation of tax and accounting concepts. Students must have a C- or better in ACCT 425 to graduate with a major in accounting. Students seeking admission to the MSA program must earn a grade of B- or better. This course, plus an additional self-study module and test on Blackboard, will satisfy the requirement for those whose catalog requires ACCT 421.

Prerequisites: ACCT 305 with a C or better and ACCT 306 with a C- or better for accounting majors; or ACCT 301 with a C or better; or FIN 431 with a C or better, and a declared major in the University or permission of the Dean's Office

ACCT 426 Taxation of Business Entities (3 Credit Hours)

An analysis of federal income tax law and its application to business entities. Students must have a C- or better in ACCT 426 to graduate with a major in accounting. Students seeking admission to the MSA program must earn a grade of B- or better.

Prerequisites: ACCT 425 with a C- or better, or ACCT 421 with a C- or better, and a declared major in the University or permission of the Dean's Office

ACCT 440/540 Introduction to Accounting (3 Credit Hours)

This course provides a succinct working knowledge of the underlying concepts of financial and managerial accounting. With a strong emphasis on the interpretation of real-world financial statements, the course teaches students how to read, analyze, and interpret financial and managerial accounting data to make informed business decisions.

Prerequisites: Instructor permission

ACCT 450/550 International and Advanced Accounting (3 Credit Hours)

The study of accounting for international operations and business combinations. Students may enroll in ACCT 450 as the BSBA required International Business elective. Students must have a C- or better in ACCT 450 to graduate with a major in accounting. Students in the Accounting Major Professional concentration or seeking acceptance to the MSA program must achieve a B- or better in ACCT 450.

Prerequisites: ACCT 301 with a C or better and ACCT 302 with a C- or better; or ACCT 305 with a C or better and ACCT 306 and ACCT 307 with a C- or better; senior standing; and a declared major in the University or permission of the Dean's Office

ACCT 460 Accounting Information Systems (3 Credit Hours)

The theoretical and practical approaches to the understanding of accounting information systems. Emphasis is placed on the understanding of how accounting is related to other business processes and how internal controls are ensured. Students must have a C- or better in ACCT 460 to graduate with a major in accounting. Students are encouraged to take ACCT 460 before completing ACCT 411.

Prerequisites: IT 360T; ACCT 305 with a C or better; ACCT 306 with a C- or better; or ACCT 301 with a C or better, ACCT 302 with a C- or better; and a declared major in the University or permission of the Dean's Office

ACCT 495 Selected Topics in Accounting (1-3 Credit Hours)

Study designed for students desiring additional work in an area of particular interest in accounting. This course may not be substituted for any required accounting course. Students must have a C- or better in ACCT 495 to graduate.

Prerequisites: ACCT 301 with a C or better; or ACCT 305 with a C or better and ACCT 306 with a C- or better; a declared major in the University or permission of the Dean's Office, and approval of the Chair of the School of Accountancy

AI - Artificial Intelligence

AI 301 Artificial Intelligence (AI) Literacy: Concepts and Implications (3 Credit Hours)

This course emphasizes fundamental AI concepts, an awareness of AI applications across various fields, and the critical evaluation of AI's growing integration into daily life. Students will explore the opportunities and challenges presented by AI in diverse contexts while examining its ethical, social, and economic implications.

Prerequisites: Permission of Instructor

AI 302 Artificial Intelligence (AI) Literacy: Applications and Responsible Use (3 Credit Hours)

This course focuses on practical applications and the responsible use of AI tools across various disciplines. Students will participate in hands-on projects to explore real-world applications, critically evaluate AI's limitations, and address challenges such as data privacy, bias, and societal impacts.

Prerequisites: Permission of Instructor

AI 315 Artificial Intelligence in Content Creation (3 Credit Hours)

This course explores the intersection of marketing and digital design, focusing on how to effectively integrate AI tools into modern content creation workflows. Students will utilize AI tools while developing content for a specific brand. By the end of the course, you will be equipped to harness AI in ideation, design, and distribution, empowering you to streamline and elevate your marketing content creation process.

Prerequisites: Permission of instructor

AI 319 Artificial Intelligence (AI) in Digital Marketing Management (3 Credit Hours)

This course provides a comprehensive exploration of how artificial intelligence is transforming digital marketing. It equips students with the knowledge and skills to leverage AI tools and technologies across various aspects of marketing strategy and management. Students will build a strong foundation of AI concepts and technologies relevant to marketing and will learn to leverage AI to better understand and engage customers, plan and execute marketing plans, and increase operational efficiency. The course also highlights unique ethical considerations related to AI in marketing and examines emerging trends in AI-powered marketing, preparing students for a successful future in the field.

Prerequisites: Permission of Instructor

AI 410/510 Artificial Intelligence (AI) Methods and Models (3 Credit Hours)

This course offers an introduction to Artificial Intelligence (AI). Students will explore the field's fundamental concepts, techniques, and applications. Methods, such as Generative AI (GenAI) that enable machines to learn and process information, and models, such as machine learning (ML) that uses data sets to recognize patterns and make decisions without human intervention will be covered. The course is designed for non-specialists and does not require prior computer science or programming knowledge.

Prerequisites: Permission of the instructor

AI 421/521 Generative AI in Cybersecurity (3 Credit Hours)

This course provides an in-depth examination of the intersection between Generative AI (Gen AI) and Cybersecurity. It focuses on the dual nature of advanced AI systems as both enhancers and potential threats to security infrastructure. Students will acquire a comprehensive understanding of the underlying principles, algorithms, and practical applications of Gen AI models in the discovery of attack vectors, identification of cyber threats, and automation of security tasks. Additionally, the course will address defensive strategies aimed at mitigating the risks stemming from AI-driven cyberattacks.

Prerequisites: Permission of Instructor

AI 446/546 Artificial Intelligence (AI) Ethics and Policy (3 Credit Hours)

This course explores whether and how ethical AI is possible by examining moral standards as they apply to the various dimensions of AI development and use. It reviews the major ethical theories and discusses how principles such as transparency, privacy, safety, non-discrimination, and sustainability should govern the creation and use of AI technologies. Moreover, it considers how these principles could serve as the ethical framework for the social and policy structures that regulate and shape the future development of these technologies.

Prerequisites: Permission of Instructor

AI 466/566 Principles and Practices of Cyber Defense (3 Credit Hours)

This course is designed to help students gain a thorough understanding of vulnerabilities and attacks in systems and networks and learn cyber defense best practices. It covers fundamental security design principles and defense strategies and security tools used to mitigate various cyber attacks. The topics may include identification of Recon Ops, intrusion detection, identification of C2 Ops, data exfiltration detection, identifying malicious codes, network security techniques, cryptography, malicious activity detection, system security architectures, defense in depth, distributed/cloud and virtualization.

Prerequisites: Permission of Instructor

AI 481/581 Trustworthy Health Analytics (3 Credit Hours)

This course offers a comprehensive, project-driven approach to integrating AI in healthcare, focusing on building prototype models for prevention, diagnosis, and treatment while stressing the need of adopting ethical, responsible methods to reduce risks and improve patient outcomes.

Prerequisites: Permission of Instructor

AI 483/583 Artificial Intelligence Applications in Health (3 Credit Hours)

This course offers an exploration of how artificial intelligence (AI) is transforming healthcare delivery and improving patient outcomes. Building on foundational knowledge from AI Ethics and Policy and AI Methods and Models, students will dive deeper into the integration of AI in clinical and operational contexts. Key topics include the role of AI in diagnostics and personalized medicine and other AI implementations in healthcare.

Prerequisites: Permission of instructor

AI 495/595 Topics in Artificial Intelligence (AI) (1-3 Credit Hours)

The advanced study of selected artificial intelligence topics designed to permit small groups of qualified students to work on subjects of mutual interest. These courses will appear in the course schedule and will be more fully described in information distributed to academic advisors.

Prerequisites: Permission of Instructor

AL - Arts and Letters

AL 100 Introduction to Arts and Letters: Scholarship in the Disciplines (1 Credit Hour)

Through guest presentations from each major department in the college, the Career Management Center and other University resources, students will learn about majors, minors, career options, effective goal-setting, study skills, and time management strategies. Coursework includes weekly reading and journal assignments, attendance at campus events, and visits to campus resources.

AL 195 Topics (3 Credit Hours)

A topics course in the area of arts and letters.

AL 196 Topics (3 Credit Hours)

A topics course in the area of arts and letters.

AL 203 (3 Credit Hours)

AL 295 Topics (3 Credit Hours)

A topics course in the area of arts and letters.

AL 296 Topics (3 Credit Hours)

A topics course in the area of arts and letters.

AL 367 Internship in Peer Advising (1-3 Credit Hours)

Students receive training in communications, counseling practices and College and University resources and services, and then serve as Peer Advisors to undecided prospective Arts & Letters students. Up to 150 hours required. Weekly staff meetings, readings, and a peer advising journal are also required.

Prerequisites: Approval of the College Director of Academic Advising

AL 395 Topics in Humanities (3 Credit Hours)

An interdisciplinary study of selected topics in the humanities. These courses will appear in the course schedule booklet, and will be more fully described in a booklet distributed to academic advisors.

Prerequisites: Junior standing or permission of the instructor

AL 396 Topics in Social Studies (3 Credit Hours)

An interdisciplinary study of selected topics in social studies. These courses will appear in the course schedule booklet, and will be more fully described in a booklet distributed to academic advisors.

Prerequisites: Junior standing or permission of the instructor

AL 495/595 Topics in Humanities (1-3 Credit Hours)

An advanced study of selected topics in humanities.

Prerequisites: Junior standing or permission of the instructor

AL 496/596 Topics in Social Studies (3 Credit Hours)

An advanced study of selected topics in social studies.

Prerequisites: Junior standing or permission of the instructor

AL 497/597 Tutorial Work in Arts and Letters Topics (3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: Junior standing or permission of the instructor

AMST - American Studies

AMST 300 Perspectives in American Studies (3 Credit Hours)

An exploration of current methodological approaches utilized in the interdisciplinary field of American Studies. Through integrative themes that cut across time, place and cultural identity, this course will allow students to build a working definition of civilization in the United States.

Prerequisites: ENGL 110C or HIST 104H or permission of instructor

AMST 495 Topics (1-3 Credit Hours)

Rotating course content in American Studies, with interdisciplinary focus. Course can be used to fulfill a requirement in the American Studies minor.

Prerequisites: ENGL 211C or ENGL 231C

ANTR - Anthropology

ANTR 110S Introduction to Anthropology (3 Credit Hours)

A survey of what we know about the emergence of humans: where we came from; how we developed physically and why; how human cultures became more complex through time; and the variety of human ways of life today.

ANTR 303 Biological Anthropology (3 Credit Hours)

Human physical and cultural evolution from our earliest primate beginnings through the appearance of anatomically modern humans.

Prerequisites: ANTR 110S

ANTR 304 Digging Up the Past (3 Credit Hours)

A comprehensive study of the philosophical and scientific foundations of archaeology and of a general prehistory to which they are applied. The course includes discussions of methods and theories used to reconstruct ancient Egypt and Mexico and other early cultures.

Prerequisites: ANTR 110S or completion of the human behavior requirement or permission of the instructor

ANTR 305 North American Archaeology (3 Credit Hours)

The study of the prehistory of native cultures north of Mexico from the peopling of the New World to contact with Europeans.

Prerequisites: ANTR 110S or completion of the human behavior requirement or permission of the instructor

ANTR 395 Topics in Anthropology (1-3 Credit Hours)

A study of selected topics, designed for nonmajors, or for elective credit within a major. These courses will appear in the course schedule, and will be more fully described in information distributed to academic advisors.

Prerequisites: ANTR 110S or permission of instructor

ANTR 495 Topics in Anthropology (1-3 Credit Hours)

A study of selected topics designed for either majors or nonmajors. These courses will appear in the course schedule, and will be more fully described in information distributed to academic advisors.

Prerequisites: Senior standing or approval of the department chair

ANTR 497 Tutorial Work in Special Topics in Anthropology (3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: Senior standing and approval of department chair

ARAB - Arabic

ARAB 111F Beginning Arabic (6 Credit Hours)

This is an introductory class to Modern Standard Arabic and Middle Eastern Culture. Students are expected to reach intermediate low to intermediate mid-level. The Arabic alphabet and sounds are introduced as well as simple language in context reflecting the authentic cultural nuances dealing with simple topics ranging from family, school and hobbies. No prior knowledge is required.

ARAB 195 Topics (1-6 Credit Hours)

Special topics in Arabic.

ARAB 212 Intermediate Arabic (6 Credit Hours)

The class is a continuous sequence of ARAB 111F or an equivalent class. The students are expected to reach intermediate high level. The class focuses on expanding the topics of communication the students developed in the introductory class. Modern standard and Levantine Arabic will be the means of communication in class and the student will be exposed to practical grammar, authentic media and texts. The students will produce culture through role plays and group work simulations and recognize the different registers in the targeted culture through paying attention to sociolinguistic variations.

Prerequisites: ARAB 111F

ARAB 295 Topics (1-6 Credit Hours)

A topics course in Arabic, with topics announced prior to the semester in which they are offered.

ARAB 311 Advanced Arabic Language and Culture I (3 Credit Hours)

The purpose of the class is to reinforce the vocabulary and grammar introduced in ARAB 111F and ARAB 212 through activating the learned materials and pushing the students to the advanced level. The language of interaction will be Levantine and Standard Arabic, which students will be able to manipulate to the specific language situations as in the countries this diglossic phenomenon exists. In addition to the grammar and vocabulary introduced in the textbook, the class will incorporate an extensive authentic reading component and a variety of Arabic contemporary media to reflect the linguistic and cultural aspects of the Middle East.

Prerequisites: ARAB 212

ARAB 312 Advanced Arabic Language and Culture II (3 Credit Hours)

The class is a continuous sequence of ARAB 311 or an equivalent class. Students are expected to reach advanced low level and explore the Middle Eastern cultures through the language spoken there. Levantine and Standard Arabic are the only means of communication in this class. The class incorporates a high load of writing to express students' ideas relating to a wide variety of Middle Eastern topics and current events, which will be introduced through weekly readings and authentic media. This is a crucial class for students planning to travel to the Middle East, who want to explore the Arab world first hand.

Prerequisites: ARAB 311

ARAB 395 Topics in Arabic (1-6 Credit Hours)

A study of selected topics for elective credit. These courses will appear in the course schedule booklet and will be more fully described in a booklet distributed to academic advisors.

Prerequisites: ARAB 212 or equivalent

ARAB 495 Topics in Arabic (1-6 Credit Hours)

A study of selected topics for elective credit. These courses will appear in the course schedule and will be more fully described in a booklet distributed to academic advisors.

Prerequisites: ARAB 212 or equivalent

ARTE - Art Education

ARTE 301 Foundations of Art Education (3 Credit Hours)

This course introduces historical, philosophical, and sociological foundations and contemporary issues of American public education, including the history and philosophies of art in education, best practice methods, and learning theories in PreK-12 schools, cultural institutions, and museum settings. Virginia Standards of Learning, National Core Arts Standards for Art, and an introduction to teaching for the understanding of visual art, visual inquiry, lesson planning, and assessment will be addressed. All students will complete a 30-hour observation experience in an appropriate PreK-12 setting specific to art education. Students must complete a criminal background check.

Prerequisites: ENGL 110C and ENGL 211C or ENGL 231C with a grade of C or better; Art education majors only and sophomore standing

ARTE 305 Elementary Art Education Methods and Classroom Management (3 Credit Hours)

This course will attend to issues of children's art making and how the visual arts can empower learning in a variety of settings. Through site visitations students will broaden their understanding of age-appropriate pedagogical practices while also exploring various artmaking materials and classroom management strategies. Through research and thought provoking hands-on activities students will develop critical thinking skills and increase their awareness of content knowledge. Students will begin work on developing their portfolios. A 35 hour practicum in an elementary setting is required. (Offered spring semester; to be taken sophomore year.)

Prerequisites: ARTE 301 with a grade of C or better; Criminal Background Check completed; open to art education majors only

ARTE 306 Secondary Art Education Methods and Classroom Management (3 Credit Hours)

This course is designed to address theoretical and practical aspects of curriculum development and classroom management with an emphasis on honoring diversity and advocating for equity in secondary art education learning environments. Pedagogy will focus on implementing studio based lessons, including current approaches to digital and instructional technology. Through research and site visits students will broaden their understanding of age-appropriate pedagogical practices. Students will critically reflect on their development as an educator while understanding their role as an advocate for the field of art education. Work on portfolios is continued. A 35 hour practicum in a secondary setting is required. Students must apply to the teacher prep program. (Offered fall semester; to be taken junior year.)

Prerequisites: ARTE 301 and ARTE 305, both with a grade of C or better; PRAXIS Art Content (5134) score must be on file

ARTE 411 Curriculum and Instruction in Art Education (3 Credit Hours)

This course is designed to prepare students for their upcoming capstone and student teaching internship from the inception of an idea to writing units of instruction for K-12 classrooms and museum and cultural institution settings. Students will use foundational knowledge to design comprehensive curriculum including relevant assessments. Students will review current topics and practice through reading, research and writing in the field of art education. Students will focus on dispositions of visual art educators as defined by NEAE national standards as well as the development of culturally relevant pedagogy. (Offered spring semester; to be taken junior year.)

Prerequisites: Grades of C or better in ARTE 301, ARTE 305, and ARTE 306; acceptance in the teacher preparation program; Praxis Art Content (5134) score must be on file

ARTE 480 Capstone in Art Education (3 Credit Hours)

Designed to provide advanced art education students with substantial practical experience in planning, developing, administering, and evaluating a program of visual arts education in a local museum setting for Youth Art Saturday School (YASS). This includes 30 hours of teaching in alternative settings. Students will reflect critically on their practice through arts-based methods and writing activities, and will curate a final art exhibition for participants and their families. Student portfolios will include all required components, with the exception of documentation of their student teaching or museum and cultural institutions internship. This course includes a final BFA show. (Offered fall semester; to be taken in the senior year.)

Prerequisites: Grades of C or better in ARTE 301, ARTE 305, ARTE 306, and ARTE 411; acceptance into the teacher preparation program, and passing score on the Praxis 2 Art content knowledge exam (5134); must complete the Child Abuse and Neglect, Cultural Competency, Dyslexia, First Aid/CPR/AED, and Restraint and Seclusion certifications

ARTE 485 Museum and Cultural Institutions Internship (6 Credit Hours)

Internship with educational programming and the facilitation of learning for young learners in a museum or cultural institution. Current partners include the Virginia Museum of Contemporary Art, the Chrysler Museum of Art, and the Hermitage Museum School of Visual Arts. (Offered spring semester; to be taken in the senior year.)

Prerequisites: Grades of C or better in ARTE 301, ARTE 305, ARTE 306, ARTE 411, and ARTE 480

ARTH - Art History

ARTH 121A Introduction to the Visual Arts (3 Credit Hours)

An introduction to the various media, techniques, styles, content, and contexts in the visual arts as they are manifested in the world's cultures.

ARTH 127A Honors: Introduction to the Visual Arts (3 Credit Hours)

An introduction to the various media, techniques, styles, content, and contexts in the visual arts as they are manifested in the world's cultures. Open only to students in the Honors College.

ARTH 150 Global Survey of Art History (3 Credit Hours)

This course provides an opportunity to discover, appreciate, and acquire broad knowledge of art history through the ages, from the Prehistoric era to contemporary times within a global perspective. Students will learn to examine and critically analyze major forms of artistic expression from diverse cultures and periods of art in order to understand their individual and collective contributions to the arts.

ARTH 195 Topics (1-3 Credit Hours)

Special topics in art history.

ARTH 203 Ancient Art (3 Credit Hours)

This course covers the art and architecture of the ancient world from its Paleolithic origins to the end of antiquity and the birth of Christian art. Ranging from drawings in caves to mosaics in churches, the material addressed in the course is situated in its social, political, and historical context. The objective of this course is to provide a visual and cultural literacy of ancient art and to familiarize students with the methods, theories, and traditions upon which ancient art history is grounded.

Prerequisites: ENGL 211C or ENGL 221C or ENGL 231C or permission of instructor

ARTH 204 Pseudoarchaeologies and Conspiratorial Thinking in Art (3 Credit Hours)

This course is an effort to confront conspiratorial thinking where art is concerned. The interpretation of human visual culture – particularly from ancient periods – is a particularly subjective endeavor, but in recent years social media have accelerated the proliferation of baseless theories about art, architecture, and material culture. From alien-builder theories to simple misconceptions about the polychromatic nature of Classical art, these pseudoarchaeologies can be found throughout the world, but they tend to harangue and ultimately undermine non-European peoples and cultures and their cultural heritage.

Prerequisites: ENGL 211C or ENGL 221C or ENGL 231C or permission of instructor

ARTH 210 Early Modern Art in Europe (3 Credit Hours)

“Early Modern” is a relatively new term applied to a broad period of artistic production in Europe that encompasses distinct, yet overlapping, style periods, which include the “Renaissance,” “Baroque,” “Rococo,” and “Neoclassicism.” This course will examine painting, sculpture, architecture, and graphic arts in Europe from 1400—1800 within the context of artistic creativity in relationship with intellectual, religious, economic, political, scientific, and cultural changes and developments in the Western world.

Prerequisites: ENGL 211C or ENGL 221C or ENGL 231C or permission of instructor

ARTH 230 Survey of Modern and Contemporary Art (3 Credit Hours)

A survey of modern and contemporary art with respect to its theoretical grounding and diverse practices. Students will encounter globally prominent artists of the last century as well as art of the immediate present on display in our area. Students will also receive instruction and experience in research and writing within the discipline of art history.

Prerequisites: ENGL 211C or ENGL 221C or ENGL 231C or permission of instructor

ARTH 295 Topics (3 Credit Hours)

A study of selected art history topics to be specified in the class schedule each semester. May be repeated for credit as topics vary.

Prerequisites: ENGL 211C or ENGL 221C or ENGL 231C or permission of instructor

ARTH 305 Egyptian Art (3 Credit Hours)

This course explores the art and architecture of ancient Egypt from the migrations of anatomically modern humans out of Africa to the persistence of Egyptian identity under Roman domination. Egypt looms large in the popular consciousness of modern society, with extraterrestrial or magical connotations. This course encourages critical thinking skills by stressing the importance of evidence and context in the interpretation of Egyptian monuments and iconography. Fulfills non-western requirement for majors.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 310 Women in the Visual Arts (3 Credit Hours)

The contributions of women in the various fields in the visual arts--painting, graphics, sculpture, architecture, and the crafts.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 314 15th and 16th Century Art in Northern Europe (3 Credit Hours)

The painting, sculpture, and graphics of the Netherlands, France and Germany in the fifteenth and sixteenth centuries with discussion of artists such as Jan van Eyck, Hieronymus Bosch, Pieter Bruegel the Elder, and Albrecht Durer.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 315 Early Renaissance Art in Italy (3 Credit Hours)

Painting, sculpture, and architecture in 14th- and 15th-century Italy from Giotto to Botticelli, among others.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 316 High Renaissance Art in Italy (3 Credit Hours)

This course is a survey of High Renaissance Art in Italy (roughly 1473 to 1520), focusing on the recognized major artists or 'masters' of the High Renaissance, Leonardo da Vinci, Michelangelo, Raphael, and Titian, as well as their lesser known contemporaries.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 317 Mannerism and Late Renaissance Art in Italy (3 Credit Hours)

The works of Leonardo, Michelangelo, and Raphael brought the Renaissance to its height, but by 1520, two of these masters were dead. It is in this aftermath - post-1520 - that a new generation of artists arose revolutionizing the art world. This course is a survey of mid-late sixteenth-century art in Italy.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 318 Baroque Art in Italy and Spain (3 Credit Hours)

This course is a survey of Baroque Art in Italy and Spain. Material includes painting, sculpture, and architecture of the seventeenth and early eighteenth centuries, with discussion of artists such as Caravaggio, Annibale Carracci, Gian Lorenzo Bernini, Francesco Borromini, Diego Velazquez, Jusepe de Ribera, and Francisco de Zurbaran, among others.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 319 Baroque Art in Northern Europe (3 Credit Hours)

This course is a survey of Baroque Art in Northern Europe. Materials include painting, sculpture, and architecture of the seventeenth and early eighteenth centuries, with discussion of artists such as Peter Paul Rubens, Rembrandt, Vermeer, and Poussin, among others.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 320W History of Graphic Design (3 Credit Hours)

A critical study of the formal, cultural, and intellectual developments of the graphic design discipline, including related activity in fine art, illustration, and industrial design. This is a writing intensive course.

Prerequisites: Grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C; and ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of instructor

ARTH 321 History of Decorative Arts (3 Credit Hours)

Examines the major historical developments in the decorative and applied arts, landscape design, and material culture from the Renaissance to the Modern period.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 322 American Art and Architecture, 1600 to the Present (3 Credit Hours)

Through the study of form, content, and context of selected works of painting, architecture and sculpture made in colonial North America and the US from the 17th to the 20th century, this course will probe changing American social and cultural values embodied in art. Students will study individual artists as well as themes, with particular attention to the production and reception of art in a developing nation, the transformation of European architectural styles into a new environment, the construction of race in ante- and post-bellum America, and the identification of an abstract style of art with the political ascendancy of the US after World War II.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 323 Nineteenth-Century European Art (3 Credit Hours)

Survey of the mainstreams of European art during the late eighteenth and nineteenth centuries, including discussion of architecture, sculpture, painting, and the graphic arts.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 327 History of Photography (3 Credit Hours)

An examination of the development of photography as a scientific curiosity, a tool for artists, and as a fine art in itself from the early nineteenth century to the present day.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 328 Art of Gardens (3 Credit Hours)

An introductory course to the history of gardens. Gardening is explored as an artistic expression and connections are made to other visual arts such as painting, sculpture and architecture, as well as to theater and public representation. The course combines a heavy site-visiting component with readings and individual research directed towards the final course paper and presentations.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of instructor

ARTH 339 Surrealism and other Utopias (3 Credit Hours)

A study of the international movements in visual arts and design in the interwar years from Dada to the New World's Fair.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 340 Abstract Expressionism and its Discontents (3 Credit Hours)

An intensive study of the two decades when modernist styles and theories in art, design, and architecture were codified and challenged internationally.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 350W Art Criticism (3 Credit Hours)

A study of the analysis, theoretical approaches, methodologies, and effects of the practice of art criticism. This is a writing-intensive course.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor; grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C

ARTH 351W Research Methods in Art History (3 Credit Hours)

An investigation of past and present approaches to scholarship in art history. Students participate in a series of writing assignments designed to strengthen their research and writing skills, culminating with the presentation of original research in oral and written form. This is a writing intensive course.

Prerequisites: Grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C; and ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 360 Asian Art (3 Credit Hours)

An introduction to the architecture, sculpture, calligraphy, pottery, ink painting, miniature painting, and gardens of India, China, and Japan. Emphasis will be placed on the connections among the cultures: Buddhism and pilgrimage, the importance of the scholar painters, the role of trade routes and the emergence of native writing. Cross-listed with ASIA 360.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 365 Problems in Postmodernism (3 Credit Hours)

Lectures and critical discussion of the development and configurations of the various styles emergent since 1960, both in America and Europe.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 368 Internship (1-3 Credit Hours)

An unpaid, structured work experience in a museum, gallery, archive, or related environment for credit. Criteria for evaluation will be determined by work supervisor and cooperating faculty advisor. May be repeated for credit. Available for pass/fail grading only.

Prerequisites: Approval of the program director and Monarch Internship and Co-Op Office

ARTH 369 Practicum (1-3 Credit Hours)

A specialized field activity outside of the classroom. Qualifies as a CAP experience. Available for pass/fail grading only.

Prerequisites: Approval of the program director

ARTH 377 Extracurricular Studies (1-6 Credit Hours)

An extracurricular activity approved for credit based on objectives, criteria, and evaluative procedures as formally determined by the department and the student prior to the semester in which the activity is to take place. Such credit is subject to review by the provost.

Prerequisites: Approval of the program director

ARTH 378 Extracurricular Studies (1-6 Credit Hours)

An extracurricular activity approved for credit based on objectives, criteria, and evaluative procedures as formally determined by the department and the student prior to the semester in which the activity is to take place. Such credit is subject to review by the provost.

Prerequisites: Approval of the program director

ARTH 395 Topics in Art History (3 Credit Hours)

A study of selected topics in art history to be specified in the class schedule each semester. May be repeated for credit as topics vary.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 396 Topics in Art History (3 Credit Hours)

A study of selected topics in art history to be specified in the class schedule each semester. May be repeated for credit as topics vary.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 408/508 Hieronymus Bosch (3 Credit Hours)

Before Dalí...before Magritte...before De Chirico, there was Hieronymus Bosch. Well before the advent of the Surrealism movement in the twentieth century, the late fifteenth-century/early sixteenth-century Dutch painter Hieronymus Bosch rocked the art world with his fantastical, disturbing, and enigmatic paintings. This course will critically examine Bosch and his work. Students will work like detectives, first by dismantling long-standing misinterpretations about Bosch's work, then by analyzing and deciphering his iconography through the lens of the period in which he lived, including art theory, politics, religion, devotion, and alchemy, among other topics.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of instructor

ARTH 410/510 Michelangelo (3 Credit Hours)

This course examines the life, sculptures, paintings, and architecture of one of the greatest Italian Renaissance artists, Michelangelo Buonarroti.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 411/511 Caravaggio (3 Credit Hours)

This course examines the life and revolutionary paintings of the Italian Baroque painter Caravaggio.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 416/516 Myths of Venice (3 Credit Hours)

Venice is set apart from other cities in Italy and from Europe not only by its geography—a city seemingly floating on water, with canals instead of streets—but also by its unique history, traditions, and cultural identity. The consideration and examination of its mythical origins in the fifth century, through its history as a territory of the Byzantine Empire, and the establishment of their Republic in 1297, this course will examine how Venice fashioned its own identity through its art and architecture during the Italian Renaissance.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of instructor

ARTH 417/517 Renaissance and Baroque Women (3 Credit Hours)

This course will examine the ways in which prevailing ideas about women shaped visual imagery, and in turn, how these images influenced, perpetuated, and even changed perceptions about women from the fifteenth through seventeenth centuries in Italy (Renaissance and Baroque periods). Students will explore how text and visual imagery informed one another, and closely examine works of art by women artists, commissioned by women patrons, and works featuring women through thematic topics. Although patriarchy dominated the Renaissance and Baroque periods, the course will recover the histories of women artists, patrons, and writers, and examine how women navigated the gender oppression of their periods to reclaim their power and value.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of instructor

ARTH 420/520 Pompeii (3 Credit Hours)

This seminar is an exploration of the visual and material culture of Pompeii, incorporating a broad spectrum of evidence, ranging from the city's temples to the wall paintings in the city's brothels. The goal of the class is to instill a working knowledge of the most recent scholarship on the ancient city and to contextualize Pompeii's art and architecture in the historical narrative of the city and the broader body of scholarship on Roman cultural history.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 434/534 Romantic Architecture (3 Credit Hours)

A survey of the aesthetic, technological, and social forces that transformed international architecture in the 18th and 19th centuries.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 435W/535 Modern Architecture (3 Credit Hours)

An examination of the architecture, planning, and related design of the twentieth and twenty-first centuries around the globe. Special emphasis is placed on the formation of the international style between the world wars and its disintegration in the recent past. This is a writing intensive course; the course also satisfies the general education impact of technology requirement.

Prerequisites: Grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C; and ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 441/541 Realism in Modern and Contemporary Art (3 Credit Hours)

This course examines the changing motivations, contexts, and characteristics of realist art since the inception of modernism. While definitions of radical and conservative have wavered and flipped, recognizable imagery seems always to function as a critical intervention within aesthetic racial, or gender-based hegemonies. As students examine numerous artists' strategies, they will see that reality isn't always so easy to pin down.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of instructor

ARTH 442/542 Painting Now (3 Credit Hours)

Anxiety about painting's purpose and relevance are woven into modern art's linear concept of history. The goal of this class is to help students understand, both intellectually and emotionally, the ambitions that motivate painting, as well as to give them an opportunity to sample the diverse practices and critical approaches that make up the painterly landscape, and finally to examine how or if it fits within the broader scope of contemporary art.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of instructor

ARTH 450/550 Public Art (3 Credit Hours)

This course is a collaborative exploration of the problems and opportunities of national and international public art that combines the practical with the theoretical, and the studio with the art-historical.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 480 Senior Thesis (3 Credit Hours)

The research and writing of a thesis on an advanced topic in art history to be determined by the student in concert with a faculty advisor. The thesis option is intended for art history majors preparing for graduate study in the field, and serves as the required culminating work for their degree.

Prerequisites: Senior standing; 12 hours of art history electives at the 300 and 400 levels; requires program director approval

ARTH 481 Capstone (3 Credit Hours)

The research and writing of a capstone on an advanced topic in art history to be determined by the student in concert with a faculty advisor. The capstone serves as the required culminating work for students who are not pursuing graduate studies in the field.

Prerequisites: Approval of the program director

ARTH 495/595 Topics in Art History (3 Credit Hours)

A study of selected topics in art history to be specified in the class schedule each semester. May be repeated for credit as topics vary.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 496/596 Topics in Art History (3 Credit Hours)

A study of selected topics in art history to be specified in the class schedule each semester. May be repeated for credit as topics vary.

Prerequisites: ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of the instructor

ARTH 497/597 Tutorial Work in Art History (3 Credit Hours)

Independent research on a topic to be selected under the guidance of a faculty advisor. Course is restricted to art history majors.

Prerequisites: Approval of program director

ARTH 498/598 Tutorial Work in Art History (3 Credit Hours)

Independent research on a topic to be selected under the guidance of a faculty advisor. Course is restricted to art history majors.

Prerequisites: Approval of program director

ARTS - Art, Studio

ARTS 122A Visual Communication (3 Credit Hours)

An introduction to essential themes and means of visual communication in the fine arts with an emphasis on studio experience in techniques from the different disciplines in studio art.

ARTS 126A Honors: Art as Experience (3 Credit Hours)

Open only to students in the Honors College. A special honors section of ARTS 122A.

ARTS 202 Two-Dimensional Design and Color Theory (3 Credit Hours)

An introduction to pictorial design via an intensive study of the elements and principles of art and design and Gestalt Theory. These fundamental ideas are reinforced as color theory principles are introduced, such as: additive and subtractive color systems, color interaction, and harmonies as well as the phenomenon of simultaneous contrast.

ARTS 203 Three-Dimensional Design (3 Credit Hours)

A basic course examining the relation of form and structure in a three-dimensional environment.

ARTS 204 Foundational Concepts in Studio Art (3 Credit Hours)

This course provides students an overview of the options, methods, and strategies by which modern and contemporary artists operate. One of the primary learning outcomes is for students to be conversant with the discourse and ideas that they have inherited as artists, designers, and scholars in the 21st century in order to enrich their own creative practices.

ARTS 211 Introduction to Digital Photography (3 Credit Hours)

Introduction to conceptual, technical and historical aspects of photography as a creative medium using digital technology. Technical areas covered include camera use, digital image processing, and digital printing. Class time is divided between demonstrations of applicable skills, in class work time, lectures and critiques.

Prerequisites: ARTS 279 or permission of the instructor

ARTS 221 Introduction to Glass: Survey (3 Credit Hours)

This course is structured to provide instruction to glass forming, balanced with the history, criticism, and aesthetics of glass art. It is a basic course in the techniques of glassblowing, flameworking, kiln forming and coldworking, taught through a series of hands-on projects. Lectures, demonstrations, and critiques encourage students to consider both the technical and conceptual manifestations of this material. In addition, the Chrysler Museum's extensive contemporary and historical glass collection and interaction with visiting and resident glass artists will be utilized. The course allows students of all skill levels to learn new techniques to advance to a higher level of art production.

Prerequisites: ARTS 203

ARTS 231 Drawing I: Fundamentals of Drawing (3 Credit Hours)

An intensive studio course that fosters observational and visualization skills through a comprehensive exploration of composition, linear perspective, and sighting and measuring techniques. These principles are executed by utilizing line and value with a variety of media including graphite, charcoal, and ink. Investigations of the discipline's historic and contemporary dimensions support the course objectives.

ARTS 241 Painting I (3 Credit Hours)

An observational painting course that serves as an introduction to the fundamental concepts and competencies of oil painting. Primary emphasis is on composition, accuracy of color mixing, description of form and space as well as paint application techniques.

Prerequisites: ARTS 202 and ARTS 231

ARTS 254 Printmaking: The Relief Print (3 Credit Hours)

An introduction to basic relief printing techniques including woodcut, linocut, letterpress, and collograph.

Pre- or corequisite: ARTS 202 and ARTS 231; one or both may be taken before; one may be taken as a corequisite

ARTS 257 Print I: Intaglio and Relief (3 Credit Hours)

A basic introduction to the aesthetic and conceptual possibilities of print media, focusing primarily on Intaglio and Relief printing techniques. Studio projects and demonstrations will be supplemented with lectures and readings exploring the significance of print to contemporary artists.

Prerequisites: ARTS 202 and ARTS 231

ARTS 258 Print I: Screenprint and Lithography (3 Credit Hours)

A basic introduction to the aesthetic and conceptual possibilities of print media, focusing primarily on Screenprinting and Lithography. Studio projects and demonstrations will be supplemented with lectures and readings exploring the significance of print to contemporary artists.

Prerequisites: ARTS 202 and ARTS 231

ARTS 259 Print I: Letterpress and Book Arts (3 Credit Hours)

A basic introduction to the aesthetic and conceptual possibilities of print media, focusing primarily on Letterpress and Book Arts. Studio projects and demonstrations will be supplemented with lectures and readings exploring the significance of print to contemporary artists.

Prerequisites: ARTS 202 and ARTS 231

ARTS 261 Introduction to Sculpture (3 Credit Hours)

Conceptual thinking in three dimensions; the development of visual capacity and spatial sense through direct experience in materials.

Prerequisites: ARTS 202 and ARTS 203

ARTS 263 Introduction to Ceramics (3 Credit Hours)

A studio core course designed as an introduction to ceramics. Students will explore functional and sculptural techniques through handbuilding and wheel-throwing, as well as basic claybody, glaze and firing theory. Students will also develop a basic understanding of the historical and cultural aspects of ceramics.

Prerequisites: ARTS 202 and ARTS 203

ARTS 279 Digital Basics (3 Credit Hours)

This course is an introduction to the Macintosh operating system, design industry-standard software programs, and technical applications to visual arts and design production. The course provides an overview of Adobe software programs (Photoshop, Illustrator, InDesign) and techniques for bitmap and vector image creation as well as page layout as used in print design and digital media development.

ARTS 291 Introduction to Jewelry and Metalsmithing (3 Credit Hours)

This course is an introduction to the fundamentals of design and metal fabrication techniques for both jewelry and small objects. Working with precious and non-precious metals, students will learn traditional techniques including sawing, filing, cold connections, soldering, and polishing. A series of structured assignments guide students as they transform their ideas into finished works. Solutions for projects are open to enable the student to explore their own aesthetic while mastering the outlined material. Lectures on historical, contemporary and cultural examples of jewelry inform and inspire students' work.

Prerequisites: ARTS 203 or permission of the instructor

ARTS 300 Introduction to Computer Graphics (3 Credit Hours)

An introductory studio art course for non-art majors. The course is designed to acquaint students with industry standard graphic software, the Macintosh operating system, and its application to digital graphics production. It includes an overview of computer hardware and software used for visual communication.

Prerequisites: Junior standing

ARTS 311 Photography 2 (3 Credit Hours)

This course encourages the refinement of technical skills as well as emphasizing the critical framework in which to place photographic imagery. Assignments will challenge students to think creatively and develop their unique perspective. Reading, research, and discussion introduce students to the major photographic movements that have shaped current theory.

Prerequisites: ARTS 211 or permission of the instructor

ARTS 312 Lighting for Photography (3 Credit Hours)

This class explores controlled lighting for photography both inside and outside the studio. Emphasis is placed on exploring photographic concepts and the creative application of lighting technique and style both inside the studio and on location. Students will also investigate ways to communicate ideas through strong photographic imagery and how photography shapes and influences society through class readings and discussion.

Prerequisites: ARTS 211 or permission of the instructor

ARTS 313 Darkroom Photography (3 Credit Hours)

This course will focus on alternative as well as conventional techniques of the black and white darkroom. The class will approach image making with a focus on experimentation. Techniques covered will include photograms, pinhole photography, Van Dyke brown and gelatin silver prints. In addition to production of images, an early history of photography, beginning with the camera obscura, will be discussed. Class sessions will be divided into lecture/slide presentations, critique of students' work, demonstrations, and open lab time. Students will create a final portfolio to be reviewed as a class at the end of the semester.

Prerequisites: ARTS 211 or permission of the instructor

ARTS 321 Intermediate Glass: Hot and Flame (3 Credit Hours)

This course is structured to provide instruction to glass forming, balanced with the history, criticism, and aesthetics of glass art. It is an intermediate course in the techniques of glassblowing, flame working, and coldworking, taught through a series of hands-on projects. Lectures, demonstrations, and critiques will encourage students to consider both the technical and conceptual manifestations of this material. In addition, the Chrysler Museum's extensive contemporary and historical glass collection and interaction with visiting and resident glass artists will be utilized. The course allows students of intermediate levels to learn new techniques to advance to a higher level of art production.

Prerequisites: ARTS 203 and ARTS 221

ARTS 331 Drawing II (3 Credit Hours)

This is an intensive studio course that builds on the perceptual and technical skills developed in ARTS 231. Using a variety of media including ink, charcoal, graphite, and chalk pastels, initial coursework will act as a review of direct observational drawing skills with an introduction to the formal optics of color perception and interaction through the framework of drawing. Students will begin exploring the expressive potential of drawing through thematically-driven projects during the second half of the semester.

Prerequisites: ARTS 231 and ARTS 202

ARTS 341 Painting II (3 Credit Hours)

An intensive studio course that builds on the perceptual and technical skills developed in ARTS 241. Coursework includes a review and expansion of direct observational painting skills with exploration into the expressive potential of painting through thematically-driven projects.

Prerequisites: ARTS 241 and ARTS 331

ARTS 343 Techniques in Abstraction (3 Credit Hours)

This course serves to expose students to various techniques in contemporary abstraction. Students explore a range of strategies for producing both objective and non-objective abstract work using drawing and/or painting media.

Prerequisites: ARTS 341 or by permission of the instructor

ARTS 350 Advanced Printmaking (3 Credit Hours)

Further investigation of chosen print technique (screenprint, lithography, relief, or intaglio) with special attention to the implementation of color.

Prerequisites: ARTS 279 and any introductory printmaking course (ARTS 254, ARTS 257, ARTS 258, or ARTS 259)

ARTS 351 Print II: The Hybrid Print (3 Credit Hours)

Students investigate the integration of traditional print media with digital prints, photographic techniques, and rapid prototyping technologies. Readings and discussions will explore the relationship between analog and digital media. Students choose a conceptual theme that will guide their work throughout the semester.

Prerequisites: ARTS 257, ARTS 258 or ARTS 259 or permission of the instructor

ARTS 352 Print II: Medium Intensive (3 Credit Hours)

Students focus on a single print medium from Print I (Intaglio, Relief, Screenprint, Lithography, or Letterpress) for intensive study. Use of color, registration, and alternative techniques will be emphasized within a given medium. Students choose a conceptual theme that will guide their work throughout the semester.

Prerequisites: ARTS 257, ARTS 258 or ARTS 259 or permission of the instructor

ARTS 361 Advanced Sculpture (3 Credit Hours)

Investigation involves the combination of various materials and construction techniques. Each student will improve their skills in fabrication to execute their research and concepts in object making and installation.

Prerequisites: ARTS 203, ARTS 261 or permission of the instructor

ARTS 362 Ceramics Studio (3 Credit Hours)

This course is an introduction to the use of clay, also known as ceramics. It includes clay forming with pinch pots, slabs, coils and pottery wheels.

Prerequisites: by permission of instructor

ARTS 363 Intermediate Ceramics (3 Credit Hours)

Students will explore functional and sculptural techniques through handbuilding and wheel-throwing, as well as basic claybody, glaze and firing theory. Students will also develop a basic understanding of the historical and cultural aspects of ceramics. The class includes glaze chemistry, firing procedures, ceramic history and contemporary ceramics.

Prerequisites: Permission of instructor

ARTS 368 Internship (1-3 Credit Hours)

A structured work experience involving aspects of design or craft, filmmaking, video, museum or gallery work, either with or without remuneration. Criteria for evaluation will be determined by work supervisor and cooperating faculty advisor.

Prerequisites: Approval by the department chair is necessary prior to registration; additional support may be provided by the Monarch Internship and Co-Op Office in at least one semester prior to enrollment

ARTS 369 Practicum (1-3 Credit Hours)

A structured research experience, under the supervision of an art department faculty member. A paper evaluating/analyzing the research, a log of research progress, and satisfactory evaluation by the supervising faculty are required.

Prerequisites: approval by the department chair

ARTS 377 Extracurricular Studies (1-6 Credit Hours)

Extracurricular activities may be approved for credit based on objectives, criteria, and evaluative procedures as formally determined by the department and the student prior to the semester in which the activity is to take place. Such credit is subject to review by the provost.

Prerequisites: approval by the department and the dean, in accordance with the policy on granting credit for extracurricular activities

ARTS 378 Extracurricular Studies (1-6 Credit Hours)

Extracurricular activities may be approved for credit based on objectives, criteria, and evaluative procedures as formally determined by the department and the student prior to the semester in which the activity is to take place. Such credit is subject to review by the provost.

Prerequisites: approval by the department and the dean, in accordance with the policy on granting credit for extracurricular activities

ARTS 381 Weaving and Fibers: Intermediate (3 Credit Hours)

An overview of techniques related to pattern drafting, advanced loom and off-loom weaving, and fabric painting.

Prerequisites: permission of the instructor

ARTS 391 Intermediate Jewelry (3 Credit Hours)

This course will expand upon the fundamentals of design and metal fabrication techniques for jewelry. Working with precious and non-precious metals, students will learn traditional techniques including casting, stone setting and production processes. A series of structured assignments guide students as they transform their ideas into finished works. Solutions for projects are open to enable the student to explore their own aesthetic while mastering the outlined material. Lectures on historical, contemporary and cultural examples of jewelry inform and inspire students' work.

Prerequisites: ARTS 291 or permission of the instructor

ARTS 392 Blacksmithing (3 Credit Hours)

This course offers an introduction to the basic tools, materials and techniques used in forging, forming, hardening and tempering steel. Exploration of form and process in working metal.

Prerequisites: ARTS 291 or permission of the instructor

ARTS 394 Intermediate Metalsmithing (3 Credit Hours)

This course will expand upon the fundamentals of design and metal fabrication techniques for small objects. Working with precious and non-precious metals, students learn traditional techniques including chase and repousse, raising and forming. A series of structured assignments guide students as they transform their ideas into finished works. Solutions for projects are open to enable the student to explore their own aesthetic while mastering the outlined material. Lectures on historical, contemporary and cultural examples of metalsmithing inform and inspire students' work.

Prerequisites: ARTS 291 or permission of the instructor

ARTS 395 Topics in Studio Art (3 Credit Hours)

A study of selected topics designed for non majors, or for elective credit within a major. These courses will appear in the course schedule, and will be more fully described in information distributed to all academic advisors.

Prerequisites: appropriate survey or introductory course or permission of the instructor

ARTS 400 Senior Show (3 Credit Hours)

This is the capstone class for all students in the BFA program (except students in the graphic design concentration take ARTS 401). Focusing on the development and articulation of aesthetic vision and studio practice, students will identify key ideas and sources for their work. They will also clarify their methods and concepts to create a finished, exhibition quality project. The class also addresses professional installation, promotion, and documentation of finished work, culminating with an exhibition.

Prerequisites: Permission of the instructor to confirm students are in the final semester of major

ARTS 411 Photography 3 (3 Credit Hours)

The course focuses on the photographic series examining reportage and contemporary narrative. Students will work on developing a fully conceived photographic series on a theme developed through guided individual research. Reading and discussion will provide students a critical framework in which to place their photographic imagery.

Prerequisites: ARTS 211 and ARTS 311 or permission of instructor

ARTS 412/512 Photo Seminar 1 (3 Credit Hours)

The first of a two-semester sequence of concentrated individual work. Students will identify a topic and create a complete body of work culminating in the senior show, ARTS 400. Lectures, readings, discussion, critique, and field trips to develop the articulation of ideas and the clarification of purpose.

Prerequisites: ARTS 211, ARTS 311 and ARTS 411 or permission of the instructor

ARTS 413/513 Photo Seminar 2 (3 Credit Hours)

This is the second in a two-semester sequence of concentrated individual work culminating in the senior show. Through readings, discussion, critiques, field trips, and intense individual work, students will compile a body of work realizing their personal vision and articulate their ideas through the crafting of an artist statement.

Prerequisites: ARTS 211, ARTS 311, ARTS 411 and ARTS 412 or permission of the instructor

ARTS 421 Advanced Glass: Hot and Flame (3 Credit Hours)

This course is structured to provide instruction to glass forming, balanced with the history, criticism, and aesthetics of glass art. It is an advanced course in the techniques of glassblowing and flame working. Lectures, demonstrations, and critiques will encourage students to consider both the technical and conceptual manifestations of this material. In addition, the Chrysler Museum's extensive contemporary and historical glass collection and interaction with visiting and resident glass artists will be utilized. The course allows students to learn new techniques to advance to a higher level of art production.

Prerequisites: ARTS 203, ARTS 221 and ARTS 321

ARTS 431/531 Drawing Studio (3 Credit Hours)

Further concentration on conceptual content and drawing skills, development of individual body of work exploring preferred concepts, subject matter, techniques, and media. May be repeated for credit.

Prerequisites: ARTS 331

ARTS 432/532 Figure Drawing Anatomy (3 Credit Hours)

A study of visually important aspects of the structural, skeletal and muscular systems of the body. Anatomical study will be related to drawing from the live model.

Prerequisites: ARTS 331 or permission of the instructor

ARTS 433/533 Figure Drawing/ Composition (3 Credit Hours)

This course places the emphasis on advanced composition using the figure as the central theme. The figure's expressive potential, along with a study of historical responses to figure drawing, will be examined in depth.

Prerequisites: ARTS 432/ARTS 532

ARTS 441 Advanced Painting and Drawing (3 Credit Hours)

An intensive studio course that builds upon skills developed in ARTS 331 and ARTS 341. Students pursue various approaches to the development of pictorial space and investigate the connection between formal decision making, media use, and individual expression within their work.

Prerequisites: ARTS 341

ARTS 442/542 Painting and Drawing Studio (3 Credit Hours)

Students develop an individual body of work exploring preferred concepts, subject matter, techniques, and media in close consultation with faculty. Written proposal by students required at registration.

Prerequisites: ARTS 441 and ARTS 445

ARTS 445 Hybrid Approaches to Painting and Drawing (3 Credit Hours)

This course emphasizes hybrid approaches to contemporary drawing and painting including the integration of digital processes into studio practice and production. Students will be introduced to various applications and techniques regularly used in contemporary painting and drawing, including generating digital imagery, diorama construction and image compositing. Traditional and nontraditional media and subjects may be used to assist in the fulfillment of students' analytical and expressive intentions.

Prerequisites: ARTS 341 or by permission of the instructor

ARTS 450/550 Printmaking III (3 Credit Hours)

Students create a body of personal work based on their research and interests. Readings, discussion, and presentations situate students' practice within contemporary print discourses.

Prerequisites: ARTS 351 or ARTS 352 or permission of the instructor

ARTS 455/555 Letterpress Printmaking (3 Credit Hours)

A visual and literary investigation of language and wordplay using foundry and wood type and a Vandercook SP-20 proofing press. Projects include expressive printed impressions of personal poetry and song lyric, political rant, and broadsides for entertainment or proselytizing. A theme group project, such as a folio or a bound book, is usually assigned.

Prerequisites: ARTS 259 or permission of instructor

ARTS 456 2D Seminar (3 Credit Hours)

This course covers both theoretical and practical concerns within contemporary 2D art (painting, drawing, print. A combination of reading, writing, and critique develop and deepen the trajectory of students' creative practice.

Prerequisites: ARTS 450 or ARTS 441 or permission of the instructor

ARTS 461/561 Sculpture Studio (3 Credit Hours)

Experimental work reflecting individual initiative and attitude.

Prerequisites: ARTS 361 or ARTS 363, and permission of the instructor

ARTS 463/563 Advanced Ceramics (3 Credit Hours)

An advanced course in the science and art of ceramics. Students will engage in guided independent research, developing their own direction by investigating clay bodies, glazes, firing methods and contemporary ceramic art.

Prerequisites: ARTS 263 and ARTS 363

ARTS 469/569 Assemblage (3 Credit Hours)

Assemblage combines elements of various art and non-art media and materials. Lectures will be comprised of presentations about relevant artists, gallery and studio visits, and critiques. Studio time allows students to explore personal directions in the medium.

Prerequisites: junior standing or permission of the instructor

ARTS 472/572 Art Therapy (3 Credit Hours)

This class is designed to initiate students from both studio art and non-studio backgrounds to the study of art therapy. It examines the history of art therapy in the United States, introduces the Expressive Therapies Continuum (ETC), and explores the application of art therapy techniques and their underlying rationales.

Prerequisites: Instructor permission required

ARTS 473/573 The Book (3 Credit Hours)

The book as a work of art. Lecture will explore historical and technical aspects of book design and production. Studio work will be devoted to the production of a series of books involving page design, paper selection, printing and binding.

Prerequisites: ARTS 202, ARTS 279, and junior standing or permission of the instructor

ARTS 481/581 Weaving and Fibers: Advanced (3 Credit Hours)

Advanced work in pattern drafting, loom techniques, off-loom weaving and fabric painting.

Prerequisites: ARTS 381

ARTS 491/591 Advanced Jewelry and Metalsmithing (3 Credit Hours)

This course offers further exploration and concentration on jewelry and metalsmithing techniques. Through readings, discussions, self-directed and self-determined projects, students will explore new methods and content to develop an individual body of work. Additional emphasis will be placed on developing supplemental portfolio materials. May be repeated once for credit.

Prerequisites: ARTS 291 and either ARTS 391 or ARTS 394

ARTS 492 Wood Studio/Furniture Design (3 Credit Hours)

An exploration of concepts and techniques in wood sculpture and furniture design and fabrication.

Prerequisites: Junior standing

ARTS 493/593 Jewelry and Metalsmithing Studio (3 Credit Hours)

This course offers further exploration and concentration on jewelry and metalsmithing techniques. Through readings, discussions, self-directed and self-determined projects, students will explore new methods and content to develop an individual body of work. Additional emphasis will be placed on developing supplemental portfolio materials. May be repeated for credit once.

Prerequisites: ARTS 291 and either ARTS 391 or ARTS 393

ARTS 495/595 Topics in Studio Art (3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on studio projects of mutual interest.

Prerequisites: permission of the instructor

ARTS 497/597 Tutorial Work in Special Studio Topics (3 Credit Hours)

Independent investigation of a subject to be selected under the advisement of the instructor. Conferences, papers, field trips, portfolios, or exhibitions as appropriate.

Prerequisites: senior standing and permission of the chief departmental advisor

ARTS 498 Tutorial Work in Special Studio Topics (3 Credit Hours)

Independent investigation of a subject to be selected under the advisement of the instructor. Conferences, papers, field trips, portfolios, or exhibitions as appropriate.

Prerequisites: senior standing and permission of the chief departmental advisor

ASIA - Asian Studies

ASIA 332 South Asia Since Independence (3 Credit Hours)

This is a comparative study of the main political, economic and social developments in the major countries of South Asia. Themes will include democratization, problems of economic development, the role of caste and religion, the causes of intrastate conflict and interstate conflict and the influence of global forces on the region.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

ASIA 336 The Emergence of New China (3 Credit Hours)

The history of China covering late Imperial China, the impact of Western imperialism, the Republican Period, and the establishment of the People's Republic.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

ASIA 337 Japan's Era of Transformation (3 Credit Hours)

The history of Japan since 1800. The decline of the Tokugawa Shogunate, modern national building in the Meiji period, domestic conflicts and war in the twentieth century, and the roots of Japan's economic prominence today.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

ASIA 338W Politics of East Asia (3 Credit Hours)

This course is designed for intermediate students who are interested in the theoretical and systematic study of world politics. The course first introduces students to several major theoretical approaches to the study of world politics and then applies these approaches to a number of major, contemporary issues--ranging from war and peace, conflict and cooperation, development and underdevelopment to global and national interests. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, six hours in human behavior, and junior standing or permission of the instructor

ASIA 353 Asian Religions (3 Credit Hours)

This course introduces students to several key religious traditions originating in Asia, such as: Hindu traditions in India; Confucianism, Daoism, and popular religion in China, Buddhism and Shinto in Japan; and Buddhist traditions of China, Tibet, and Mongolia. Students will read and analyze primary sources in English translation. By examining artifacts from literature, art, and poetry, students will also learn about cultural history. Throughout the course, we will be employing hermeneutical methods in the field of religions studies, such as methods of comparisons.

Prerequisites: Junior standing and three semester hours in philosophy, or permission of the instructor

ASIA 360 Asian Art (3 Credit Hours)

An introduction to the architecture, sculpture, calligraphy, pottery, ink, painting, miniature painting, and gardens of India, China, and Japan. Emphasis will be placed on the connections among the cultures: Buddhism and pilgrimage, the importance of the scholar painters, the role of trade routes and the emergence of native writing.

Prerequisites: A grade of C or higher in ENGL 110C; a grade of C or higher in ENGL 211C or ENGL 221C or ENGL 231C; ARTH 121A or ARTH 150 or ARTH 203 or ARTH 204 or ARTH 210 or ARTH 230 or permission of instructor

ASIA 395 Topics in Asian Studies (3 Credit Hours)

A study of selected topics designed for nonmajors or for elective credit within a major. These courses will appear in the course schedule and will be more fully described in information distributed to academic advisors.

Prerequisites: HIST 101H or permission of the instructor

ASIA 435 Chinese Politics (3 Credit Hours)

A study of origins of the Chinese revolution; development and functions of the Chinese Communist Party; government institutions; the defense establishment; evolution of foreign policy; and post-Mao political and economic reforms.

Prerequisites: POLS 100S or POLS 102S or permission of the instructor

ASIA 461W Asian Studies Capstone Seminar (3 Credit Hours)

As a required course for the Asian Studies major, the course helps students synthesize the knowledge they have learned from the undergraduate courses, write a capstone research paper and present the paper in class. This is a writing intensive course.

Prerequisites: HIST 101H, a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, and junior standing

ASIA 495/595 Topics in Asian Studies (3 Credit Hours)

This course is designed for small groups of qualified students to conduct advanced study of selected topics on Asian Studies, topics which may not be taught in regularly scheduled classes. The description of the course for each offering will appear in the course schedule booklet that is distributed to each advisor.

Prerequisites: Appropriate survey source or permission of the instructor

ASTP - Astrophysics

ASTP 103N Introductory Astronomy of the Solar System (4 Credit Hours)

A study of the physical principles and scientific investigation of objects in our solar system. Emphasis on how we acquire knowledge of celestial objects to develop models of our universe.

ASTP 104N Introductory Astronomy of Galaxies and Cosmology (4 Credit Hours)

Emphasizes the study of stars, star systems, cosmology and relativity. Emphasis on how we acquire knowledge of celestial objects to develop models of our universe.

ASTP 108 Intro Astronomy Solar Sys Lab (1 Credit Hour)

An introductory laboratory course in astronomy dealing with experiments about the laws of nature that apply to objects in our solar system. This course is intended for students with previous transfer credit for an Introductory Astronomy of the Solar System Lecture course.

Prerequisites: Written permission of the chief departmental advisor of the Physics Department

ASTP 109 Intro Astron Galaxy/Cosmo Lab (1 Credit Hour)

A laboratory course in astronomy dealing with experiments about the laws of nature that apply to galaxies and the cosmos as a whole. This course is intended for students with previous transfer credit for an Introductory Astronomy of Stars, Galaxies and the Cosmos Lecture course.

Prerequisites: Written permission of the chief departmental advisor of the Physics Department

ASTP 126N Honors: Introductory Astronomy of the Solar System (4 Credit Hours)

Open only to students in the Honors College. A special honors version of ASTP 103N.

ASTP 127N Honors: Introductory Astronomy of Galaxies and Cosmology (4 Credit Hours)

Open only to students in the Honors College. A special honors version of ASTP 104N.

ASTP 313 Elements of Astrophysics (3 Credit Hours)

A one-semester course covering the important topics of modern astrophysics. The elementary physical basis of stellar structure and evolution is derived from first principles. Theoretical and observational details of white dwarfs, neutron stars, pulsars, and black holes are developed. Elements of Big Bang cosmology are also presented.

Prerequisites: PHYS 232N or PHYS 227N or PHYS 262N

ASTP 406/506 Observational Astronomy (3 Credit Hours)

Observational techniques in astronomy with emphasis on constellation identification, celestial movements, and telescopic observation. Individualized night observations are required.

Prerequisites: Junior standing

ASTP 408/508 Astronomy for Teachers (3 Credit Hours)

A course in astronomy dealing with stars and stellar systems. Topics will include observational astronomy, the electromagnetic spectrum, relativity, stellar and galactic structures, cosmology, and the search for extraterrestrial intelligence.

Prerequisites: Junior Standing

ASTP 414 Relativity and Cosmology (3 Credit Hours)

Introduction to special and general relativity and cosmology. The course covers the current understanding of the structure and evolution of the Universe. The most important unsolved cosmological problems will be discussed, as well as current efforts/theories that may lead to the solution. Special and general relativity, Einstein's field equations, Friedmann-Lemaitre-Robertson-Walker metric, Friedmann's equations, Schwarzschild solution and black holes, Big Bang, cosmic microwave background radiation, dark matter and dark energy are covered.

Prerequisites: PHYS 232N or PHYS 227N or PHYS 262N and MATH 312 or MATH 307

ASTP 495/595 Special Topics in Astrophysics (3 Credit Hours)

In-depth study of a selected topic in astrophysics at the advanced undergraduate level. May include a laboratory or computational component.

Prerequisites: Permission of the instructor

BDA - Big Data Analytics

BDA 200T Elements of Data Science (3 Credit Hours)

This course offers a non-technical introduction to the emerging and interdisciplinary area of data science. Students will be introduced to the development, fundamental tools, and the impact of data science in a wide range of disciplines such as business, the sciences and engineering. Fundamental data visualization techniques and basic concepts of machine learning will be applied through real-life data science projects. Moreover, students will explore the general framework for ethical thinking and practicing data science, the current challenges, the benefits, the potential harms and risks posed by developing data science models and technology.

Prerequisites: MATH 102M or MATH 103M

BDA 401/501 Programming Languages for Data Science (3 Credit Hours)

An introductory course on programming languages and tools which are relevant to data analytics. Each language or tool is introduced as a separate module and incorporates applications in mathematics and statistics. Examples of included programming languages and tools are MATLAB, Python, R and SAS. Additional languages and tools may be covered based on current trends in data analytics. Students will complete hands-on programming assignments throughout the course.

Prerequisites: MATH 312, MATH 316 and STAT 330 or STAT 331

BDA 411/511 Introduction to Machine Learning (3 Credit Hours)

An introductory course on machine learning. Machine Learning is the science of discovering pattern and structure and making predictions in data sets. It lies at the interface of mathematics, statistics and computer science. The course gives an elementary summary of modern machine learning tools. Topics include regression, classification, regularization, resampling methods, and unsupervised learning. Students enrolled are expected to have some ability to write computer programs, some knowledge of probability, statistics and linear algebra.

Prerequisites: MATH 312, MATH 316, and STAT 330 or STAT 331

BDA 431/531 Modern Statistical Methods for Big Data Analytics (3 Credit Hours)

The statistical perspective of data mining is emphasized for majority of the course. Both applied aspects (programming, problem solving, and data analysis) and theoretical concepts (learning, understanding, and evaluating methodologies) of data mining will be covered. Topics include Regularization and Kernel Smoothing Methods, Tree-based Methods, Neural Networks and optional topics such as deep learning.

Prerequisites: BDA 411 and STAT 405

BDA 432/532 Introduction to Optimization in Data Science (3 Credit Hours)

Topics considered include the solution of non-smooth optimization problems arising in data science, including unconstrained and constrained optimization problems, Lagrange multiplier methods, inequality constraints, Kuhn-Tucker conditions, and applications. Also considered are linear and nonlinear inverse problems, regularization of ill-posed problem including singular value decomposition, and Tikhonov regularization methods and sparse regularization methods, inverse eigenvalue problems and applications such as compressed sensing, image reconstruction and machine learning.

Prerequisites: MATH 307, MATH 312 and MATH 316

BDA 450 Senior Project in Big Data Analytics I (3 Credit Hours)

This course introduces students to practical applications of big data analytics. Lecture topics include an overview of the various topics in business, engineering, and government currently using big data analytics. Students will choose a project involving a real world application to explore techniques learned during other course work. Course involves written and oral presentations for students to improve communication and teamwork skills.

Prerequisites: A grade of C or better in STAT 331 and STAT 405

Pre- or corequisite: BDA 431

BDA 451 Senior Project in Big Data Analytics II (3 Credit Hours)

This course allows the student to pursue an in-depth exploration of a project initiated in BDA 450. The course involves written and oral presentations for students to improve communication and teamwork skills.

Prerequisites: BDA 450 and permission of instructor

BIOE - Bioelectrics

BIOE 454/554 Introduction to Bioelectrics (3 Credit Hours)

Covers the electrical properties of cells and tissues as well as the use of electrical and magnetic signals and stimuli in the diagnosis and treatment of disease. Typical topics to be covered include basic cell physiology, endogenous electric fields in the body, electrocardiography, cardiac pacing, defibrillation, electrotherapy, electroporation, and electrotherapy in wound healing. In addition, ultrashort electrical pulses for intracellular manipulation and the application of plasmas to biological systems will be covered.

Prerequisites: PHYS 111N or higher and MATH 200 or higher

BIOL - Biological Sciences

BIOL 105N Biology for Nonscience Majors I (4 Credit Hours)

An introductory, non-sequential course for non-biology majors with laboratory. This course concentrates on major biological concepts concerning molecular biology, cellular biology, cellular reproduction, energetics, and organismal biology. Laboratory activities enhance understanding of core biological topics. Cannot be substituted for BIOL 121N and BIOL 122N or for BIOL 123N and BIOL 124N.

BIOL 106N Biology for Nonscience Majors II (4 Credit Hours)

An introductory, non-sequential course for nonbiology majors with laboratory. This course concentrates on major biological concepts involving classical and molecular genetics, biotechnology, evolution, and ecology. Laboratory activities enhance understanding of core biological topics. Cannot be substituted for BIOL 121N and BIOL 122N or for BIOL 123N and BIOL 124N.

BIOL 110N Environmental Science for Non-Majors (3 Credit Hours)

An introductory, non-sequential course for nonbiology majors focusing on scientific inquiry and the fundamental biological underpinnings of environmental science. The course concentrates on ecology, evolution, the nature of and threats to biodiversity, and conservation solutions. Cannot be substituted for BIOL 121N or BIOL 123N. BIOL 110N + BIOL 111N satisfy four credits of the University's Nature of Science general education requirement.

Pre- or corequisite: BIOL 111N

BIOL 111N Environmental Science Lab for Non-Majors (1 Credit Hour)

Laboratory activities and scientific experiments that enhance understanding of environmental science through a hands-on approach that cannot be provided in the lecture classroom setting. BIOL 110N + BIOL 111N satisfy four credits of the University's Nature of Science general education requirement. Cannot be substituted for BIOL 122N or BIOL 124N.

Pre- or corequisite: BIOL 110N

BIOL 112N Environment and Humanity (3 Credit Hours)

An introductory, non-sequential course for nonbiology majors focusing on the most serious environmental problems our society is facing today and how these problems can be solved. The course concentrates on the science behind natural resources and resource management, toxicology, environmental policies and ethics, and sustainable living. Cannot be substituted for BIOL 121N or BIOL 123N. BIOL 112N and BIOL 113N satisfy four credits of the University's Nature of Science general education requirement.

Pre- or corequisite: BIOL 113N

BIOL 113N Environment and Humanity Laboratory (1 Credit Hour)

Laboratory activities and experiments that enhance understanding of the scientific method and environmental sciences through a hands-on approach that cannot be provided in the lecture classroom setting. This course cannot be substituted for BIOL 122N or BIOL 124N. BIOL 112N + BIOL 113N satisfy four credits of the University's Nature of Science general education requirement.

Pre- or corequisite: BIOL 112N

BIOL 117N Introduction to Human Biology (3 Credit Hours)

An introductory lecture course for non-majors focusing on scientific inquiry and the structure and function of the human body with units on diet, nutrition, exercise, infectious disease, and cancer. Cannot be substituted for BIOL 121N or BIOL 123N.

Pre- or corequisite: BIOL 118N

BIOL 118N Introduction to Human Biology Lab (1 Credit Hour)

An introductory lab course for non-majors focusing on scientific inquiry and the structure and function of the human body with units on diet, nutrition, exercise, infectious disease, and cancer. Cannot be substituted for BIOL 122N or BIOL 124N.

Pre- or corequisite: BIOL 117N

BIOL 121N General Biology I (3 Credit Hours)

An introduction to the process of science, biological molecules, cell biology, metabolism, molecular biology, and Mendelian genetics. Students required to take BIOL 121N cannot earn credit for BIOL 105N, BIOL 106N, BIOL 110N, BIOL 112N, or BIOL 117N.

Prerequisites: Writing Success Placement Tool (WSPT) Score of 3 or ENGL 110C

Pre- or corequisite: BIOL 122N and MATH 102M or higher

BIOL 122N General Biology I Lab (1 Credit Hour)

A lab course emphasizing the process of science, biological molecules, cell biology, metabolism, molecular biology, and Mendelian genetics. Students required to take BIOL 122N cannot earn credit for BIOL 111N, BIOL 113N, or BIOL 118N.

Prerequisites: Placement into ENGL 110C

Pre- or corequisite: BIOL 121N and MATH 102M or higher

BIOL 123N General Biology II (3 Credit Hours)

An introduction to the process of science, evolutionary biology, ecology, and the basic biology of viruses, prokaryotes, and eukaryotes. Students required to take BIOL 123N cannot earn credit for BIOL 105N, BIOL 106N, BIOL 110N, BIOL 112N, or BIOL 117N.

Prerequisites: Placement into ENGL 110C and qualifying Math SAT/ACT score, or qualifying score on the Math placement test, or completion of MATH 102M or higher, and BIOL 121N passed with a grade of C (2.0) or higher

Pre- or corequisite: BIOL 124N

BIOL 124N General Biology II Lab (1 Credit Hour)

A lab course emphasizing the process of science, evolutionary biology, ecology, and the basic biology of viruses, prokaryotes, and eukaryotes. Students required to take BIOL 124N cannot earn credit for BIOL 111N, BIOL 113N, or BIOL 118N.

Prerequisites: Placement into ENGL 110C and qualifying Math SAT/ACT score, or qualifying score on the Math placement test, or completion of MATH 102M or higher, and BIOL 121N

Pre- or corequisite: BIOL 123N

BIOL 136N Honors General Biology I (3 Credit Hours)

This course is available only to students in the Honors College. An introduction to the process of science, biological molecules, cell biology, metabolism, molecular biology, and Mendelian genetics. Students required to take BIOL 136N cannot earn credit for BIOL 105N, BIOL 106N, BIOL 110N, BIOL 112N, or BIOL 117N.

Prerequisites: Placement into ENGL 110C and qualifying Math SAT/ACT score, or qualifying score on the Math placement test, and enrollment in the Honors College

Pre- or corequisite: BIOL 137N and MATH 102M or higher

BIOL 137N Honors General Biology I Lab (1 Credit Hour)

This lab course is available only to students in the Honors College. This lab course emphasizes the process of science, biological molecules, cell biology, metabolism, molecular biology, and Mendelian genetics. Students required to take BIOL 137N cannot earn credit for BIOL 111N, BIOL 113N, or BIOL 118N.

Prerequisites: Placement into ENGL 110C and qualifying Math SAT/ACT score, or qualifying score on the Math placement test, and enrollment in the Honors College

Pre- or corequisite: BIOL 136N and MATH 102M or higher

BIOL 138N Honors General Biology II (3 Credit Hours)

This course is available only to students in the Honors College. An introduction to the process of science, evolutionary biology, ecology, and the basic biology of viruses, prokaryotes, and eukaryotes. Students required to take BIOL 138N cannot earn credit for BIOL 105N, BIOL 106N, BIOL 110N, BIOL 112N, or BIOL 117N.

Prerequisites: Placement into ENGL 110C and qualifying Math SAT/ACT score, or qualifying score on the Math placement test, or completion of MATH 102M or higher, enrollment in the Honors College, and BIOL 136N

Pre- or corequisite: BIOL 139N

BIOL 139N Honors General Biology II Lab (1 Credit Hour)

This lab course is available only to students in the Honors College. This lab course emphasizes the process of science, evolutionary biology, ecology, and the basic biology of viruses, prokaryotes, and eukaryotes. Students required to take BIOL 139N cannot earn credit for BIOL 111N, BIOL 113N, or BIOL 118N.

Prerequisites: Placement into ENGL 110C and qualifying Math SAT/ACT score, or qualifying score on the Math placement test, or completion of MATH 102M or higher, enrollment in the Honors College, and BIOL 136N

Pre- or corequisite: BIOL 138N

BIOL 150 Introductory Microbiology (3 Credit Hours)

A course designed to acquaint the student with the elementary principles of bacteriology and other disease causing microorganisms. Emphasis is placed on microorganisms as etiological agents in disease, on practical methods of disinfection, and on the factors of infection and immunity.

Pre- or corequisite: BIOL 151

BIOL 151 Introductory Microbiology Laboratory (1 Credit Hour)

A course designed to acquaint the student with the elementary principles of bacteriology and other disease causing microorganisms. Emphasis is placed on microorganisms as etiological agents in disease, on practical methods of disinfection, and on the factors of infection and immunity.

Pre- or corequisite: BIOL 150

BIOL 195 Biology Lab Topics (1-3 Credit Hours)

Laboratory topics.

BIOL 196 Topics (1-3 Credit Hours)

Topics in Biology.

BIOL 197 Undergraduate Research Experience in Biology (0 Credit Hours)

Student participation in a supervised, undergraduate research experience for which credit will not apply to the degree. Experience must be related to the student's major, minor or career area of interest.

Prerequisites: permission of the instructor

BIOL 240 Fundamentals of Anatomy and Physiology I (4 Credit Hours)

This is the first of a two-part course that investigates the structure and function of the human body. Emphasis is on the basic organization of the body, biochemical composition, cellular structure, function, tissues and organs of the following systems: integumentary, skeletal, muscular, nervous, sensory and endocrine. In lab, students will study the interrelationship between structure and function of the human body using models, histological preparations, and human and feline anatomical specimens. Students with credit for BIOL 240 cannot receive credit for BIOL 250.

BIOL 241 Fundamentals of Anatomy and Physiology II (4 Credit Hours)

The second of a two-part course that investigates the structure and function of the human body. Emphasis is on the basic organization of the body, biochemical composition, cellular structure, function, tissues and organs of the following systems: cardiovascular, lymphatic, immune, respiratory, urinary, digestive, reproductive and human development. In lab, students will study the interrelationship between structure and function of the human body using models, histological preparations, and human and feline anatomical specimens. Students with credit for BIOL 241 cannot receive credit for BIOL 251.

Prerequisites: BIOL 240

BIOL 250 Human Anatomy and Physiology I (4 Credit Hours)

This course emphasizes the gross anatomical relationships and the molecular, cellular, physiological, and metabolic process of the integument, musculoskeletal, neural, and immune systems. Students with credit for BIOL 250 cannot receive credit for BIOL 240.

Prerequisites: BIOL 121N and BIOL 122N or BIOL 136N and BIOL 137N must be passed with a grade of C or higher

BIOL 251 Human Anatomy and Physiology II (4 Credit Hours)

This course emphasizes the physiology and pathophysiology of the cardiac, pulmonary, renal, endocrine, and reproductive systems. Only BIOL 251 (4 credits) may count toward upper-division elective requirements for the Biology major. Students with credit for BIOL 251 cannot receive credit for BIOL 241.

Prerequisites: BIOL 250 or permission of the instructor

BIOL 291 Ecology (3 Credit Hours)

An introduction to the basic concepts of ecology for both biology majors and nonmajors. The concepts are introduced with respect to terrestrial and aquatic environments.

Prerequisites: BIOL 123N and BIOL 124N or BIOL 138N and BIOL 139N must be passed with a grade of C or higher

BIOL 292 Evolution (3 Credit Hours)

An introduction to the basic concepts of evolution for both biology majors and nonmajors. The concepts are introduced with respect to terrestrial and aquatic environments.

Prerequisites: BIOL 123N and BIOL 124N or BIOL 138N and BIOL 139N must be passed with a grade of C or higher

BIOL 293 Cell Biology (3 Credit Hours)

A comprehensive course in the structural and functional features of cells, including prokaryotic and eukaryotic cells. The course will also examine biomacromolecules, techniques in cell and molecular biology, and current frontiers in cell biology research.

Prerequisites: BIOL 123N and BIOL 124N or BIOL 138N and BIOL 139N must be passed with a grade of C or higher

BIOL 294 Genetics (3 Credit Hours)

An introduction to the principles of biological inheritance and variation and the molecular basis of gene structure and function.

Prerequisites: BIOL 123N and BIOL 124N or BIOL 138N and BIOL 139N must be passed with a grade of C or higher

BIOL 300 Fundamental Biomolecules (3 Credit Hours)

This course provides a detailed understanding of the four major classes of organic biological molecules as well as inorganic biological molecules (vitamins and trace minerals). The course focuses on how these biomolecules relate to everyday life for a diversity of organisms. This course will additionally emphasize current research and topics in the media as they pertain to biomolecules. This course counts as an elective for BIOL majors; students with premedical, dental or veterinary emphasis should consider if this course will satisfy requirements for medical, dental, or veterinary schools.

Prerequisites: BIOL 123N or BIOL 138N or BIOL 251 with a C or better and CHEM 107N or CHEM 123N or CHEM 173T with a C or better

BIOL 301 Practice of Science-Biology (4 Credit Hours)

This course is designed to provide a genuine research experience for undergraduate students at the sophomore/junior level. Students will pursue a novel research question and use modern laboratory techniques to examine this question and test hypotheses.

Prerequisites: BIOL 121N, BIOL 122N, BIOL 123N, and BIOL 124N

Pre- or corequisite: BIOL 291 or BIOL 292 or BIOL 293 or BIOL 294

BIOL 302 Introduction to immunology (3 Credit Hours)

A review of the phenomena of immune resistance, the cells and tissues involved in immune responses and the consequences of immunization.

Prerequisites: BIOL 293

BIOL 304 Animal Nutrition (3 Credit Hours)

The course incorporates the fields of animal physiology, biochemistry, ecology and behavior to provide a comprehensive framework for energy acquisition, processing, and use in animals. The course content integrates cellular and molecular mechanisms of digestion and absorption, with tissue-specific and whole-animal metabolism, to the environmental influences on food resource availability and the diverse adaptations of animals to specific dietary and energetic constraints. The course primarily focuses on vertebrate animals.

Prerequisites: BIOL 123N or BIOL 138N; and BIOL 124N or BIOL 139N

Pre- or corequisite: BIOL 305

BIOL 305 Animal Nutrition Laboratory (2 Credit Hours)

This course in comparative animal nutrition and metabolism explores how diverse animals accomplish the universal task of acquiring food energy from their environments, processing and assimilating these resources, and use food energy in metabolism to support vital functions (e.g. growth, repair, reproduction).

Prerequisites: BIOL 123N or BIOL 138N; and BIOL 124N or BIOL 139N

Pre- or corequisite: BIOL 304

BIOL 306 Human Genetics (3 Credit Hours)

Human genetics applies the principles of genetics to understanding human disease and evolution. It covers classical genetics, molecular genetics and population genetics, meeting the undergraduate genetics requirement for biology and biochemistry majors.

Prerequisites: BIOL 121N, BIOL 122N, BIOL 123N, and BIOL 124N or the equivalent with a grade of C (2.0) or better

Pre- or corequisite: CHEM 441

BIOL 307 Invertebrate Zoology (5 Credit Hours)

An examination of the invertebrate phyla with emphasis on classification, morphology, phylogeny, and general biology.

Prerequisites: BIOL 292 must be passed with a grade of C or higher

BIOL 308 Botany (4 Credit Hours)

A general introduction to the structure, function, ecology, and diversity of plants.

Prerequisites: BIOL 291 and BIOL 292 must be passed with a grade of C or higher

BIOL 309 Foundations of Pathophysiology (4 Credit Hours)

This course is designed to teach the fundamentals of abnormal functions essential to understanding diseases, disease processes, and production of signs and symptoms. Chemical, biological, and biochemical alterations in physiology of all major organ systems will be considered.

Prerequisites: BIOL 240/BIOL 241 OR BIOL 250/BIOL 251

BIOL 310 Field Invertebrate Zoology (5 Credit Hours)

An examination of the invertebrate phyla with emphasis on classification, morphology, phylogeny, and general biology. This course will be taught as a full, immersive, field course in the Florida Keys.

Prerequisites: BIOL 292 must be passed with a grade of C or higher

BIOL 311 Global Change Biology (3 Credit Hours)

This course will emphasize the application of evolutionary and ecological principles such as species geographic range shifts, changes in phenology, acclimation, adaptation, and extinction in response to global environmental changes.

Prerequisites: BIOL 291 and BIOL 292 must be passed with a grade of "C" or higher

BIOL 313 Introduction to Neuroanatomy (4 Credit Hours)

This course is designed to give students a comprehensive understanding of the structure and function of the human nervous system, with a major focus on neuroanatomy. The basic principles of cellular neuroscience, neurophysiology, as well as, the sensory and motor pathways will be discussed in detail. Clinically relevant applications will be discussed when relevant. The laboratory component of this course will use cadavers and human tissue to study head and neck structures.

Prerequisites: BIOL 241 or BIOL 251 and BIOL 293 must be passed with a C (2.0) or better

BIOL 314 Developmental Biology (5 Credit Hours)

An analysis of development in animals. Lectures will explore experimental approaches to the study of gametogenesis, fertilization, cleavage and morphogenesis. Laboratories will emphasize the morphological features of the developing vertebrate embryo.

Prerequisites: BIOL 240 or BIOL 250 and BIOL 241 or BIOL 251 must be passed with a grade of C or higher

Pre- or corequisite: CHEM 211

BIOL 316 General Microbiology (3 Credit Hours)

This lecture course is a general survey of the nature and diversity of microorganisms, especially bacteria but including viruses and fungi, the roles and functions of microorganisms and basic microbiological research.

Prerequisites: BIOL 293 and BIOL 294 must be passed with a grade of C or higher

Pre- or corequisite: BIOL 317 or BIOL 318

BIOL 317 General Microbiology Laboratory (2 Credit Hours)

Laboratory course emphasizing basic techniques in microbiology. Students with credit for BIOL 317 cannot receive credit for BIOL 318.

Prerequisites: BIOL 293 and BIOL 294 must be passed with a grade of C or higher

Pre- or corequisite: BIOL 316

BIOL 318 Online General Microbiology Laboratory (2 Credit Hours)

Online laboratory course emphasizing basic techniques in microbiology. Students who take BIOL 318 cannot earn credit for BIOL 317.

Prerequisites: BIOL 293 and BIOL 294 with a grade of C or higher

Pre- or corequisite: BIOL 316

BIOL 322 Ethnobotany (3 Credit Hours)

A survey of plants used for food, fiber, medicine, dyes, perfumes, oils, and waxes. The role of plants in folklore and religion is included. A student research project with a written paper and presentation is required.

Prerequisites: BIOL 292 AND BIOL 308 must be passed with a grade of C or higher

BIOL 331 Marine Biology (3 Credit Hours)

A survey of the variety, ecology and adaptations of marine organisms. The course is designed to broadly introduce students to life in the oceans and the many special features of marine species that have evolved in the earth's oldest and most extensive ecosystem.

Prerequisites: BIOL 291 must be passed with a grade of C (2.0) or higher

BIOL 336 Vertebrate Zoology (4 Credit Hours)

This course will emphasize the organisms classified as vertebrates - fish, amphibians, reptiles, birds, and mammals - in addition to their evolutionary relatives. Detailed discussions of the changes that accompany this diversification of life will include topics in evolution, comparative anatomy, geology, and taxonomy. The lab will be a survey of specimens representing the major groups discussed in lecture.

Prerequisites: BIOL 291 and BIOL 292 must be passed with a grade of "C" or higher

BIOL 340 Field Botany (4 Credit Hours)

A survey of plants and plant communities of the Mid-Atlantic Coastal Plain. Skills in plant and mushroom identification, specimen preparation, and research databases are emphasized. Most classes are field trips.

Prerequisites: BIOL 291 must be passed with a grade of C or higher

BIOL 346 Plant Geography (3 Credit Hours)

The distribution and characteristics of major plant community types in North America and practices used in the study of biogeography are discussed.

Prerequisites: BIOL 123N and BIOL 124N must be passed with a grade of C or higher

BIOL 350 Phage Discovery and Genomics I (4 Credit Hours)

This course is the first semester of a two-semester laboratory and scientific writing course designed to provide a unique undergraduate research experience. It focuses on the discovery of viruses (also known as bacteriophage or phage) that infect bacteria with an emphasis on laboratory techniques. Students will collect phage from environmental samples and learn the laboratory techniques required for the isolation, purification and propagation of viruses. Students will further characterize phage based on microscopy, molecular microbiology techniques, and nucleic acid sequencing. This course emphasizes independent research and additional time outside of the laboratory will be required for sample collection and analysis. This course also is designed to complement the MonarchTeach curriculum.

Prerequisites: BIOL 294

BIOL 351 Phage Discovery and Genomics II (3 Credit Hours)

This is the second course of a two semester laboratory and scientific writing sequence that is designed to provide a unique research experience for undergraduate students. The second semester course is a continuation of the research on the phage project that was started in Phage Discovery and Genomics I (BIOL 350). The students will analyze the newly sequenced bacteriophage genome using bioinformatics tools with an emphasis on Genomics. The bioinformatics will be completed using computer software, mathematical modeling and presented in formal scientific laboratory reports and formal presentations. Upon successful completion of the year-long course, some students will be invited to participate in the SEA-PHAGE program coordinated by the Howard Hughes Medical Institute. The course is designed with an emphasis on independent research that could lead to a scientific publication.

Prerequisites: BIOL 350 and BIOL 294 must be passed with a grade of "C" or higher

BIOL 355 Stem Cell Biology (3 Credit Hours)

Tissue homeostasis requires the birth of new cells, typically derived from stem cells, as well as the removal of cells that are not needed or have become damaged. This course will focus on understanding the mechanisms by which new cells are generated and old or diseased cells are removed. The pathological consequences of failures in one or both of these key processes will be explored as well. Applications of stem cells to regenerative medicine will be considered in detail.

Prerequisites: A grade of "C" or higher in BIOL 293

BIOL 367 Cooperative Education (1-3 Credit Hours)

Student participation for credit in a paid work environment based on the academic relevance of the work experience as determined by the department and the Cooperative Education program, prior to the semester in which the work experience is to take place. Unstructured course. Students must identify a full-time biology faculty member with the expertise to determine if the cooperative education experience is appropriate for a biology curriculum, approve the learning contract, review the submitted assignments (student report and supervisor's evaluation) and assign a P/F grade.

Prerequisites: Approval by the department chair required; Additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

BIOL 368 Internship (1-3 Credit Hours)

Supervised participation in non-research professional setting. Requires a minimum of 3 hours per week or equivalent for 1 credit, completion of work report and other documents relevant to the work experience, and supervisor evaluation. Unstructured course. Students must identify a full-time biology faculty member with the expertise to determine if the internship is appropriate for a biology curriculum, approve the learning contract, review the submitted assignments (student report and supervisor's evaluation) and assign a P/F grade.

Prerequisites: BIOL 123N and BIOL 124N must be passed with a grade of C (2.0) or higher, junior standing, and the approval of a full-time biology faculty member

BIOL 369 Practicum (1-3 Credit Hours)

A supervised experience in a research, teaching, or a work/field setting and culminating in the preparation of a written document relevant to the practicum experience. Unstructured course. Students must identify a full-time biology faculty member with the expertise to determine if the practicum is appropriate for a biology curriculum, approve the learning contract, review the submitted assignments (student report and supervisor's evaluation) and assign a P/F grade.

Prerequisites: BIOL 123N and BIOL 124N must be passed with a grade of C (2.0) or higher, acceptance as a declared major, junior class status, and approval by the sponsoring full-time biology faculty member and the practicum coordinator

BIOL 395 Topics (1-3 Credit Hours)

A structured specialty course designed to meet the needs of students in biology. Students are expected to perform at the level of other junior level classes.

Prerequisites: BIOL 123N and BIOL 124N must be passed with a grade of C or higher

BIOL 396 Topics in Biological Sciences (4-5 Credit Hours)

A structured specialty course for students at the junior level. Courses may include lecture and laboratory components.

Prerequisites: BIOL 123N and BIOL 124N with grades of C or better

BIOL 400/500 Plant Systematics (4 Credit Hours)

An evolutionary survey of vascular plant families and the principles and methodologies that define them; lab emphasis is placed on recognition and skills of identification. A lab and field intensive hands-on course.

Prerequisites: BIOL 292 and BIOL 308 with a C or better

BIOL 401W/501 Entomology (4 Credit Hours)

A comprehensive survey of the insects, including taxonomy, morphology, physiology, reproductive and developmental biology, and ecology. Research techniques in entomology will be learned through both field and laboratory work. Writing skills will be learned through written summaries, essay exams, laboratory reports and research proposals. This is a writing intensive course.

Prerequisites: BIOL 291 and BIOL 292 must be passed with a grade of C (2.0) or higher

BIOL 402/502 Scientific Diving Methods for Marine Research (4 Credit Hours)

This lecture/field experience course will train students in the common techniques used by marine scientists who employ scuba for their research. It satisfies the requirements for an American Academy of Underwater Scientist certification and covers other topics such as: use of underwater research equipment and marine resource surveys. A multi-day scuba trip is required.

Prerequisites: BIOL 123N and BIOL 124N with grades of C or better, Open Water Scuba certification or equivalent, and ODU Dive Physical Form signed/completed by a physician

BIOL 403/503 Medical Microbiology (3 Credit Hours)

This course integrates the disciplines of microbiology, immunology, and biochemistry with the pathophysiology of infections and the appropriate pharmacology in a problem-based learning setting. Students will learn the fundamental concepts and terminologies of infectious diseases. The material will be case studies in small group tutorials and emphasize independent learning.

Prerequisites: BIOL 240 or BIOL 250, BIOL 316 and BIOL 317 or BIOL 318, and CHEM 441 must be passed with a grade of C or higher or instructor approval

BIOL 404/504 Conservation Biology and Sustainable Development (5 Credit Hours)

The application of fundamental biological principles to the preservation of biodiversity, including the role of ecological and evolutionary theory to the preservation of biotas on a regional and global basis. Lectures will cover modern approaches to conservation biology, including conservation ethics and management issues. Laboratories will include discussion of case studies, introduction to software applicable to conservation biology, presentations by regional conservation practitioners, and visits to relevant field sites.

Prerequisites: BIOL 291 must be passed with a grade of C or higher and junior standing or permission of instructor

BIOL 405W Biology Seminar (3 Credit Hours)

This course offers a capstone experience in scientific writing, faculty-mentored library research, the review and synthesis of material from the primary technical literature, and oral presentation. Students will develop a deeper understanding of the purposes and types of scientific writing, the structure and interpretation of technical papers, and the oral and written communication skills appropriate to the discipline. This is a writing intensive course.

Prerequisites: BIOL 293, BIOL 294 and two 300- or 400-level elective courses, a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, and CS 120G or CS 121G or CS 126G or HLTH 120G or IT 150G or STEM 251G

BIOL 406 Mammalogy (4 Credit Hours)

This lecture and laboratory course examines the biology of mammals in depth. Course topics include the evolution of mammalian diversity, mammalian systematics, the behavior and social systems of mammals, mammalian biogeography and ecology, anatomical and physiological specializations in mammals, domestication of mammals, conservation of mammals, and human evolution. The laboratory portion of the course will focus on the various taxonomic groups within the Class: Mammalia through the study of museum material, pictures, video, and primary literature. In addition, students will learn how to identify specific mammal species found in the state of Virginia. Laboratory activities will also include field activities and one required weekend day trip.

Prerequisites: BIOL 291 and BIOL 292

BIOL 407/507 The Pharmacology and Neurobiology of How Recreational Drugs Work (3 Credit Hours)

This course in drug use and abuse is designed to distinguish between drug use and drug abuse as well as provide pharmacological knowledge of how recreational drugs work. Students will acquire knowledge regarding the abuse of prescription drugs, depressants, stimulants, hallucinogens, marijuana and inhalants. This information will be used to analyze pathophysiological conditions that can occur as a result of drug use and abuse.

Prerequisites: BIOL 293 or equivalent

Pre- or corequisite: BIOL 408 recommended

BIOL 408/508 Introduction to Pharmacology (3 Credit Hours)

This is a general introductory course in pharmacology dealing with chemistry, general properties and pharmacological effects on various physiological systems, therapeutic usefulness and toxicities of drugs. The course is designed to prepare upper-level undergraduate and graduate students for more advanced courses in pharmacology.

Prerequisites: course background in cell biology and/or human physiology

BIOL 411/511 Zymology: Fermentation Science (4 Credit Hours)

This is an introductory course in the theory and practice of zymology (fermentation). Edible and potable products of fermentation (beer, wine, mead, yogurt, cheese) have been known since antiquity and play an important role in today's society. The science of fermentation touches on many biological disciplines, such as microbiology and biochemistry, and the study of yeasts has provided considerable foundation to the fields of cell biology and molecular biology. In this course, we will cover fundamentals of fermentation and its practical application to production of beer, one of the oldest beverages produced by humans.

Prerequisites: BIOL 293

BIOL 412/512 Plant Physiology (4 Credit Hours)

Discover the incredible secrets behind what makes our green friends tick. This course includes a traditional lecture covering the physiological and chemical processes occurring in plants. A laboratory, greenhouse, and/or field-oriented lab will provide hands-on opportunities to understand plant stress responses, nutrient use, cell metabolism-respiration, photosynthesis, hormones, and processes driving growth patterns.

Prerequisites: BIOL 292 OR BIOL 308 must be passed with a grade of C or higher

Pre- or corequisite: BIOL 293 and CHEM 211

BIOL 415W/515 Marine Ecology (5 Credit Hours)

A lecture and laboratory course designed to introduce students to important ecological processes operating in coastal marine environments; this is a writing-intensive course. The course covers synthetic topics as well as the ecology of specific marine habitats. The laboratory is designed to provide students with experience in marine research and the organisms and ecological conditions common in various marine habitats visited by the class.

Prerequisites: BIOL 291 and BIOL 331 and ENGL 211C or ENGL 221C or ENGL 231C must be passed with a grade of "C" or higher; instructor approval required

BIOL 416/516 Clinical Immunology (3 Credit Hours)

A description of common immunological problems seen in the clinic.

Prerequisites: BIOL 302

BIOL 419/519 Wetland Plants (4 Credit Hours)

An exploration of the ecology of inland and coastal wetlands and their plants. The course emphasizes wetland and aquatic plant identification, field and laboratory methods, and core concepts important to wetland plants and their ecology. Linkages to wetland delineation and wetland adjacent systems will be made. Weekly field-based laboratories are expected to local wetlands focusing on hands on opportunities and research methods.

Prerequisites: BIOL 291 OR BIOL 308 must be passed with a grade of 'C' or higher; prerequisite waivers may be requested from the instructor

BIOL 420/520 Ichthyology (5 Credit Hours)

The biology of marine and freshwater fishes including morphology, physiology, evolution, distribution, ecology, and reproduction.

Prerequisites: BIOL 292 must be passed with a grade of C or higher and junior standing

BIOL 422/522 Field Studies in Ornithology (4 Credit Hours)

A combined lecture and field study of birds with emphasis on identification, behavior, and field methods. Extensive field trips, including at least one weekend, are taken.

Prerequisites: BIOL 291 and BIOL 292 must be passed with a grade of C or higher or permission of the instructor

BIOL 423W/523 Cellular and Molecular Biology (3 Credit Hours)

The molecular organization of eukaryotic cells is presented along with cell evolution, molecular genetics, the internal organization of the cell and the behavior of cells in multicellular organisms. This is a writing intensive course.

Prerequisites: BIOL 293, BIOL 294, and a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C

BIOL 424/524 Comparative Animal Physiology (5 Credit Hours)

An introduction to the basic mechanisms by which different animals function. How organisms acquire and use energy, regulate their internal environment, circulate and exchange gases and wastes, receive and conduct information about their environment, and move and use muscles will be some of the topics covered. Emphasis will be on how organisms make changes in these basic mechanisms to deal with different environmental conditions.

Prerequisites: BIOL 292 must be passed with a grade of C or higher

BIOL 425/525 Cancer Biology (3 Credit Hours)

This course will examine how mutation leads to altered gene products and expression, subverted cell activity, cell immortalization, and tumor formation. Students will explore the differences between benign tumors and malignant tumors as well as the factors involved in malignancy. The course will conclude with the exploration of current cancer therapy.

Prerequisites: BIOL 293 and BIOL 294 must be passed with a grade of C or higher

BIOL 426/526 Histology (5 Credit Hours)

The structure and function of cells, tissues and organs at both the light microscopic and ultrastructural levels.

Prerequisites: BIOL 240 or BIOL 250 and BIOL 293 must be passed with a grade of C or higher

BIOL 430W/530 Microbial Pathogenesis (3 Credit Hours)

Examination of bacterium-host interactions with an emphasis on how bacteria cause disease, particularly the means by which the bacterium is able to circumvent host defense mechanisms. This is a writing intensive course.

Prerequisites: BIOL 316 and BIOL 317 and a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C

BIOL 432W Modern Plant-Animal Interactions (3 Credit Hours)

This is a writing intensive course. It is designed to engage students in learning about the different types of plant-animal interactions that occur in a variety of the Earth's ecosystems. The goal is to understand these interactions and their significance, how they shape communities and ecosystems, and how they maintain biodiversity. A variety of animal taxa and their relationships with plants are investigated, including birds, mammals, bats, fishes, and insects. Varied ecosystems, including wetlands, prairies, tropical and hardwood forests, agricultural lands, tundra, oceans, lakes and more, will be considered.

Prerequisites: BIOL 291 and BIOL 292

BIOL 435/535 Marine Conservation Biology (3 Credit Hours)

This highly interdisciplinary science of conserving marine biodiversity will be taught through a review of old and new literature. This will include its history, marine ecology related to conservation biology, threats to marine biodiversity, assessment of extinction risk, conservation challenges of marine habitats and regions, and methods for conserving marine biodiversity.

Prerequisites: BIOL 331 must be passed with a grade of C or higher

BIOL 436W/536 Infectious Disease Epidemiology (3 Credit Hours)

This lecture course will focus on concepts related to the spread and control of infectious diseases. This course is a writing-intensive course.

Prerequisites: BIOL 293, and BIOL 294, and MATH 200 or MATH 163 or MATH 211 or MATH 205, and STAT 130M or STAT 310, and ENGL 231C or ENGL 221C or ENGL 211C; all must be passed with a grade of "C" or higher

BIOL 437W/537 One Health: People, Animals and the Environment (3 Credit Hours)

A course that examines the interdependence between human health, animal health and environmental health. The One Health approach to the threat of emerging infectious diseases includes understanding the interconnectedness of human and animal pathogens, epidemic zoonoses and corresponding environmental factors, insights into mechanisms of microbial evolution towards pathogenicity, new technologies and approaches towards disease surveillance, and political and bureaucratic strategies. This is a writing intensive course.

Prerequisites: BIOL 291 and BIOL 293

Pre- or corequisite: BIOL 292 and BIOL 294; a Microbiology course is recommended

BIOL 440/540 Methods in Immunological Research (4 Credit Hours)

The major objective of this hands-on course is to prepare students to independently perform basic laboratory techniques, assays, and experiments commonly used in entry-level immunology laboratory positions. The course will cover theory, sample and reagent preparation, instrumentation, data analysis and interpretation, and applications in immunology. Several topics covered in-class include ELISAs, mammalian cell culture, and flow cytometry; however, additional topics (such as confocal microscopy) will be covered using virtual technologies. This course is ideal for students who intend to pursue careers at the laboratory bench.

Prerequisites: BIOL 302, BIOL 316 and BIOL 317

BIOL 441/541 Animal Behavior (5 Credit Hours)

Animal behavior with special attention to its evolution and ecological significance. Field and laboratory activities will emphasize the observational and experimental techniques used to study behavior.

Prerequisites: BIOL 291 and BIOL 292 must be passed with a grade of C or higher and junior standing or permission of the instructor

BIOL 444/544 Field Studies in Marine Biology (5 Credit Hours)

An intensive study abroad field course offered during the summer at a foreign marine laboratory where students will be engaged in lectures and field studies of coastal marine environments. Check with the Director of the Marine Biology Concentration Program for details.

Prerequisites: BIOL 331 must be passed with a grade of C or higher

BIOL 445/545 Community Ecology (3 Credit Hours)

The goal of this course is to introduce and evaluate both classical and emerging paradigms in community ecology. This will be achieved by examining those processes (biotic and abiotic) that structure ecological communities and by exposing students to quantitative and theoretical aspects of these paradigms.

Prerequisites: BIOL 291 must be passed with a grade of C or higher

BIOL 446/546 Comparative Biomechanics (3 Credit Hours)

The principles of fluid and solid mechanics will be applied to a variety of plant and animal systems to understand how organisms deal with the immediate physical world and its accompanying constraints. A diverse range of topics will be covered, including aerial flight in insects, wind resistance in trees, jet propulsion in squid, flow within blood vessels, forces on intertidal organisms, viscoelasticity in biological materials, and energy storage during terrestrial movement.

Prerequisites: BIOL 293 must be passed with a grade of C or higher; PHYS 111N and PHYS 112N are recommended

BIOL 448 Population Ecology (3 Credit Hours)

This course uses conceptual and mathematical models to understand how populations grow and persist in space and time. Both plants and animals are discussed.

Prerequisites: MATH 205 or MATH 211

BIOL 449 Microbial Impact on Human Health (3 Credit Hours)

This course introduces the student to microorganisms with particular emphasis placed on their role in health, wellness and disease. Economic, social and cultural issues related to utilization, control, and research of the bacteria and viruses are also considered.

Prerequisites: BIOL 293 or BIOL 294 must be passed with a grade of C or better

BIOL 450/550 Principles of Plant Ecology (4 Credit Hours)

This course explores theoretical concepts in plant ecology through review of classical and cutting-edge literature and practice with field-based experimental design and statistical methods. This course emphasizes the structure, development, and processes that drive patterns in plant communities and the ecological communities they support. Weekly field-based laboratories involve hands-on experience and opportunities to explore field methods in ecological research.

Prerequisites: BIOL 291 OR BIOL 308

BIOL 451/551 Bioinformatics and Genomics I (4 Credit Hours)

The application of computer science to biology has led to major breakthroughs in the ability to read and understand the code written in genomes. This course will give students the skills to participate in the computational revolution in biology. The course will give students hands-on experience in writing simple yet powerful computer programs in the Python programming language and making beautiful data visualizations in the R programming language. Students will also learn how to combine existing pieces of bioinformatics software for their own workflows.

Prerequisites: BIOL 123N and BIOL 124N must be passed with a grade of C (2.0) or higher, junior standing, and permission of the instructor

BIOL 452/552 Bioinformatics and Genomics II (4 Credit Hours)

The application of computer science to biology has led to major breakthroughs in the ability to read and understand the code written in genomes. This course will give students the skills to participate in the computational revolution in biology. The course will build on the knowledge of writing programs. Students will learn about some key techniques "under the hood" of software that have been critical to the genomics revolution. Topics will include: graph algorithms, evolutionary trees, probability models for DNA and protein sequences, and an introduction to deep learning in biology.

Prerequisites: Knowledge of Python programming and permission of instructor, or BIOL 451 must be passed with a grade of C (2.0) or higher

BIOL 453/553 Molecular Ecology (4 Credit Hours)

This course will explore the biology of organisms by using molecular (nucleic acid and/or protein) techniques and data. It covers a wide variety of subdisciplines within Biology, including genetics, physiology, ecology, and evolution. This course will explore basic theory in population genetics, ecology, and evolution and cover DNA, RNA, and Protein techniques and their application to biological research.

Prerequisites: BIOL 291, BIOL 292, BIOL 293, AND BIOL 294 all must be passed with a grade of C or higher

BIOL 454/554 Research in Pathogen Biology I: Laboratory Investigation (4 Credit Hours)

This is the first course of a two-semester laboratory and analysis sequence that is designed to provide a genuine research experience for undergraduate students. Students will design a novel research question in pathogen biology, then use modern laboratory techniques such as polymerase chain reaction and next-generation DNA sequencing to examine this question and test hypotheses. Data generated in this course will be analyzed in the second course in the series, BIOL 455. Data and analyses generated during these courses may be used for publication in scientific journals.

Prerequisites: BIOL 294

BIOL 455/555 Research in Pathogen Biology II: Analysis (4 Credit Hours)

This is the second course of a two-semester laboratory and analysis sequence that is designed to provide a genuine research experience for undergraduate students. In this semester, students will analyze data generated during the previous semester in BIOL 454. Modern methods of data analysis will be used, including statistical and bioinformatics techniques. Data and analyses generated during these courses may be used for publication in scientific journals.

Prerequisites: BIOL 294 and BIOL 454

BIOL 457/557 General Virology (3 Credit Hours)

A basic course covering the history of virology, viral taxonomy, genetics, and the molecular biology and host responses to the major mammalian virus groups. Examples of recent impacts of viruses on human health such as influenza pandemics will also be covered.

Prerequisites: BIOL 293 and BIOL 294 must be passed with a grade of C or higher

BIOL 460/560 Frontiers in Nanoscience and Nanotechnology (1 Credit Hour)

Review of the structure, synthesis and properties of key nano-materials and their impact on living systems.

Prerequisites: BIOL 293 must be passed with a grade of C or higher

BIOL 461/561 Human Cadaver Dissection (5 Credit Hours)

Students will dissect a human cadaver fully and learn all of the major structures. The course will be divided into three sections: back and limbs, TAP (thorax, abdomen and pelvis), and head and neck. Instructor demonstrations include brain removal and dissection.

Prerequisites: BIOL 241 or BIOL 251, or its equivalent, must be passed with a grade of C (2.0) or higher

BIOL 462/562 Microbial Genetics (3 Credit Hours)

This course will emphasize the fundamental concepts of microbial genetics including the study of gene structure, gene regulation, operons, DNA replication, RNA biology, protein synthesis, plasmid biology, mobile genetic elements, and recombinant DNA technology.

Prerequisites: BIOL 316 and BIOL 317 or BIOL 318 must be passed with a grade of C (2.0) or higher

BIOL 463/563 Cell Signaling in Host Pathogen Interactions (3 Credit Hours)

This course will emphasize cell dynamics including host and pathogen induced cellular signaling, the regulation of actin cytoskeleton rearrangement, and the modulation of host transcription and translation by different pathogens.

Prerequisites: BIOL 293

BIOL 464/564 Biomedical Applications of Low Temperature Plasmas (3 Credit Hours)

This course is cross listed between ECE and Biology. It is intended for senior undergraduate students and first year graduate students. The course contents are multidisciplinary, combining materials from engineering and the biological sciences. The course covers an introduction to the fundamentals of non-equilibrium plasmas, low temperature plasma sources, and cell biology. This is followed by a detailed discussion of the interaction of low temperature plasma with biological cells, both prokaryotes and eukaryotes. Potential applications in medicine such as wound healing, blood coagulation, sterilization, and the killing of various types of cancer cells will be covered.

Prerequisites: Senior standing

BIOL 465/565 Biotechnology (3 Credit Hours)

This course provides an overview of how microbes are manipulated to solve practical problems through biotechnology. Topics include basic concepts in microbial technology, industrial microbiology, microbes in drug development, food microbiology, microbial interactions, gut microbiota, and metagenomics.

Prerequisites: BIOL 316 and BIOL 317 or BIOL 318 must be passed with a grade of C or higher or permission of instructor

BIOL 466W/566 Introduction to Mitigation and Adaptation Studies (3 Credit Hours)

Students will be introduced to the science underpinning mitigation of human-induced changes in the Earth system, including but not limited to climate change and sea level rise, and adaptation to the impacts of these changes. The course will cover the environmental hazards and the opportunities and limitations for conservation, mitigation and adaptation. This is a writing intensive course. Cross listed with IDS 466W and OEAS 466W.

Prerequisites: BIOL 291 or permission of instructor

BIOL 467/567 Sustainability Leadership (3 Credit Hours)

In this class, students will discover what makes a leader for sustainability. They will consider a range of global and local crises from a leadership point of view in the context of sustainability science, which addresses the development of communities in a rapidly changing social, economic, and environmental system-of-systems environment. The course will be based on taking a problem-motivated and solution-focused approach to the challenges considered. The course includes a service learning project focusing on a leadership experience in solving a real-world environmental problem.

Prerequisites: BIOL 466W or OEAS 466W or IDS 466W

BIOL 468W Research Methods in Mathematics and Science (3 Credit Hours)

Emphasizes the tools and techniques used to solve scientific problems. Topics include use and design of experiments, use of statistics to interpret experimental results, mathematical modeling of scientific phenomena, and oral and written presentation of scientific results. Students will perform four independent inquiries, combining skills from mathematics and science to solve research problems. Required for Biology teaching licensure track; not available as upper-division elective in content area. This is a writing intensive course.

Prerequisites: BIOL 307 or BIOL 308 or BIOL 316 and BIOL 317 or MATH 212 and ENGL 211C or ENGL 221C or ENGL 231C and STEM 201 must be passed with a grade of C or higher or permission of instructor, and admission to Monarch Teach

BIOL 470T/570 Diseases that Changed our World (3 Credit Hours)

Despite advancements in the development of antimicrobials and vaccines and in securing clear water and food supplies, modern civilizations are not immune to epidemic diseases. This course will provide insight into the role of different technologies in the struggle to attain disease control and eradication and explore the challenge of forecasting emerging plagues, describing the nature and evolution of diseases and conveying their significance in shaping Western culture and civilization, their impact, their consequences, their costs, and the lessons learned.

Prerequisites: Sophomore standing with a general biology course (BIOL 123N or BIOL 138N or BIOL 117N)

BIOL 471W/571 Marine Vertebrate Ecology, Management & Conservation (3 Credit Hours)

Course will explore the biology, diversity and major life history patterns of a suite of marine megafauna, including sea turtles, marine mammals, seabirds and sharks. Students will determine the major drivers behind large-scale declines of many marine megafauna species and be challenged to understand and attempt to solve conservation and management issues. This is a writing intensive course, with a focus on the content and mechanics of scientific writing. Pre- or

Prerequisites: BIOL 291, BIOL 292, and ENGL 211C or ENGL 221C or ENGL 231C must be passed with a C (2.0) or better

Corequisites: BIOL 331 OR OEAS 306

BIOL 475/575 Neurobiology (3 Credit Hours)

This course will focus on understanding brain structure as well as the morphology and function of the central nervous system in general.

Fundamental processes such as neuron morphogenesis, guidance, polarity, migration, and growth cone motility will be emphasized. The cellular and molecular basis of neurological disorders also will be discussed.

Prerequisites: BIOL 240 or BIOL 250 or BIOL 293 must be passed with a grade of "C" or higher or permission of instructor

BIOL 476/576 Cancer Immunology and Immunotherapy (3 Credit Hours)

Introduction to the immune system, tumor antigens, immunosuppressive cells and molecules, and cancer immunotherapy treatment approaches.

Prerequisites: BIOL 123N, BIOL 124N, and BIOL 293 or permission of the instructor

BIOL 478/578 Microbial Ecology (3 Credit Hours)

Study of the interactions between microorganisms, particularly bacteria, and their environment. Emphasis is placed on nutrient cycling and the influence of microbes on global mineral dynamics. The effects of physical and chemical factors on the distribution and activity of microbes in their environments and the applications (biotechnology) of these interactions are studied.

Prerequisites: BIOL 316 and BIOL 317 or BIOL 318 must be passed with a grade of C or higher

BIOL 479/579 Microbial Ecology Laboratory (1 Credit Hour)

A laboratory for measurement of microbial numbers and activity in natural environments.

Pre- or corequisite: BIOL 478

BIOL 481W/581 Forensic and Medical Entomology (5 Credit Hours)

This is a writing intensive course that provides a comprehensive survey of the insects used in legal investigations and medically important insects. Topics covered include the taxonomy, morphology, physiology, reproductive and developmental biology, and ecology of these insects along with the diseases they may vector. Research techniques in forensic and medical entomology will be learned through both field and laboratory activities.

Prerequisites: BIOL 291 and BIOL 292 must be passed with a grade of C (2.0) or higher

BIOL 482/582 Human and Veterinary Parasitology (3 Credit Hours)

The course will emphasize the principles of parasitism, including biology, physiology, genetics, morphology, and phylogeny of the major parasitic groups with a specific focus on the significant parasites of humans and animals of veterinary importance. The general biology of parasites including their life cycles, diagnosis, and treatment will be included as well.

Prerequisites: BIOL 293 and BIOL 294 must be passed with a grade of C or higher or permission of instructor

BIOL 487 Honors Research in Biology (2 Credit Hours)

Student performs mentored research in biological science. Student and faculty mentor must meet on a regular basis. The course is intended to be taken as a series with BIOL 488W. Available for pass/fail grading only.

Prerequisites: admission to the Honors Program and senior standing

BIOL 488W Honors Research in Biology (4 Credit Hours)

Independent study and scheduled meetings with faculty advisor. Supervised independent study in an area of individual interest in biology. The work in this course results in the production of a thesis. This is a writing intensive course.

Prerequisites: BIOL 487, admission to the Honors Program, senior standing, and a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C

BIOL 490/590 Advanced Human Physiology (4 Credit Hours)

All major physiological systems will be examined with an emphasis on normal physiology. Some clinical applications will be discussed.

Prerequisites: BIOL 241 or BIOL 251 must be passed with a grade of C (2.0) or higher

BIOL 494 Entrepreneurship in Biology (3 Credit Hours)

Ecological entrepreneurs consider the impact of products on the environment and are mindful of natural resources, sustainability, and social equity.

In this novel class students will test their skill at biologically-inspired entrepreneurship after learning about biomimicry, sustainability, and other relevant concepts.

Prerequisites: BIOL 291 and BIOL 292

BIOL 496/596 Topics in Biological Sciences (1-4 Credit Hours)

A structured specialty course for students at the senior level. Courses may include lecture and laboratory components.

Prerequisites: BIOL 123N and BIOL 124N must be passed with a grade of C (2.0) or higher, junior standing, and permission of instructor

BIOL 497 Undergraduate Research (1-3 Credit Hours)

The student performs laboratory and/or field research under the supervision of a Department of Biological Sciences faculty member. The student must devote a minimum of 3 hours per week for the equivalent of 1 credit. The student must maintain lab/field notes, must submit a written report, may be required to give an oral presentation, and must be evaluated by the faculty supervisor. If 3 credits are taken, then BIOL 497 counts as an upper-level biology elective course with a laboratory or field component.

Prerequisites: BIOL 123N and BIOL 124N or BIOL 138N and BIOL 139N must be passed with a grade of C or higher, junior standing, permission of the supervising faculty member, and permission of the Chief Departmental Advisor and Chair of the Department of Biological Sciences

BIOL 498/598 Independent Study (1-3 Credit Hours)

This unstructured course is based on a supervised project, without a laboratory or field component, that is selected to suit the needs of the individual student. The completion of a formal scientific paper documented with the appropriate primary technical literature is required. An oral presentation also may be required. Contact the Chief Departmental Advisor for details.

Prerequisites: BIOL 123N and BIOL 124N or BIOL 138N and BIOL 139N must be passed with a grade of C or higher; junior standing, permission of the supervising faculty member, permission of the Chief Departmental Advisor, and permission of the Chair of the Department of Biological Sciences also are required

BME - Biomedical Engineering

BME 403/503 Introduction to Mathematical Modeling in Physiology (3 Credit Hours)

This course introduces model development and model formulation with differential equations in physiology. Students will learn how to use Matlab to solve differential equations and visualize their results. The physiological focus will be on cellular physiology, particularly ion channel dynamics and homeostasis.

Prerequisites: BIOL 240 or BIOL 250 and MATH 200 or MATH 205 or MATH 211

BME 404/504 Introduction to Biomaterials (3 Credit Hours)

This course will introduce the properties of biomedical materials used as implants, prostheses, orthosis, and tissue-engineered materials as medical devices in contact with tissues and organs. Biocompatibility, immunological responses, wound healing, clotting cascade, surface compatibility and characterization of materials used for implantable medical devices will be introduced. Other topics such as ethical considerations and medical device regulatory mechanisms will be presented.

Prerequisites: BIOL 240 or BIOL 250 and MATH 200 or MATH 205 or MATH 211

BME 405/505 Biomechanics (3 Credit Hours)

The purpose of this course is to achieve a broad overview of biomechanics, focused on the musculoskeletal system. Students will explore multiscale mechanics, including whole-body movement and mechanical properties of the structures in the musculoskeletal system. Additionally, students will survey the experimental methods and computational modeling techniques used in biomechanics research.

Prerequisites: BIOL 240 or BIOL 250, and MATH 212

BME 409/509 Introduction to Regenerative Medicine (3 Credit Hours)

This course will introduce fundamental knowledge in regenerative medicine including therapeutic applications of biomaterials, tissue and stem cell engineering, gene therapy and bioelectronics, with emphasis on structure-function relationships of biologic systems. In addition to lecture, students will have opportunities for group discussions and presentations on milestone work related to tissue regeneration. Students will leave with a thorough understanding of true mammalian regeneration, wound healing/repair processes, and medical device milestones as related to human tissue regeneration and repair.

Prerequisites: BIOL 240 or BIOL 250 and MATH 200 or MATH 205 or MATH 211

BME 430/530 Therapy and Function Models for Medical Simulation (3 Credit Hours)

This course introduces students to the main Modeling & Simulation models. (1) Anatomical modeling based on robust medical image segmentation and meshing methodologies. (2) A therapy model to determine the impact of a medical intervention by synthesizing the effect of a therapy on the patient's tissues. (3) A collision model, which interacts with anatomy and therapy models, is used for haptics-driven simulations. This course will also explore physiological simulation and the use of finite elements to model biomechanics.

Prerequisites: ECE 250 or CS 250 or CS 251 and CS 260 or equivalent

BME 454/554 Introduction to Bioelectronics (3 Credit Hours)

This course covers the electrical properties of cells and tissues as well as the use of electrical and magnetic signals and stimuli in the diagnosis and treatment of disease. Typical topics to be covered include basic cell physiology, endogenous electric fields in the body, electrocardiography, cardiac pacing defibrillation, electrotherapy, electroporation, electrotherapy in wound healing. In addition ultra-short electrical pulses for intracellular manipulation and the application of plasmas to biological systems will be covered.

Prerequisites: PHYS 111N or higher and MATH 200 or higher

BME 462/562 Introduction to Medical Image Analysis (3 Credit Hours)

Introduction to basic concepts in medical image analysis. Medical image registration, segmentation, feature extraction, and classification are discussed. Basic psychophysics, fundamental ROC analysis and FROC methodologies are covered. Cross-listed with ECE 462/MSIM 462.

Prerequisites: a grade of C or better in MATH 212

BME 464/564 Biomedical Applications of Low Temperature Plasmas (3 Credit Hours)

This course is cross listed with ECE and Biology. It is designed to be taken by senior undergraduate students and first year graduate students. The course contents are multidisciplinary, combining materials from engineering and the biological sciences. The course covers an introduction to the fundamentals of non-equilibrium plasmas, low temperature plasma sources, and cell biology. This is followed by a detailed discussion of the interaction of low temperature plasma with biological cells, both prokaryotes and eukaryotes. Potential applications in medicine such as wound healing, blood coagulation, sterilization, and the killing of various types of cancer cells will be covered.

Prerequisites: Senior standing

BME 495/595 Topics in Biomedical Engineering (1-3 Credit Hours)

This course explores specialized topics in biomedical engineering, providing an in-depth study of emerging trends, technologies, and applications in the field. Topics may vary by semester and are designed to enhance students' understanding of cutting-edge developments in biomedical engineering.

Prerequisites: Departmental approval

BME 497/597 Independent Study in Biomedical Engineering (1-3 Credit Hours)

This course allows students to pursue independent research or study in biomedical engineering under the guidance of a faculty mentor. Students will explore specific areas of interest, develop problem-solving skills, and gain hands-on experience in a focused topic. A written report or presentation may be required as part of the course. Supervised and approved by the advisor.

Prerequisites: Departmental approval

BNAL - Business Analytics

BNAL 206 Business Analytics I (3 Credit Hours)

An introduction to methods of business analytics. Topics are concentrated in descriptive analytics, which include descriptive statistics, normal and binomial distributions, decision making under uncertainty and under risk, decision analysis incorporating sample information, sampling distributions and Central Limit Theorem, interval estimation, and hypothesis testing. Business and economic applications are emphasized. Computer software, as a tool for problem solving, is utilized where appropriate.

Prerequisites: A grade of C or better in MATH 162M or placement into a higher level math course

BNAL 306 Business Analytics II (3 Credit Hours)

Advanced descriptive and predictive analytics topics include advanced hypothesis testing, analysis of frequency data, correlation analysis, simple and multiple regression, and time series forecasting. Prescriptive analytics topics include linear programming formulation and managerial analysis, and distribution models. PERT/CPM models are also covered. Computer software is utilized throughout the course. Emphasis is on the interpretation of the various outcomes of the application of business analytics tools.

Prerequisites: MATH 200, BNAL 206 and a declared major in the University or permission of the Dean's Office

BNAL 367 Cooperative Education (1-3 Credit Hours)

Approval for enrollment and allowable credits are determined by the department. Additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment.

Prerequisites: Junior standing and a declared major in the University or permission of the Dean's Office

BNAL 368 Internship (1-3 Credit Hours)

Approval for enrollment and allowable credits are determined by the department. Additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment.

Prerequisites: BNAL 306 and a declared major in the University or permission of the Dean's Office

BNAL 369 Practicum (1-3 Credit Hours)

Approval for enrollment and allowable credits are determined by the department in the semester prior to enrollment; additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment. Student participation in a professional work experience. Qualifies as a CAP experience.

Prerequisites: BNAL 206 and BNAL 306 and a declared major in the University or permission of the Dean's Office

BNAL 403/503 Data Visualization and Exploration (3 Credit Hours)

This course introduces students to concepts and processes, technologies, and methodologies that are commonly used in data visualization that an organization may use to enhance its descriptive, predictive, and prescriptive methods for making fact-based decisions.

Prerequisites: A grade of C or better in BNAL 306 or permission of the instructor

BNAL 405 Spreadsheet-Based Data Analysis for Decision Making (3 Credit Hours)

The spreadsheet has become one of the most widely used analytical tools in the modern business environment. This course covers spreadsheet (e.g., Microsoft Excel) capabilities and business applications, with a focus on the use of spreadsheets for modeling, data analysis, and business decision support. Topics include concepts such as functions, pivot table, macros, analytical utilities, database connections, and interactive interfaces. Modeling and analysis in several areas such as forecasting, investment, quality, and sales are covered.

Prerequisites: BNAL 306 with a grade of C or better

BNAL 407/507 Prescriptive Analytics of Management Science (3 Credit Hours)

Students are introduced to prescriptive analytics through formulation and solution of mathematical models, with a particular focus on optimization models. The business use of the models, as well as their limitations, is emphasized. Topics include linear, integer, non-linear programming, network models, genetic algorithms, decision analysis, and project management models.

Prerequisites: A grade of C or better in BNAL 306 and a declared major in the University or permission of the Dean's Office or the instructor

BNAL 415/515 Advanced Business Analytics/Big Data Applications (3 Credit Hours)

This course addresses advanced business analytics techniques and the application of such techniques to large data sets. Some alternative business analytics strategies are introduced. Descriptive, predictive, and prescriptive models are included. Topics covered in this course include data visualization and exploration, cluster analysis, and developing and calibrating predictive models for big data. Applications of multivariate, logistic, and probit regression to business analytics are discussed. Software packages such as SAS/JMP/SPSS may be used.

Prerequisites: A grade of C or better in BNAL 306 and a declared major in the University or permission from the Dean's Office

BNAL 430/530 Probability and Statistics (3 Credit Hours)

This course provides a foundational understanding of probability and statistics in a business context. Students learn to analyze data, make informed decisions, and solve business problems using statistical techniques. Topics include sampling distributions, confidence intervals, hypothesis testing, simple and multiple regressions, and time series forecasting. Emphasis is placed on the application of the tools to business problems.

Prerequisites: Instructor permission

BNAL 432/532 Predictive Analytics for Business (3 Credit Hours)

Predictive analytics techniques for business. Applications include both shorter term forecasting for sales and operations management as well as forecasting for long term planning. Emphasis is on statistical methods to obtain and evaluate forecasts. Statistical models are implemented using standard software such as MINITAB, EXCEL, R, and/or Python.

Prerequisites: BNAL 306 and a declared major in the University or permission of the Dean's Office

BNAL 476/576 Simulation Modeling and Analysis for Business Systems (3 Credit Hours)

Simulation modeling is an integral part of the analytics revolution, enabling the creation of models that can represent the variability that exists in many real business systems. This course covers the theory and application of simulation modeling, with an emphasis on how simulation provides predictive and prescriptive analytics to support business decision-making. Topics include simulation fundamentals, the project life-cycle, model development, input and output analysis, verification and validation, and the presentation of a simulation study. We utilize a major commercial simulation software package for assignments and class projects.

Prerequisites: OPMT 303 with a grade of C or better and BNAL 306 with a grade of C or better, senior standing and a declared major in the University or permission of the Dean's Office

BNAL 495 Topics in Business Analytics (3 Credit Hours)

Selected advanced topics in decision sciences. Taught on an occasional basis. See the course schedule for the particular topic being taught each semester.

Prerequisites: Senior standing and a declared major in the University or permission of the Dean's Office

BNAL 497 Independent Study (1-3 Credit Hours)

Affords students the opportunity to undertake independent study under the direction of a faculty member.

Prerequisites: Permission of department

BUSN - Business Administration

BUSN 110 Introduction to Contemporary Business (1 Credit Hour)

Provides students with a preliminary understanding of business and gives them an opportunity to use office productivity software to enhance communications and presentations. Students should be able to identify career prospects for each of the primary business areas (such as Accounting, Finance, Management, etc.) and basic business terminology. Office productivity software (word processing, spreadsheets, and presentation) will be heavily used by the faculty and students for communication in the form of presentations and essays.

BUSN 401/501 Business Planning for Entrepreneurs I (2 Credit Hours)

Students are introduced to readily available resources to research and analyze a comprehensive feasibility process including a clear statement of the business idea/model, selection of the North American Industry Classification System (NAICS) codes, and research and analysis of the applicable industry, market and competitors. A marketing strategy, to include pricing, is developed, with emphases on social media and similar outreach tools.

Prerequisites: Junior standing

CDSE - Communication Disorders and Special Education

CDSE 497/597 Independent Study in Special Topics in Education (1-3 Credit Hours)

Independent study of selected topics in education.

Prerequisites: junior standing or permission of the instructor

CEE - Civil and Environmental Engineering

CEE 111 Information Literacy and Research (2 Credit Hours)

This course will introduce students to the needs, access, evaluation, use, impact and ethical/legal aspects of information, as well as to the application of information literacy and research in the fields of civil and environmental engineering.

Prerequisites: ENGN 110

CEE 195 Topics in Civil and Environmental Engineering (1-3 Credit Hours)

Special topics in civil and/or environmental engineering at the introductory level.

Prerequisites: Permission of the department chair

CEE 204 Statics (3 Credit Hours)

Introduction to engineering problems and their solutions through a study of the statics of particles and rigid bodies.

Prerequisites: MATH 211 with a C or higher

Pre- or corequisite: PHYS 231N

CEE 205 Engineering Dynamics (3 Credit Hours)

This course is designed to assist engineering students in acquiring a more thorough knowledge and proficiency in engineering mechanics. The course follows CEE 204 in the mechanics sequence. In this course, kinematics of particles and rigid bodies, mass moments of inertia, acceleration, work, energy, power, and special applications in the civil engineering field, such as inertia problems in vehicle collisions, rudiments of wave dynamics, etc. are included.

Prerequisites: CEE 204 with a grade of C or better

CEE 220 Mechanics of Deformable Bodies (3 Credit Hours)

This course provides fundamental theories to understand the strength of materials focused on civil engineering applications. It will cover stress-strain relationship, equilibrium of deformable bodies and behavior of axially loaded members. It will also analyze for stresses, strains, and deformation of members subjected to torsions in both elastic and inelastic ranges. Other topics, such as buckling and stability of columns, Mohr circle, and energy methods will also be discussed.

Prerequisites: CEE 204 with a grade of C or better

CEE 240 Geographic Information Systems in Civil and Environmental Engineering (2 Credit Hours)

Geographic Information Systems as they apply to civil and environmental engineering. Spatial data acquisition, generation and analysis methods from terrestrial, aerial and satellite sources. Modeling of terrain, land, and hydrographic information using CAD and GIS software in the creation and application of CAD design and GIS spatial databases to engineering problems.

Prerequisites: MATH 212, sophomore standing or higher

CEE 295 Topics in Civil and Environmental Engineering (1-3 Credit Hours)

Topics in civil and/or environmental engineering at the basic engineering level.

Prerequisites: Permission of the department chair

CEE 304 Probability and Statistics for Civil Infrastructure (3 Credit Hours)

This course studies the fundamentals of probability and statistics that are widely used in various fields of engineering. Specific areas of study include probability theory, counting methods, statistics and parameters, propagation of error, probability distribution functions, central limit theorem, hypothesis testing, linear regression, and correlation analysis. Applications of statistics and probability analysis in civil and environmental engineering will be discussed through examples. Furthermore, an introduction to data science and an overview of applications of artificial intelligence in CEE problems will also be discussed.

Prerequisites: junior standing in CEE

CEE 305 Numerical Methods for Civil and Environmental Engineering (1 Credit Hour)

Introduction to selected numerical methods and their applications in solving civil and environmental engineering problems.

Prerequisites: ENGN 150 or ENGN 122 and sophomore standing or higher

CEE 310 Structures I (3 Credit Hours)

Analysis of statically determinate structures. Influence lines and structural design. Displacement calculations. Introduction to analysis of indeterminate structures.

Prerequisites: CEE 220 with a grade of C or better

CEE 320 Civil Engineering Materials (3 Credit Hours)

Properties of steel, portland cement concrete, bituminous concrete, aggregates, and timber.

Prerequisites: CEE 220

CEE 323 Soil Mechanics (3 Credit Hours)

Fundamental engineering properties of soil and their application to earth structures and foundations. Topics include seepage, compaction, strength, and deformation characteristics of soils.

Prerequisites: CEE 220

Corequisites: CEE 324

CEE 324 Soil Mechanics Laboratory (1 Credit Hour)

Performance of various soil mechanics tests, including gradation, index testing, compaction, density, permeability, consolidation, shear tests for soils are conducted for students to gain hand-on experiences. The relevant principles are covered in CEE 323.

Prerequisites: Junior standing

Corequisites: CEE 323

CEE 330 Hydromechanics (3 Credit Hours)

Fluid properties, fluid statics and fundamentals of fluid kinematics. Steady, incompressible conservation laws for mass, momentum and energy including real fluid energy losses. Turbulent, incompressible fluid flows in closed conduits and with a free surface. Introduction to thermodynamics.

Prerequisites: MATH 212 and CEE 205 and junior standing in CEE

CEE 340 Hydraulics and Water Resources (3 Credit Hours)

Analysis of closed-conduit flow and open-channel flow. Principles of surface water hydrology and groundwater hydraulics. Economics and probability concepts in water resources planning.

Prerequisites: CEE 304; CEE 330 with a grade of C or better

Corequisites: CEE 341

CEE 341 CE Hydraulics and Water Resources Laboratory (1 Credit Hour)

Performing various labs and experiments for hydraulics, hydrology, and water resources for students to gain hand-on experiences. The relevant principles are covered in CEE 340.

Prerequisites: Junior standing

Corequisites: CEE 340

CEE 350 Environmental Pollution and Control (3 Credit Hours)

Introduction to the fundamental principles of environmental engineering. Topics in water quality, water and wastewater treatment, air quality, and solid waste and landfills are discussed.

Prerequisites: CHEM 121N-CHEM 122N, MATH 211, PHYS 231N and junior standing in CEE

CEE 367 Cooperative Education (1-3 Credit Hours)

May be repeated for credit. Available for pass/fail grading only. Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures as formally determined by the department prior to the semester in which the work experience is to take place.

Prerequisites: Approval by the department chair required; additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

CEE 368 Internship (1-3 Credit Hours)

May be repeated for credit. Available for pass/fail grading only. Academic requirements will be established by the department and will vary with the amount of credit desired. Allows students to gain short duration career-related experience.

Prerequisites: Approval by department is required; additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

CEE 369 Practicum (1-3 Credit Hours)

May be repeated for credit. Available for pass/fail grading only. Academic requirements will be established by the department and will vary with the amount of credit desired. Allows students to gain short duration career-related experience.

Prerequisites: Approval by department is required; Additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

CEE 370 Transportation Fundamentals (3 Credit Hours)

This course surveys the current practice of transportation engineering in the United States. It focuses on various ground transportation modes and covers policy, institutional planning and operational issues. Students are introduced to planning models, capacity analysis, and traffic impact analysis.

Prerequisites: Junior standing

CEE 395 Topics (1-3 Credit Hours)

Topics in civil and/or environmental engineering.

Prerequisites: permission of the instructor

CEE 402 Professional Practice of Engineering (1 Credit Hour)

The course will cover the practice and business aspects of engineering including concepts in management, business, public policy, and leadership. It will also cover public and private procurement of work, project management and execution, responsibility to clients, contracting, project finances, professional liability, and public safety.

Prerequisites: Senior standing

CEE 403W Civil Engineering Design Project and Professional Practice (3 Credit Hours)

For graduating seniors only. Group design project of civil engineering systems requiring synthesis, data gathering, preliminary investigation, master planning, conceptual designs, layouts, support studies, cost estimates and report writing. Emphasis will be on alternatives, constraints, economics, ethics and professional practice, business and project management, public policy and leadership. This is a writing intensive course.

Prerequisites: grade of C or better in CEE 401, ENGL 211C or ENGL 221C or ENGL 231C

CEE 410 Concrete Design (3 Credit Hours)

Fundamental concepts of reinforced concrete analysis and design by ultimate strength and working stress methods.

Prerequisites: CEE 310 with a grade of C or better

CEE 412/512 Computational Methods in Structures (3 Credit Hours)

Analysis of 2-D and 3-D determinate and indeterminate truss/beam/frame structures by the unified direct stiffness matrix method, for both hand-calculation and computer implementation. Popular commercialized (NASTRAN) software will also be discussed.

Prerequisites: CEE 310

CEE 414/514 Masonry Structures Design (3 Credit Hours)

Masonry materials, reinforced beams and lintels, walls, columns and pilasters, shear walls, and buildings.

Prerequisites: CEE 310

CEE 415/515 Steel Structures Design (3 Credit Hours)

Load and resistance factor design methods for steel structures.

Prerequisites: CEE 310

CEE 416/516 Wood Structures Design (3 Credit Hours)

Design of wood structures based on national design specification and load and resistance factor design.

Prerequisites: CEE 310

CEE 430/530 Foundation Engineering (3 Credit Hours)

Subsurface exploration, site preparation, design of shallow and deep foundations, and retaining structures.

Prerequisites: CEE 323 with a grade of C or better

CEE 431/531 Slope Stability and Earth Structures Design (3 Credit Hours)

Slope stability analysis, including limit equilibrium procedures, finite element method, seepage analysis, and advanced topics such as rapid drawdown, construction of embankments on soft soil, and seismic slope stability. Lateral earth retention systems, including gravity walls, excavation support systems, and applications of geosynthetic material, will be covered.

Prerequisites: CEE 323

CEE 432/532 Introduction to Earthquake Engineering (3 Credit Hours)

An overview of earthquake processes and details of the characteristics of destructive ground motion; the effects of such motion on civil engineering structures; reviews of current design practice in mitigating earthquake hazards for various civil engineering structures such as buildings, bridges, dams, lifelines, ports and harbors, etc.

Prerequisites: senior standing and permission of the instructor

CEE 433/533 Geomaterials Stabilization (3 Credit Hours)

This course studies soil and aggregate's physical, chemical and biological stabilization procedures. Students are introduced to chemical stabilization analysis and design using materials such as cement, lime, and fly ash. Physical ground modification, compaction methods and mechanical stabilization application and design are also studied.

Prerequisites: CEE 323

CEE 440/540 Hydraulic Engineering (3 Credit Hours)

Hydraulic transients; flow control structures; computer analysis of hydraulic systems; design of pipelines, open channels and culverts.

Prerequisites: CEE 340

CEE 446/546 Urban Stormwater Hydrology (3 Credit Hours)

Storm rainfall analysis, design rainfall hyetographs, runoff calculation procedures, detention basins, use of mathematical models to analyze and design urban storm drainage systems.

Prerequisites: CEE 340

CEE 447/547 Groundwater Hydraulics (3 Credit Hours)

Description of well hydraulics in single and multiple well systems. Determination of aquifer parameters from pumping tests. Use of computer models to determine drawdowns due to multiple well systems.

Prerequisites: CEE 340

CEE 450/550 Water Distribution and Wastewater Collection System Design (3 Credit Hours)

Design of water distribution systems, sanitary sewer systems and appurtenances.

Prerequisites: CEE 330

Corequisites: CEE 340

CEE 451 Water and Wastewater Treatment (3 Credit Hours)

Discussion of water quality constituents and introduction to the design and operation of water and wastewater treatment facilities.

Prerequisites: CEE 330, CEE 350

CEE 452/552 Air Quality (3 Credit Hours)

Study of air quality management standards and regulations and pollutant dynamics. Design and operation of emission control equipment for mobile and stationary sources of air pollution.

Prerequisites: CEE 350

CEE 454/554 Hazardous Waste Treatment (3 Credit Hours)

Study of sources, generation rates and characteristics of hazardous wastes and their regulation, handling, and design of treatment and disposal facilities.

Prerequisites: CEE 350

CEE 455/555 Pollution Prevention and Green Engineering (3 Credit Hours)

Application of engineering methods for the prevention of pollution. Review of the pollution prevention related regulations. Study of source reduction methods, analysis for environmentally conscious manufacturing methods, process changes, life cycle analysis, and water/energy conservation methods. Evaluation of pollution prevention case studies.

Prerequisites: CEE 350

CEE 457/557 Adaptation to Sea Level Rise (3 Credit Hours)

Investigation of complex relationships between humans and coastlines and study of how humans adapt and develop adaptation measures and solutions to tackle flooding caused by rising sea levels and subsequent heavy storm events. This course also evaluates natural and nature-based systems, engineered systems, different flood-proofing methods, and impacts of sea level rise on coastal water quality and the potential impacts on disease transmission.

Prerequisites: CEE 340 or CET 332

CEE 458/558 Sustainable Development (3 Credit Hours)

Overview of social, economical, technical environmental aspects of regional, national and international efforts to achieve sustainable development.

Discussion of the integration of industrial activity and ecological concerns utilizing principles of zero emissions, pollution prevention and design for the environment. (WEB Based, On-Line Course)

Prerequisites: junior standing or permission of instructor

CEE 459/559 Biofuels Engineering (3 Credit Hours)

Course covers the overview of renewable energy sources; fundamentals of biofuels; biomass and types of biomass (e.g., woody biomass, forest residues, agricultural residues, energy crops); composition of lignocelluloses (cellulose, hemicellulose, and lignin); biomass conversion technologies; thermochemical, supercritical water, and biochemical conversion processes; types of biofuels from biomass; liquid fuels (bioethanol, bio-oil, biocrude, and hydrocarbons); gaseous fuels (synthesis gas, hydrogen, biodiesel); solid fuels (biochar, torrefied biomass); biodiesel from vegetable oils, algae to biofuels; value-added processing of biofuel residues; economic and environmental assessments; policies and future R&D.

Prerequisites: permission of the instructor

CEE 471/571 Transportation Operations I (3 Credit Hours)

This is the first course in transportation operations and traffic flow theory. Topics include traffic engineering studies, capacity analysis, intersection control, traffic flow models, shockwave analysis, signal warrant analysis, and safety analysis. Course includes applications of modeling and simulation to isolated intersections.

Prerequisites: CEE 370

CEE 474/574 Transportation Data Analytics (3 Credit Hours)

This course presents the basic techniques for transportation data analytics. It will discuss statistical modeling, prominent algorithms, and visualization approaches to analyze both small- and large-scale data sets generated from transportation systems. Practices of using different data for various real-world traffic/transportation applications and decision making will also be discussed., (STAT 330); any programming language such as C, Python or Java is beneficial but not required.

Prerequisites: Basic probability and statistics (e.g

CEE 475/575 Geometric Design of Highways (3 Credit Hours)

This course provides students with an understanding of basic principles and techniques in order to develop skills in the highway geometric design process. It introduces design methods for three-dimensional layout for roadways, considering cross section (lanes and shoulders, curbs, medians, roadside slopes and ditches, sidewalks), horizontal alignment (tangents and curves), and vertical alignment (grades and vertical curves).

Prerequisites: CEE 370

CEE 482/582 Introduction to Coastal Engineering (3 Credit Hours)

Classical small amplitude wave theory, wave transformations in shallow water, shoaling, refraction, diffraction, reflection, breaking. Wave induced near shore currents and sediment transport processes. Alternatives to mitigate coastal erosion processes. Introduction to coastal structures.

Prerequisites: CEE 330 and permission of the instructor

CEE 495/595 Topics in Civil and Environmental Engineering (1-3 Credit Hours)

Special topics of interest with emphasis placed on recent developments in civil and/or environmental engineering.

Prerequisites: Permission of the department chair

CEE 497 Independent Study in Civil and Environmental Engineering (1-3 Credit Hours)

Individual analytical, experimental and/or design study selected by the student and supervised by the advisor.

Prerequisites: approval of the advisor

CET - Civil Engineering Technology

CET 120 Civil 2D Computer Aided Drafting (2 Credit Hours)

This course introduces students to computer aided drafting, where methods are taught with a major emphasis on practical application using two-dimensional AutoCAD software in the computer lab. This includes the basic principles of civil engineering drawings to include but not limited to: dimensioning, spot elevations, contours, plan and profile view, section views, details, scaling, measurements. It will introduce students to site plan drawings, structural views, architectural views, as well as buried infrastructure plan and profiles. Finally, it will be the basis for preparation of a working set of plans, for use in all follow-on CET courses.

CET 205 Principles of Surveying (3 Credit Hours)

Basic plane surveying measurements and computations, survey control systems, elementary digital mapping and simple curves, and building construction survey and stakeout. Field exercises using standard surveying instrumentation, traverse and leveling techniques, topographic mapping and curve layout.

Prerequisites: MATH 163 and MET 120 or CET 120

CET 210 Fundamentals of Building Construction (3 Credit Hours)

Introduction to various materials and methods available for design and construction of buildings. Covers application and combination of traditional materials and methods, and recent innovations in construction systems.

CET 221 Material Testing Laboratory (1 Credit Hour)

Standard Methods of inspecting and testing structural materials used in construction are demonstrated. Data is collected and interpreted according to industry standards with results reported.

Prerequisites: MATH 211

Pre- or corequisite: ENGT 220

CET 260 CAD for Building Applications (2 Credit Hours)

A detailed study of the form and content of typical construction drawings and 3D building models used in the construction industry. Commercial 3D CAD software is used to assemble a set of structural construction drawings. Standard specification documents are introduced.

Prerequisites: CET 120 or MET 120 and CET 210

CET 265 Civil 3D CAD (2 Credit Hours)

A detailed study into the development of civil site plans. Commercial software (AutoCAD Civil 3D) is introduced as a tool to assist in the design of civil sites and develop a set of civil site drawings.

Prerequisites: CET 120 or MET 120 and CET 205 and CET 210

CET 295 Topics (1-3 Credit Hours)

Study of selected topics.

CET 296 Topics (1-3 Credit Hours)

Study of selected topics.

CET 301 Introduction to Structural Design (4 Credit Hours)

Introduction to structural design of buildings and/or nonbuilding type structures using reinforced concrete, steel, and wood as materials. This course utilizes provisions of the American Concrete Institute ACI 318, American Institute of Steel construction AISC 360, and the National Design Specification NDS specifications. Forces, moments, and deflections in statically determinate beams, frames, and trusses due to various load cases and load combinations are determined.

Prerequisites: CET 220 and MATH 211

CET 325 Introduction to Land Development (3 Credit Hours)

Applications of fundamental site engineering principles, land design principles and permitting issues. A brief historical review of exemplary subdivision, urban designs and their impact on current practice. Site surveying and engineering issues including hydrology, storm water management, site geometry, grading, design of roads, engineering design standards, and computer applications in site engineering are examined. The principles of siting and theories of design for aesthetic and efficient alignment of roads, layout of structures, and subdivision parcels are introduced.

Prerequisites: CET 210

CET 330 Fluid Mechanics (4 Credit Hours)

Elementary mechanics of fluids. Fluid properties; hydrostatics; fluid kinematics; equations of motion; energy equation; momentum principles; flow of liquids and gasses in closed conduits; flow in open channels and/or compressible flow. Laboratory will demonstrate principles from the lecture material. All experiment results will be submitted in a written report format, including presentation and interpretation of experimental data. Use of spreadsheets is required.

Prerequisites: CET 220 and MATH 211

CET 332 Water Resources Engineering (3 Credit Hours)

Hydrologic and Hydraulic principles are utilized in the planning, design, operation and construction of water management projects. The course addresses fundamental Hydrology - the occurrence and movement of surface water including weather and climate; precipitation; evaporation; transpiration; runoff; infiltration; stream flow; hydrograph analysis; erosion; and sedimentation. Additional topics covered will include water distribution, use of water, and sustainability of water as a natural resource.

Prerequisites: CET 330

CET 334 Computer Applications in Hydraulic Engineering (3 Credit Hours)

Application of computer software in solving water resources problems; program development or application of available packages to solve assigned water resources problems. Use and application of commercial software for analysis and design of water distribution networks and gravity sewer collection systems.

Prerequisites: CET 330

CET 335 Fluid Mechanics Laboratory (1 Credit Hour)

A laboratory to demonstrate the verification of fluid equations and principles as well as the characteristics of fluid machinery. All experimental results will be submitted in a report format, including presentation and interpretation of experimental data. Use of spreadsheets is required. This is an online asynchronous class open only to transfer students with credit for the lecture portion of CET 330.

Prerequisites: CET 330

CET 340 Soils and Foundations (3 Credit Hours)

A study of the engineering properties of soil including stress, shear strength, and bearing capacity. Movement of water through soils, consolidation and settlement of structures and the design of shallow and deep foundations are also covered. Use of Excel spreadsheets is a requirement.

Prerequisites: CET 330

Corequisites: CET 341

CET 341 Soil Testing Laboratory (1 Credit Hour)

Course includes standard methods for inspecting, sampling, testing, and evaluating soils. Students use typical test equipment and perform tests on samples of local soils. Data is collected and results are interpreted and plotted.

Prerequisites: CET 330

Corequisites: CET 340

CET 355 Sustainable Building Practices (3 Credit Hours)

The course will examine industry trends in sustainable building practices. It explores the green building strategies used in the design and construction of sustainable buildings. The role of site selection, water efficiency, energy, materials and resources, and indoor environmental quality will be explored.

Prerequisites: Junior standing

CET 361 Construction Project Management (3 Credit Hours)

An introduction to the procedures and methods that are used by a contractor during the construction phase of a project. Special emphasis on planning, managing and documenting project activities. Topics include job site layout and control, subcontracting and purchasing and changes and claims/progress payments.

Prerequisites: CET 210

CET 365 Building Information Modeling (BIM) (3 Credit Hours)

This course is an introduction to building information modeling (BIM) and its implementation in building design and construction. Topics include the fundamentals of information modeling; business benefits of BIM; impacts of BIM on design and construction processes; integrated design process and project delivery; popular software applications and basic modeling techniques; and popular areas and best practices of BIM implementation.

Prerequisites: CET 260

CET 367 Cooperative Education (1-3 Credit Hours)

Available for pass/fail grading only. Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures as formally determined by the department prior to the semester in which the work experience is to take place (offered fall, spring, summer).

Prerequisites: Approval by the CET program director in accordance with the policy for granting credit for Cooperative Education programs; a student who needs to add additional credit to maintain full-time status should contact the program director

CET 368 Internship (1-3 Credit Hours)

Available for pass/fail grading only. Academic requirements will be established by the department and will vary with the amount of credit desired. Allows students to gain short duration career-related experience.

Prerequisites: approval by department

CET 395 Topics (1-3 Credit Hours)

Topics in Civil Engineering Technology.

Prerequisites: permission of the instructor

CET 396 Topics (1-3 Credit Hours)

Topics in Civil Engineering Technology.

Prerequisites: permission of the instructor

CET 400 Computer Applications in Structural Design (3 Credit Hours)

Analysis of indeterminate structures including the verification of results using the commercial software RISA 3D. Introduction to computer modeling in 2D and 3D, pre and post processors, interpretation of results and development of professionally written reports. Structural analysis topics include influence lines, cables and arches, slope deflection, moment distribution, and stiffness methods of analysis. Analysis and design of structures using steel, wood, and reinforced concrete materials using RISA 3D. Design meeting strength and serviceability requirements per codes, specifications, and standards.

Pre- or corequisite: CET 301

CET 402 Structural Steel Design (3 Credit Hours)

Structural analysis and design of steel structures, including beams, girders, columns, composite sections, trusses, rigid frames and connections using the LRFD method. Analysis of statically-determinate cantilever (hungspan) systems also are covered.

Prerequisites: CET 301

CET 405 Environmental Loads (3 Credit Hours)

Familiarize the student with the analysis of environmental design loads required for the design of building and non-building type structures in the United States. A thorough study of loading categories and load combinations for ASD and LRFD is also covered. Extensive use of the International Building Code (IBC) and the Minimum Design Loads for Building and Other Structures (ASCE 7) is expected.

Prerequisites: CET 301

CET 410 Reinforced Concrete Design (3 Credit Hours)

Structural analysis and design of reinforced concrete members. Topics include flexural analysis and design of structures, including slabs, beams and columns using strength design procedures.

Prerequisites: Junior standing

Pre- or corequisite: CET 301

CET 412 Wood Design (3 Credit Hours)

Analysis and design of wooden structural elements of buildings to satisfy design codes. Included are shearwall design and connections as well as beams, columns and other elements.

Prerequisites: CET 301

CET 414 Bridge Design (3 Credit Hours)

Familiarize the student with the analysis and design of simple and continuous span bridge structures utilizing the Load and Resistance Factor Design (LRFD) methodology. Determination of the most common design loads used in bridge design. Introduction to the AASHTO Specification for Structural Bridge Design used in United States.

Prerequisites: CET 410 or CET 450 or CET 402

CET 417 Design of Reinforced Concrete Foundations (3 Credit Hours)

Analysis and design of reinforced concrete foundations typically used in buildings and bridges. Topics include loads and loading groups, methods of analysis and design, abutments, and isolated and continuous footings. The class will be focused on the load and resistant factor design method. Use of the ASCE 7, ACI and AASHTO codes is necessary.

Prerequisites: CET 340 and CET 410

CET 420 Hydrology and Drainage (3 Credit Hours)

Hydrologic and hydraulic principles are utilized in the planning, design, operation and construction of water management projects. Topics include elements of stormwater drainage pertaining to hydrology, hydraulics of open channel and pipe flow, stormwater management, and issues pertinent to state stormwater regulations and the Chesapeake Bay Preservation Act.

Prerequisites: CET 332

CET 428 Buried Infrastructure (3 Credit Hours)

This is a capstone design course in the field of water resources. It incorporates pressurized pipe flow, gravity flow, and hydrology into the design of municipal infrastructure for water, sewer and stormwater projects. Topics will also cover rehabilitation and replacement of aging infrastructure in urban and neighborhood settings. Use of spreadsheets is required.

Prerequisites: CET 332 or CET 334 or CET 325

CET 430 Hydraulic Engineering (3 Credit Hours)

Analysis of hydraulics problems associated with the design of civil engineering structures. Uniform, steady flow in open channels; hydraulic models; design problems for dams; spillways and hydraulic structures; hydraulic machinery and other related topics will be discussed. Use of spreadsheets is required.

Prerequisites: CET 330

CET 456 Resilience and Sustainability (3 Credit Hours)

An investigation of emerging construction industry trends in resilience and sustainability. Evaluation of applications for vulnerable, small-scale and rural projects. Quantify increases in project value by incorporating life cycle analysis, planning for continuity of function, and deliberate risk management.

Prerequisites: CET 355

CET 458 Managing the Climate Crisis (3 Credit Hours)

This course provides a structured framework for developing resilience. It focuses on addressing the impacts of the climate crisis like flooding, heat, water, and wildfire through principles, designs, and real-world solutions. This is achieved by examining hard engineering structures, nature-based design, and hybrid solutions to protect communities and create a resilient design future.

Prerequisites: Junior standing

CET 460 Construction Cost Estimating (3 Credit Hours)

Evaluation and analysis of the basic elements of estimating construction costs for buildings. Elements of take off and pricing for Division 1 through Division 6 are covered. Use of computers and estimating software are emphasized.

Prerequisites: CET 361

CET 462 Construction Planning and Scheduling (3 Credit Hours)

The basic elements of planning and scheduling building construction projects. All elements of building construction, including the precedence methods of scheduling. Use of computers and planning and scheduling software are emphasized.

Prerequisites: CET 210

CET 467 Construction Finance and Equipment Utilization (3 Credit Hours)

This course provides a study of financial management in civil engineering construction projects. It emphasizes the development of techniques for effective financial monitoring. Additionally, the curriculum covers concepts related to construction equipment utilization, ensuring an economic alignment of machine capabilities with project requirements. It also addresses the application of time value of money principles for financial decision-making in equipment selection and utilization for heavy highway and major building construction projects.

Prerequisites: CET 361 and CET 301 or CET 330

CET 472 Contract Documents (3 Credit Hours)

The basic concepts of contracts and the standard contract documents used in construction. Also included is a study of the dispute resolution process in arbitration.

Prerequisites: CET 361

CET 495 Topics (1-3 Credit Hours)

Topics in civil engineering technology.

Prerequisites: permission of the instructor

CET 496 Topics (1-3 Credit Hours)

Topics in civil engineering technology.

Prerequisites: permission of the instructor

CGE - Center for Global Engagement

CGE 001 Beginning Reading and Vocabulary (0 Credit Hours)

This course helps students become independent and efficient readers of both academic and nonacademic texts by introducing students to a range of level-appropriate topics and genres often encountered at the university. Lessons focus on applying academic reading strategies, critical thinking, and vocabulary development skills across a variety of written texts. Classroom discussions and exercises allow students to share and discuss their ideas about texts.

Prerequisites: Beginning placement

CGE 002 Beginning Writing (0 Credit Hours)

This course provides instruction and practice in the writing and grammar skills to help students become successful in academic contexts. By the end of this course, students will be able to write in a number of level-appropriate genres with confidence and attention to clarity and grammatical accuracy. Reading materials provide a basis for developing ideas and models for writing. Grammar and mechanics are learned in context.

Prerequisites: Beginning placement

CGE 003 Beginning Listening and Speaking (0 Credit Hours)

This course focuses on building students' listening and speaking skills for both social and academic settings. Students develop their speaking skills through role-plays, discussions, vocabulary-building activities, and short presentations. In addition, students develop and apply listening skills to a variety of short lectures, podcasts, interviews, and conversations on a variety of topics.

Pre- or corequisite: Beginning placement

CGE 004 Beginning Pronunciation (0 Credit Hours)

This course focuses on the recognition and pronunciation of the English sound system. In addition to work on differentiating between similar and/or confusing sounds, students will have an opportunity to focus on personal difficult areas that interfere with the comprehension of the student's speech. Guidance will be provided on techniques to improve word stress, rhythm, articulation, pausing, and linking.

Prerequisites: Beginning placement

CGE 005 Beginning Topics in English for Academic Purposes (0 Credit Hours)

A study of selected topics in English for Academic Purposes based on student need and interest.

Prerequisites: Beginning placement

CGE 010 English Language Center Seminar (0 Credit Hours)

This seminar course is for academic and campus orientation and other required student activities for new and continuing English Language Center students.

CGE 011 Intermediate Reading and Vocabulary (0 Credit Hours)

This course helps students become independent and efficient readers of both academic and nonacademic texts by introducing students to a range of level-appropriate topics and genres often encountered at the university. Lessons focus on applying academic reading strategies, critical thinking, and vocabulary development skills across a variety of written texts. Classroom discussions and exercises allow students to share and discuss their ideas about texts.

Prerequisites: CGE 001 or Intermediate placement

CGE 012 Intermediate Writing (0 Credit Hours)

This course provides instruction and practice in the writing and grammar skills to help students become successful in academic contexts. By the end of this course, students will be able to write in a number of level-appropriate genres with confidence and attention to clarity and grammatical accuracy. Reading materials provide a basis for developing ideas and models for writing. Grammar and mechanics are learned in context.

Prerequisites: CGE 002 or Intermediate placement

CGE 013 Intermediate Listening and Speaking (0 Credit Hours)

This course focuses on building students' listening and speaking skills for both social and academic settings. Students develop their speaking skills through role-plays, discussions, vocabulary-building activities, and short presentations. In addition, students develop and apply listening skills to a variety of short lectures, podcasts, interviews, and conversations on a variety of topics.

Prerequisites: CGE 003 or Intermediate placement

CGE 014 Intermediate Pronunciation (0 Credit Hours)

This course focuses on the recognition and pronunciation of the English sound system. In addition to work on differentiating between similar and/or confusing sounds, students will have an opportunity to focus on personal difficult areas that interfere with the comprehension of the student's speech. Guidance will be provided on techniques to improve word stress, rhythm, articulation, pausing, and linking.

Prerequisites: CGE 004 or Intermediate placement

CGE 015 Intermediate Topics in English for Academic Purposes (0 Credit Hours)

A study of selected topics in English for Academic Purposes based on student need and interest.

Prerequisites: CGE 005 or Intermediate placement

CGE 021 Advanced I Reading and Vocabulary (0 Credit Hours)

This course focuses on developing students' academic reading skills through critical engagement with a variety of text genres including English literature, academic journal articles, research essays, and mainstream media. #Application of reading strategies, vocabulary development, critical thinking, reflection, and discussion of texts are centered throughout the course.

Prerequisites: CGE 011 or Advanced I placement

CGE 022 Advanced I Writing from Sources (0 Credit Hours)

This course focuses on building and refining students' advanced-level skills and strategies to be effective writers of the kinds of compositions they will produce in university coursework. Students will progress in their understanding and use of language, develop effective writing processes, incorporate sources, and demonstrate an understanding of the rhetorical situation. Grammar and mechanics are learned in context.

Prerequisites: CGE 012 or Advanced I placement

CGE 023 Advanced I Listening and Speaking (0 Credit Hours)

This course focuses on building students' listening competence and communicative fluency to a level sufficient to handle most everyday, academic, and professional encounters. In this course, students will move from listening to conversations, interviews, radio programs, or podcasts to more complex documentaries, movies, and lectures. Students will develop their discussion and conversation skills for social and academic purposes, both in and out of class.

Prerequisites: CGE 013 or Advanced I placement

CGE 024 Advanced I Academic Presentations and Pronunciation (0 Credit Hours)

This course prepares students for success in public speaking situations typically encountered in university courses and professional environments. Students will learn to plan, organize, and deliver presentations on a variety of formal and informal topics using effective visual aids. A variety of areas of pronunciation will be covered, paying special attention to comprehensibility and individual students' needs.

Prerequisites: CGE 014 or Advanced I placement

CGE 025 Advanced I Topics in English for Academic Purposes (0 Credit Hours)

Special topics in English for Academic Purposes based on student need and interest.

Prerequisites: CGE 015 or Advanced I placement

CGE 026 Advanced I Grammar (0 Credit Hours)

This course focuses on providing students with a comprehensive understanding of advanced grammatical structures, enabling students to effectively communicate and write in a precise, nuanced, and sophisticated manner within an academic setting. Emphasis is placed on both accuracy and fluency, ensuring that students not only recognize and understand advanced grammar rules but also practice incorporating them naturally in speaking and writing.

Prerequisites: Advanced I placement

CGE 030 University 101 (0 Credit Hours)

This course helps students develop a broad range of transferable skills to become a more versatile and successful university student, in addition to becoming a more reflective and adaptive learner. Students will learn foundational academic skills such as time management and goal setting, research and digital literacy, exam and study skills, as well as reflective and critical thinking.

Prerequisites: Advanced I or Advanced II placement

CGE 031 Advanced II Reading and Vocabulary (0 Credit Hours)

This course focuses on developing students' academic reading skills through critical engagement with a variety of text genres including English literature, academic journal articles, research essays, and mainstream media. #Application of reading strategies, vocabulary development, critical thinking, reflection, and discussion of texts are centered throughout the course.

Prerequisites: CGE 021 or Advanced II placement

CGE 032 Advanced II Writing from Sources (0 Credit Hours)

This course focuses on building and refining students' advanced-level skills and strategies to be effective writers of the kinds of compositions they will produce in university coursework. Students will progress in their understanding and use of language, develop effective writing processes, incorporate sources, and demonstrate an understanding of the rhetorical situation. Grammar and mechanics are learned in context.

Prerequisites: CGE 022 or Advanced II placement

CGE 033 Advanced II Listening and Speaking (0 Credit Hours)

This course focuses on building students' listening competence and communicative fluency to a level sufficient to handle most everyday, academic, and professional encounters. In this course, students will move from listening to conversations, interviews, radio programs, or podcasts to more complex documentaries, movies, and lectures. Students will develop their discussion and conversation skills for social and academic purposes, both in and out of class.

Prerequisites: CGE 023 or Advanced II placement

CGE 034 Advanced II Academic Presentations and Pronunciation (0 Credit Hours)

This course prepares students for success in public speaking situations typically encountered in university courses and professional environments. Students will learn to plan, organize, and deliver presentations on a variety of formal and informal topics using effective visual aids. A variety of areas of pronunciation will be covered, paying special attention to comprehensibility and individual students' needs.

Prerequisites: CGE 024 or Advanced II placement

CGE 035 Advanced II Topics in English for Academic Purposes (0 Credit Hours)

Special topics in English for Academic Purposes based on student need and interest.

Prerequisites: CGE 025 or Advanced II placement

CGE 036 Advanced II Grammar (0 Credit Hours)

This course focuses on providing students with a comprehensive understanding of advanced grammatical structures, enabling students to effectively communicate and write in a precise, nuanced, and sophisticated manner within an academic setting. Emphasis is placed on both accuracy and fluency, ensuring that students not only recognize and understand advanced grammar rules but also practice incorporating them naturally in speaking and writing.

Prerequisites: CGE 026 or Advanced II placement

CGE 040 Undergraduate Oral Communication and Literacy (0 Credit Hours)

This course is designed for multilingual and/or international undergraduate students in order to develop, use, and refine academic communication skills by critically engaging with a variety of college-level text genres. Students will learn to prepare and develop academic presentations as well as effectively participate in group discussions. This is a non-credit course; students cannot use this course for academic credit toward a degree program. Undergraduate Monarch English Transition (MET) Program Exit Criteria: Earn a grade point average of 2.5 in academic courses and grades of C or higher and 85% attendance or higher in the MET courses.

CGE 042 Undergraduate Academic Writing (0 Credit Hours)

This course develops multilingual and/or international undergraduate students' foundational writing skills, emphasizing the writing process. Students learn to match writing to audience and purpose, write in a variety of academic genres, and incorporate source material into their work to be able to transfer acquired skills into discipline-specific writing. Students will learn to recognize and avoid plagiarism by developing a personal voice while also appreciating the importance of the author's ideas and credibility. Problems with sentence structure, lexical grammar, and diction are addressed individually. This is a non-credit course; students cannot use this course for academic credit toward a degree program. Undergraduate Monarch English Transition (MET) Program Exit Criteria: Earn a grade point average of 2.5 in academic courses and grades of C or higher and 85% attendance or higher in the MET courses.

CGE 095 Topics in English for Special Programs (0 Credit Hours)

Specialized topics in English designed for Special Programs. Courses offered based on programmatic needs and interests.

Prerequisites: Enrollment within a Special Program

CGE 131 Advanced II Reading and Vocabulary (3-5 Credit Hours)

This course focuses on developing students' academic reading skills through critical engagement with a variety of text genres including English literature, academic journal articles, research essays, and mainstream media. #Application of reading strategies, vocabulary development, critical thinking, reflection, and discussion of texts are centered throughout the course.

Prerequisites: CGE 021 or Advanced II placement

CGE 132 Advanced II Writing from Sources (3-5 Credit Hours)

This course focuses on building and refining students' advanced-level skills and strategies to be effective writers of the kinds of compositions they will produce in university coursework. Students will progress in their understanding and use of language, develop effective writing processes, incorporate sources, and demonstrate an understanding of the rhetorical situation. Grammar and mechanics are learned in context.

Prerequisites: CGE 022 or Advanced II placement

CGE 133 Advanced II Listening and Speaking (3-5 Credit Hours)

This course focuses on building students' listening competence and communicative fluency to a level sufficient to handle most everyday, academic, and professional encounters. In this course, students will move from listening to conversations, interviews, radio programs, or podcasts to more complex documentaries, movies, and lectures. Students will develop their discussion and conversation skills for social and academic purposes, both in and out of class.

Prerequisites: CGE 023 or Advanced II placement

CGE 134 Advanced II Academic Presentations and Pronunciation (2-4 Credit Hours)

This course prepares students for success in public speaking situations typically encountered in university courses and professional environments. Students will learn to plan, organize, and deliver presentations on a variety of formal and informal topics using effective visual aids. A variety of areas of pronunciation will be covered, paying special attention to comprehensibility and individual students' needs.

Prerequisites: CGE 024 or Advanced II placement

CGE 135 Advanced II Topics in English for Academic Purposes (1-5 Credit Hours)

Special topics in English for Academic Purposes based on student need and interest.

Prerequisites: CGE 025 or Advanced II placement

CGE 136 Advanced II Grammar (2-4 Credit Hours)

This course focuses on providing students with a comprehensive understanding of advanced grammatical structures, enabling students to effectively communicate and write in a precise, nuanced, and sophisticated manner within an academic setting. Emphasis is placed on both accuracy and fluency, ensuring that students not only recognize and understand advanced grammar rules but also practice incorporating them naturally in speaking and writing.

Prerequisites: CGE 026 or Advanced II placement

CGE 140 Undergraduate Oral Communication and Literacy (4 Credit Hours)

This course is designed for multilingual and/or international undergraduate students in order to develop, use, and refine academic communication skills by critically engaging with a variety of college-level text genres. Students will learn to prepare and develop academic presentations as well as effectively participate in group discussions.

CGE 142 Undergraduate Academic Writing (4 Credit Hours)

This course develops multilingual and/or international undergraduate students' foundational writing skills, emphasizing the writing process. Students learn to match writing to audience and purpose, write in a variety of academic genres, and incorporate source material into their work to be able to transfer acquired skills into discipline-specific writing. Students will learn to recognize and avoid plagiarism by developing a personal voice while also appreciating the importance of the author's ideas and credibility. Problems with sentence structure, lexical grammar, and diction are addressed individually.

CGE 195 Topics in English for Academic Purposes (1-3 Credit Hours)

A study of selected topics in English for academic purposes. These courses will appear in the course schedule and will be more fully described by academic advisors.

CGE 196 Topics in Language, Culture, and Society (1-3 Credit Hours)

A study of selected topics in language, culture and society. These courses will appear in the course schedule and will be more fully described by academic advisors.

CGE 295 Topics in English for Academic Purposes (1-3 Credit Hours)

A study of selected topics in English for academic purposes. These courses will appear in the course schedule and will be more fully described by academic advisors.

CGE 296 Topics in Language, Culture, and Society (1-3 Credit Hours)

A study of selected topics in language, culture and society. These courses will appear in the course schedule and will be more fully described by academic advisors.

CGE 368 Internship (1-3 Credit Hours)

A structured work experience which allows students to apply skills and further develop knowledge related to their program of study in a multicultural and multilingual context. Students must work for at least 50 hours per course credit.

Prerequisites: Junior standing; permission of course instructor

CGE 395 Topics in English for Academic Purposes (3 Credit Hours)

A study of selected topics in English for academic purposes. These courses will appear in the course schedule and will be more fully described by academic advisors.

Prerequisites: Junior standing or approval of the department director

CGE 396 Topics in Language, Culture, and Society (3 Credit Hours)

A study of selected topics in language, culture and society. These courses will appear in the course schedule and will be more fully described by academic advisors.

Prerequisites: Junior standing or approval of the department director

CGE 449/549 Linguistics for Working with Multilingual Populations (3 Credit Hours)

This course introduces fundamental concepts in linguistics essential for working with multilingual populations. Students examine core structural components of language including sound systems, word formation, sentence structure, and meaning, developing skills to analyze linguistic data across diverse languages and global English varieties. The course examines the intricate relationships between language, culture, and society through topics such as linguistic worldviews, regional and social variation, multilingualism, writing systems, and language-based discrimination. This course includes a service-learning component which involves working directly with local multilingual learners at ODU and within the community.

Prerequisites: Junior standing or approval of the instructor

CGE 450/550 Social Justice & Literacy for Immigrant and Refugee Learners (3 Credit Hours)

This course provides an introduction to issues critical to the education of immigrant- and refugee-background learners. Students will learn to actively participate in refugee and immigrant communities, acquire an awareness of this population's experiences and needs, and explore issues related to social justice, education, language, and access. Language development theories and pedagogical strategies to engage collaboratively and compassionately with multilingual and multicultural newcomers are explored and practiced.

Prerequisites: Junior standing or approval of the instructor

CGE 496/596 Topics in Language, Culture, and Society (3 Credit Hours)

The advanced study of selected topics in language, culture, and society designed to permit small groups of qualified students to work on subjects of mutual interest, which because of their specialized nature, may not be offered regularly. These courses will appear in the course schedule and will be more fully described by academic advisors.

Prerequisites: Junior standing or approval of the department director

CHEM - Chemistry and Biochemistry

CHEM 103 Preparatory Chemistry (3 Credit Hours)

An introductory course designed to acquaint the student with the basic principles of chemistry.

Prerequisites: knowledge of basic algebra

CHEM 105N Introductory Chemistry (3 Credit Hours)

This course is the first part of a two-semester sequence of chemistry covering topics in general, organic, and biological chemistry. In this part, an introduction to the principles of inorganic (general) chemistry is provided. The topics to be covered include measurements, atoms and elements, compounds and their bonds, energy and matter, gases, solutions, acids and bases, chemical reactions and quantities, chemical equilibrium, and nuclear chemistry. This course does not meet the prerequisite for CHEM 123N, and cannot be used toward the CHEM major or minor. Students wishing to pursue advanced study in chemistry should take CHEM 121N, CHEM 122N, CHEM 123N, and CHEM 124N. Credit for CHEM 105N is not allowed if a student has prior credit for CHEM 121N. CHEM 105N + CHEM 106N satisfy four credits of the University's Nature of Science general education requirement.

Prerequisites: knowledge of basic algebra

Corequisites: CHEM 106N

CHEM 106N Introductory Chemistry Laboratory (1 Credit Hour)

An introduction to common laboratory techniques and the process of science is provided. CHEM 105N + CHEM 106N satisfy four credits of the University's Nature of Science general education requirement.

Pre- or corequisite: CHEM 105N

CHEM 107N Introductory Organic and Biochemistry (3 Credit Hours)

This course is the second part of a two-semester sequence of chemistry covering topics in general, organic, and biological chemistry. In this part, an introduction to organic compounds and their role in biological systems is provided. The topics to be covered include the structure, nomenclature, and reactivity of organic compounds, the structure and function of important biomolecules, and the chemistry of metabolic pathways. This course does not meet the prerequisite for CHEM 211, and cannot be used toward the CHEM major or minor. Students wishing to pursue advanced study in chemistry should take CHEM 121N, CHEM 122N, CHEM 123N, and CHEM 124N. CHEM 107N + CHEM 108N satisfy four credits of the University's Nature of Science general education requirement.

Prerequisites: CHEM 105N with a grade of C or better

Corequisites: CHEM 108N

CHEM 108N Introductory Organic and Biochemistry Laboratory (1 Credit Hour)

Laboratory experiments involving organic compounds and biomolecules are performed. CHEM 107N + CHEM 108N satisfy four credits of the University's Nature of Science general education requirement.

Prerequisites: CHEM 106N with a grade of C or better

Pre- or corequisite: CHEM 107N

CHEM 120 Foundations of Chemistry I Laboratory for Online Degree Programs (1 Credit Hour)

In this course, students perform laboratory experiments to complement the topics presented in the companion lecture course, CHEM 121N. CHEM 121N + CHEM 120 does not satisfy the university's Nature of Science requirement. This is a distance learning course restricted to students in an online degree program.

Pre- or corequisite: CHEM 121N

CHEM 121N Foundations of Chemistry I Lecture (3 Credit Hours)

This is the first of a two-course series, designed for science and engineering majors, that prepares the student for subsequent studies in molecular science and constitutes the foundation for all upper-level chemistry courses. Topics include the descriptive chemistry of selected elements, modern atomic and molecular structure, stoichiometry, thermochemistry, and gas laws. A student receiving credit for CHEM 121N cannot receive additional credit for CHEM 103 or CHEM 105N. CHEM 121N + CHEM 122N satisfy 4 credits of the University's Nature of Science general education requirement. Pre- or **Prerequisites:** MATH 102M or MATH 103M or higher with a grade of C or better and a qualifying score on the Chemistry Placement Exam or successful completion of the Chemistry Placement online modules or CHEM 103 or CHEM 105N with a grade of C or better

Corequisites: CHEM 122N or CHEM 120

CHEM 122N Foundations of Chemistry I Laboratory (1 Credit Hour)

Laboratory experiments are designed to complement the topics presented in the companion lecture course, CHEM 121N. A student receiving credit for CHEM 122N cannot receive additional credit for CHEM 106N. CHEM 121N + CHEM 122N satisfy 4 credits of the University's Nature of Science general education requirement.

Pre- or corequisite: CHEM 121N

CHEM 123N Foundations of Chemistry II Lecture (3 Credit Hours)

This is the second of a two-course series, designed for science majors, that prepares the student for subsequent studies in molecular science and constitutes the foundation for all upper-level chemistry courses. Topics include states of matter, solutions, electrochemistry, thermodynamics, equilibria, and kinetics. CHEM 123N + CHEM 124N satisfy 4 credits of the University's Nature of Science general education requirement.

Prerequisites: CHEM 121N with a grade of C or better

CHEM 124N Foundations of Chemistry II Laboratory (1 Credit Hour)

Laboratory experiments are designed to complement the topics in the companion lecture course, CHEM 123N. CHEM 123N + CHEM 124N satisfy 4 credits of the University's Nature of Science general education requirement.

Prerequisites: CHEM 121N and CHEM 122N with grades of C or better

Pre- or corequisite: CHEM 123N

CHEM 125 Foundations of Chemistry II Lab with Introduction to Chemical Research (2 Credit Hours)

This course introduces students to foundational laboratory skills and research in the chemical sciences. Students will gain experience in experimental design and chemical research through a rotation in a faculty member's research lab.

Prerequisites: CHEM 121N, CHEM 122N, and CHEM 160G with a grade of B or better AND a Chemistry or Biochemistry major

Corequisites: CHEM 123N

CHEM 160G Introduction to Chemistry and Biochemistry Research and Careers (3 Credit Hours)

This course introduces students to information literacy and research in chemistry and biochemistry in the context of future career success. Students will develop skills in searching, evaluating, and citing information required for research projects. Potential career paths and strategies for student success will be investigated to establish a solid platform for development as a chemist or biochemist. Course activities will include field trips to and guest speakers from local industry.

Pre- or corequisite: CHEM 103 or a Nature of Science (N) course

CHEM 171T Influence of Polymers on Society (3 Credit Hours)

In this course, the history of synthetic and natural polymers will be studied from their initial development to modern day. Through these studies, students will learn how polymers are produced, the properties of polymers, and the many application of polymers. Further, the impact these materials have on society will be examined in many different areas such as medicine, electronics, consumer goods and the environment.

CHEM 173T Nutritional Biochemistry (3 Credit Hours)

Students will explore the role biotechnology plays in understanding and advancing nutrition and the effects this has on human health, development and societies. The key biological molecules such as vitamins, amino acids, proteins, fats and carbohydrates and their nutritional functions will be discussed. Nutritional biochemistry as it relates to human development, medicine and the evolution of human species will be explored. Students will review present day nutritional issues such as popular diets, organic foods, farming practices and advances such as genetically modified foods.

CHEM 175T Neurotechnology (3 Credit Hours)

Neurotechnology is the technology used to understand (assessment neurotechnology) and moderate (intervention neurotechnology) brain chemistry with regards to various aspects of consciousness, thought, memory, perception, addiction and other higher order activities and disorders in the brain. From pharmaceutical drugs to brain scanning, the impact of neurotechnology affects nearly everyone either directly or indirectly - for example: drug use for depression, sleep, ADD, or neurotic behavior; cancer scanning; stroke rehabilitation; etc. This course will explore the basics of neurotechnology and its impact on human behavior and performance as well as broader impacts on society. Further, students will learn how neurotechnology is used to assess and intervene in the neurochemistry of the brain with a particular emphasis on addictive behavior and neurodegenerative disorders.

CHEM 195 Selected Topics (1-3 Credit Hours)

Selected laboratory or lecture topics designed for students who need to supplement a transfer course to fulfill a course requirement.

Prerequisites: permission of the chief departmental advisor or chair of the department

CHEM 197 Undergraduate Research Experience in Chemistry and Biochemistry (0 Credit Hours)

Student participation in a supervised, undergraduate research experience for which credit will not apply to the degree. Experience must be related to the student's major, minor or career area of interest.

Prerequisites: permission of the instructor

CHEM 211 Organic Chemistry I Lecture (3 Credit Hours)

Introduction to organic compounds, isomerism and nomenclature, stereochemistry and conformational analysis, in depth mechanistic understanding of proton transfer reactions, substitution and elimination reactions, and addition to C=C bonds.

Prerequisites: CHEM 123N with a grade of C or better

CHEM 212 Organic Chemistry I Laboratory (2 Credit Hours)

Experience is offered in fundamental laboratory techniques applicable to the characterization, separation and purification of various organic compounds including stereoisomers and introduction to organic reactions.

Prerequisites: CHEM 124N or CHEM 125 with a grade of C or better

Pre- or corequisite: CHEM 211 with a grade of C or better

CHEM 213 Organic Chemistry II Lecture (3 Credit Hours)

Chemistry of carbon compounds with in-depth treatments of reaction mechanisms, modern spectral techniques, and new synthetic methods to meet the needs of chemistry and biochemistry majors.

Prerequisites: CHEM 211 with a grade of C or better

CHEM 214 Organic Chemistry II Laboratory (2 Credit Hours)

Experience is offered in synthetic, separation, and analytical methods of organic chemistry. Modern synthetic and spectroscopic techniques are introduced.

Prerequisites: CHEM 212 with a grade of C or better

Pre- or corequisite: CHEM 213 with a grade of C or better

CHEM 216 Advanced Organic Chemistry Laboratory (2 Credit Hours)

Experience is offered in advanced organic reactions and spectroscopic techniques. In addition, students will carry out a short, customized, research project in Organic Chemistry or Organic Materials.

Prerequisites: CHEM 211 and CHEM 212 with a grade of C or better; approval by the course instructor or coordinator

Pre- or corequisite: CHEM 213

CHEM 320T Survey of Forensic Science (3 Credit Hours)

This three-credit general education T course (Impacts of Technology) will delve into the principles and practices of forensic science, including crime scene investigation, evidence collection, and analysis using advanced technological methods. The course covers a wide range of forensic disciplines, emphasizes the legal and ethical aspects of forensic work, and includes case studies to illustrate the practical applications of technology in solving crimes. Through interdisciplinary collaboration and critical thinking, students will gain a comprehensive understanding of the crucial role technology plays in modern forensic science.

Prerequisites: Completion of CHEM 123N with a grade of C or better

CHEM 321 Analytical Chemistry Lecture (3 Credit Hours)

A study of the fundamental principles of quantitative chemical analysis including the application of principles of equilibria to analytical processes. Emphasis is given to gravimetric and titrimetric methods as well as consideration of electrical, optical, and other methods of chemical analysis.

Prerequisites: CHEM 123N and MATH 163 or MATH 205 with a grade of C or better

CHEM 322 Analytical Chemistry Laboratory (2 Credit Hours)

Statistical principles or measurements and error analysis are integrated with experiments designed to evaluate and refine techniques of fundamental measurements to a level of analytical competency. These techniques are applied to the analysis of samples using gravimetric, titrimetric, electrical and optical methods.

Prerequisites: CHEM 124N or CHEM 125 with a grade of C or better

Pre- or corequisite: CHEM 321 or permission of the instructor

CHEM 325 Forensic Biochemistry and Microscopy with Laboratory (3 Credit Hours)

This 3-credit upper-level undergraduate course explores the intersection of biochemistry and microscopy in forensic science. Students will gain an in-depth understanding of biochemical principles and techniques used to analyze biological evidence in criminal investigations, including blood, hair, and bodily fluids. The course emphasizes the application of advanced microscopy methods such as light, fluorescence, and electron microscopy to identify and characterize forensic samples. Through a combination of lectures, case studies, and hands-on laboratory work, students will develop skills in sample preparation, molecular analysis, and the interpretation of forensic data. Topics covered include protein analysis, DNA/RNA profiling, toxicology, and the role of microscopy in identifying trace evidence at crime scenes. By the end of the course, students will be equipped with the knowledge to apply biochemistry and microscopy tools to real-world forensic investigations and casework.

Prerequisites: CHEM 213

Pre- or corequisite: A grade of C or better in CHEM 214

CHEM 331 Physical Chemistry Lecture I (3 Credit Hours)

Quantum chemistry, molecular structure, and spectroscopy.

Prerequisites: CHEM 321, CHEM 213, MATH 212 and PHYS 231N-PHYS 232N with a grade of C or better

CHEM 332W Experimental Physical Chemistry I (2 Credit Hours)

A laboratory class focusing on a variety of physical chemical techniques. Topics may include electronic, vibrational (Raman) and NMR spectroscopies, calorimetry, viscosity, and atomic force microscopy. This is a writing intensive course, aiming to achieve an in-depth understanding of the physical principles underlying the techniques.

Prerequisites: grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C

Pre- or corequisite: CHEM 331 with a grade of C or better

CHEM 333 Physical Chemistry Lecture II (3 Credit Hours)

Chemical thermodynamics of pure substances and solutions, chemical equilibrium, electrochemistry, chemical kinetics, and statistical thermodynamics.

Prerequisites: CHEM 331 with a grade of C or better

CHEM 334W Experimental Physical Chemistry II (2 Credit Hours)

A laboratory class focusing on a variety of physical chemical techniques. Topics may include X-Ray Diffraction, Bomb Calorimetry, Thermal Gravimetric Analysis (TGA), Conductance of Solutions, and Polymer Physical Properties. This course may also include a team project that will incorporate many of the techniques learned in the physical chemistry lab sequence. This project will introduce the students to working as a team to address a specific challenge such as one might encounter in an industrial or government laboratory setting. This is a writing intensive course.

Prerequisites: grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C

Pre- or corequisite: CHEM 332W and CHEM 333 with a grade of C or better

CHEM 339T The Chemistry of the Environment (3 Credit Hours)

This class explores the impact of chemical technologies on current environmental topics using basic chemical principles and the scientific method as standards for evaluating and understanding pressing environmental issues. Topics include global and ocean warming, air pollution, atmospheric ozone depletion, effects of enhanced UV light, acid rain and ocean acidification, toxic heavy metals, radioactivity and nuclear power plant disasters, indoor air quality and radon, water pollution, sewage and water treatment, drinking water quality, waste disposal and plastics, pesticides, and the food chain. The course will use math to a modest degree including basic Algebra. It is highly recommended that students have passed a college level algebra math class (e.g., MATH 102M or MATH 103M or higher) and one year of high school chemistry.

Prerequisites: Any General Education Nature of Science (N) course

CHEM 343T Science and Technology in Art (3 Credit Hours)

This combined lecture and lab course will explore the chemical and physical properties of artists' materials from pigments and binders to ceramics. Topics will include the nature of light and color, historical origins and development of pigments and artistic methods, synthesis of dyes and pigments, and the application of technology to art historical analysis. The course will include hands-on experience with modern laboratory equipment and field trips to local museums and conservation labs.

Prerequisites: Completion of one Nature of Science general education course or permission of the instructor

CHEM 351 Inorganic Chemistry (3 Credit Hours)

This foundational course provides an introduction to inorganic chemistry. Topics include periodic law, bonding theory, oxidation/reduction, acid/base theory, descriptive chemistry of the main group, an introduction to transition metal coordination chemistry, and human applications of inorganic chemistry.

Prerequisites: Grade of C or better in CHEM 211

CHEM 352 Inorganic Chemistry Laboratory (2 Credit Hours)

Synthesis of metal and nonmetal inorganic compounds and organometallic compounds, their characterization by physical methods, and a study of their properties.

Prerequisites: CHEM 124N or CHEM 125 and CHEM 211 each with a grade of C or better

Pre- or corequisite: CHEM 351 with a grade of C or better

CHEM 359 Forensic Chemistry with Laboratory (3 Credit Hours)

Students will develop familiarity of scientific laboratory and evidentiary practices within the subfield of forensic chemistry as well as perform inquiry-based coursework on topics of importance within forensic science. Topics will include toolmark, serial number restoration and ballistic analysis; blood alcohol analysis; microscopic and chemical analysis of fibers; glass, soil and trace evidence analysis; fingerprint analysis; handwriting analysis; analysis of residues of explosives, accelerants, and unknown chemicals.

Prerequisites: CHEM 211 and CHEM 212

CHEM 365 Undergraduate Teaching Experience (1-3 Credit Hours)

Teaching experience in a chemistry classroom or laboratory setting under the direct supervision of the course instructor. Available for Pass/Fail grading only.

Prerequisites: junior standing and/or approval of the appropriate departmental coordinator

CHEM 367 Cooperative Education (1-3 Credit Hours)

May be repeated for credit. Student participation for credit is based on the academic relevance of the work experience, criteria, and evaluative procedures as formally determined by the department and the Cooperative Education program prior to the semester in which the work experience is to take place. Available for pass/fail grading only. (qualifies as a CAP experience)

Prerequisites: Approval by department is required; Additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

CHEM 369 Chemistry Practicum (1-3 Credit Hours)

A student may choose a coop, internship, research, or student teaching experience to gain out-of-class experience related to the major.

Prerequisites: CHEM 331/CHEM 332W (Chemistry major) or CHEM 441/CHEM 442W (Biochemistry major) and the approval of the appropriate departmental coordinator

CHEM 411/511 Natural Products Chemistry in the Caribbean (4 Credit Hours)

A bioinorganic and natural products course that entails the chemistry of the use of chromium, vanadium, and herbs in medicine and the use of tunicates as biomonitors of heavy metal pollution in Jamaica. This is a study abroad course intended for the Maymester term.

Prerequisites: CHEM 211 and CHEM 212 with a C or better

CHEM 415/515 Intermediate Organic Chemistry (3 Credit Hours)

An in-depth look at organic reaction mechanisms, including polar, pericyclic, radical and organometallic reactions.

Prerequisites: CHEM 211-CHEM 213 with a grade of C or better

CHEM 421/521 Instrumental Analysis Lecture (3 Credit Hours)

Designed to be taken concurrently with CHEM 422/CHEM 522. A study of the basic principles of spectroscopic, chromatographic, and electrochemical methods of quantitative chemical analysis. Methods of chemical instrumentation are also included.

Prerequisites: CHEM 321, MATH 205 or MATH 211, and PHYS 232N or PHYS 112N each with a grade of C or better

CHEM 422/522 Instrumental Analysis Laboratory (3 Credit Hours)

An intensive laboratory study of the principles of analytical chemistry. Experiments in spectroscopic, chromatographic, and electrochemical methods are conducted to illustrate fundamental principles and to provide the opportunity to develop skills in the use of instrumentation for chemical measurement.

Prerequisites: CHEM 322

Pre- or corequisite: CHEM 421

CHEM 439/539 Introduction to Pharmaceutical Chemistry (3 Credit Hours)

An introduction to the fundamental concepts of drug action including pharmacodynamics (effect of drugs on the body) and pharmacokinetics (ADME: absorption, distribution, metabolism and elimination) of drugs; an introduction to the process of new drug discovery and synthesis will also be taught.

Prerequisites: CHEM 213 and CHEM 214 (or CHEM 216) with a grade of "C" or higher; CHEM 321 and CHEM 441 recommended

CHEM 441/541 Biochemistry Lecture (3 Credit Hours)

This course is a one-semester survey of the major molecular constituents, bioenergetics, enzymes, nucleic acid structure, and genetic information transfer pathways fundamental to biochemistry.

Prerequisites: CHEM 211 with a grade of C or better

CHEM 442W/542 Biochemistry Laboratory (4 Credit Hours)

Principles and techniques of biochemical and immunological procedures involving protein characterization and isolation, enzymology, bioinformatics, and common molecular biology techniques for nucleic acids will be presented. This is a writing intensive course.

Prerequisites: CHEM 214 with a grade of C or better and ENGL 211C or ENGL 221C or ENGL 231C with a grade of C or better

Pre- or corequisite: CHEM 441/CHEM 541 with a grade of C or better

CHEM 443/543 Intermediate Biochemistry (3 Credit Hours)

This course presents an in-depth study of protein structure, folding, and synthesis. The major metabolic pathways will be studied in detail regarding thermodynamics and mechanism of regulation or control of individual enzymes and entire metabolic pathways. Concepts of metabolic disease will be introduced and effects on integrated metabolism will be presented.

Prerequisites: CHEM 441/CHEM 541 with a grade of C or better or equivalent

CHEM 449/549 Environmental Chemistry (3 Credit Hours)

An overview of the natural chemical systems operating in the atmosphere, in the terrestrial environment (both water and soils), and in the oceans, and the potential effects that human activities may have on them. Specific topics include the origin and evolution of the earth and life, the chemistry of the atmosphere (including the ozone layer and greenhouse effect), the organic and inorganic components of soil and water, chemical weathering of rocks, metal complexation, biological processes in soil and water, and global-scale chemical processes.

Prerequisites: CHEM 123N, CHEM 213 and CHEM 321 with a grade of C or higher or permission of the instructor

CHEM 451/551 Advanced Inorganic Chemistry (3 Credit Hours)

Theoretical aspects of modern inorganic chemistry: bonding theories, stereochemistry, acid-base theories, coordination compounds, organometallic and bioinorganic compounds.

Prerequisites: CHEM 351 with a grade of C or better

CHEM 452/552 Advanced Inorganic Chemistry Laboratory (2 Credit Hours)

Synthesis of metal and nonmetal inorganic compounds and organometallic compounds, their characterization by modern physical methods, and a study of their properties.

Prerequisites: CHEM 351 and CHEM 352

CHEM 453/553 Essentials of Toxicology (3 Credit Hours)

Fundamental principles of toxicology: dose-response relationship, toxicologic testing, chemical and biological factors influencing toxicity, organ toxicology, carcinogenesis, mutagenesis, teratogenesis.

Prerequisites: CHEM 213 with a grade of C or higher

CHEM 459 Advanced Forensic Chemistry and Crime Scene Investigation (3 Credit Hours)

Application of advanced scientific practices for the identification and collection of evidence, documentation, and techniques for crime scene reconstruction (e.g., blood stain pattern analysis and interpretation, accident reconstruction; ballistics) used in crime scene investigation. Topics include history and theory of crime scene investigation; nature and properties of evidence types; safety and security of the crime scene; crime scene search techniques; photography and videography used for documentation of crime scene evidence; report writing and case preparation. This laboratory course will culminate with a group crime scene reconstruction project.

Prerequisites: CHEM 359

Pre- or corequisite: CHEM 325

CHEM 460/560 Frontiers in Nanoscience and Nanotechnology (1 Credit Hour)

Nanotechnology presents unparalleled opportunities for advances in technology and medicine. Simultaneously, nanotechnology presents new challenges to organisms and to our environment. These undefined risk factors threaten to slow the development of new technologies and novel medical therapies. This course will review: structure, synthesis and properties of key nanomaterials; key applications of nanomaterials in technology and medicine; and impacts of nanomaterials on plant and animal physiology and the environment more generally. This course will be team-taught by faculty members in Biological Sciences, Chemistry and Biochemistry, and Engineering.

Prerequisites: junior standing

CHEM 461 Forensic Professional Practice (3 Credit Hours)

An examination and evaluation of scientific evidence in criminal investigations as well as individual and group activities focusing on professional practices of forensic science. Topics will include courtroom testimony, introduction to law, quality assurance and chain of custody as well as ethical considerations in forensic science. and the criminal justice system.

Prerequisites: CHEM 359

CHEM 468 Research Methods in Mathematics and Science (3 Credit Hours)

Emphasizes the tools and techniques used to solve scientific problems. Topics include use and design of experiments, use of statistics to interpret experimental results, mathematical modeling of scientific phenomena, and oral and written presentation of scientific results. Students will perform four independent inquiries, combining skills from mathematics and science to solve research problems. Required for Chemistry teaching licensure track; not available as upper-division elective in content area.

Prerequisites: CHEM 331, STEM 201, and admission to the MonarchTeach program

CHEM 485 Chemistry and Biochemistry Seminar (1 Credit Hour)

The formal presentation of a chemical or biochemical topic before students and faculty. Students will also take Major Field Test during this course.

Prerequisites: Senior standing; restricted to chemistry and biochemistry majors

Pre- or corequisite: CHEM 421 or CHEM 443

CHEM 490 Senior Thesis I (1 Credit Hour)

Part one of a two-semester thesis project involving literature research, development of scientific writing skills, and obtaining lab experience using a variety of techniques and equipment. Each student will undertake a research experience under the supervision of a departmental faculty member. A preliminary report of research findings is required at the end of the semester.

Prerequisites: Chemistry or Biochemistry major; Senior standing; Cumulative GPA of 3.20 or higher

CHEM 494 Entrepreneurship in Chemistry and Biochemistry (3 Credit Hours)

A high level of economic activity and development for any industrialized nation has at its core a strong STEM component. Within this component, the fields of chemistry and biochemistry form one of the strongest interdisciplinary links by providing an understanding of the processes and products at a molecular level. This course will allow students to combine their academic knowledge in chemistry and biochemistry with the needs of real-world businesses to formulate an economically viable business plan that encompasses a scientifically and economically sound proof-of-concept.

Prerequisites: Junior standing

CHEM 495/595 Selected Topics (1-3 Credit Hours)

Study of selected topics.

Prerequisites: permission of the instructor

CHEM 497 Independent Study (1 Credit Hour)

An opportunity is afforded students to undertake independent study or an original investigation under the direction of a faculty member.

Prerequisites: course background appropriate to the proposed study project and approval of the department chair and the faculty/research advisor

CHEM 498 Independent Study (2 Credit Hours)

An opportunity is afforded students to undertake independent study or an original investigation under the direction of a faculty member.

Prerequisites: course background appropriate to the proposed study project and approval of the department chair and the faculty/research advisor

CHEM 499 Senior Thesis II (2 Credit Hours)

Continuation of CHEM 490. The research culminates in a thesis that includes a literature review, description of methods, results and conclusions, and an oral presentation.

Prerequisites: CHEM 490 and a cumulative GPA of 3.20 or better

CHIN - Chinese

CHIN 111F Beginning Chinese (6 Credit Hours)

This course focuses on the fundamental elements of the Chinese language within a cultural context. Emphasis is placed on building a foundation of basic listening, speaking, reading, and writing skills. The course includes Chinese Pinyin phonetic system, character formation, basic sentence structures, and Chinese culture and cultural activities. Students are expected to comprehend and respond to essential topics in Chinese and demonstrate their cultural awareness.

CHIN 212 Intermediate Chinese (6 Credit Hours)

This course continues to focus on the fundamental elements of the Chinese language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. The course includes Chinese basic sentence patterns and real-life topics on Chinese cultural activities. Students are expected to comprehend and respond with grammatical accuracy to spoken and simple written Chinese and demonstrate their cultural awareness.

Prerequisites: CHIN 111F

CHIN 295 Topics in Chinese (1-3 Credit Hours)

Study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest.

Prerequisites: Junior standing or permission of instructor

CHIN 311 Advanced Chinese Language and Culture I (3 Credit Hours)

This course takes students to an advanced level of communicative competence and language social interaction. The course includes more complex sentence patterns and Chinese cultural activities. Students learn to respond to topics of interest to college-age students, such as campus life, career planning, and Chinese cultural traditions. Students are exposed to the speech of native speakers in real cultural situations and develop sensitivity to communicative strategies and cultural competency.

Prerequisites: CHIN 212

CHIN 312 Advanced Chinese Language and Culture II (3 Credit Hours)

This course takes students to a higher level of communicative competence and language social interaction. The course gradually introduces more formal speech and written-style language in the real cultural context. The course trains students to interpret textual and cultural meanings and to express their opinions and cultural understanding by using connected paragraph length discourse.

Prerequisites: CHIN 311

CHIN 395 Topics in Chinese (1-3 Credit Hours)

Selected topics, genres, authors and/or literary, cultural, sociopolitical, or historical movements in the Chinese-speaking world. May be repeated for credit if the topic is different.

Prerequisites: Junior standing or permission of the instructor

CHIN 396 Topics in Chinese (1-3 Credit Hours)

Seminars engage students in in-depth study of a specified topic through readings, research and oral and written student reports. Special attention is paid to theoretical and bibliographic issues. Topics vary according to the areas of expertise and professional interests of departmental faculty. May be repeated if topics are different.

Prerequisites: Junior standing or permission of the instructor

CHIN 495 Topics in Chinese (3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. May be repeated for credit if the topic is different.

Prerequisites: Senior standing or permission of the instructor

COMM - Communications

COMM 101R Public Speaking (3 Credit Hours)

Preparation, delivery, and analysis of types of speeches with emphasis on extemporaneous speaking.

COMM 103R Voice and Diction (3 Credit Hours)

An introduction to the analysis and practice of effective voice and articulation. Applications across various communication contexts, such as public communication, media, and social communication.

COMM 112R Introduction to Interpersonal Communication (3 Credit Hours)

An introduction to concepts, processes, and effects of communication in personal and social relationships. Emphasis on fundamental communication skills necessary for the formation and maintenance of relationships.

COMM 126R Honors: Public Speaking (3 Credit Hours)

Open only to students in the Honors College. A study of the theory, strategies, and techniques of public speaking with emphasis on its application to effective conflict resolution.

COMM 195 Topics in Communication (1-3 Credit Hours)

A study of selected topics designed for non-majors, or for elective credit within a major. These courses will appear in the course schedule, and will be more fully described in a booklet distributed to all academic advisors.

COMM 196 Topics in Communication (1-3 Credit Hours)

A study of selected topics designed for non-majors, or for elective credit within a major. These courses will appear in the course schedule, and will be more fully described in a booklet distributed to all academic advisors.

COMM 200S Introduction to Human Communication (3 Credit Hours)

An introduction to the discipline and methods of human communication. Survey of the major approaches to studying communication across the range of human communication contexts and functions.

COMM 225 Introduction to Production Technology (3 Credit Hours)

Fundamentals of construction, lighting, and production techniques in contemporary theatre and film. Students will apply acquired skills to active productions for ODU Theatre and Film productions.

COMM 226S Honors: Introduction to Human Communication (3 Credit Hours)

Open only to students in the Honors College. An introduction to the discipline and methods of human communication. Survey of the major approaches to studying communication across the range of human communication contexts and functions.

COMM 227A Honors: Film Appreciation (3 Credit Hours)

Open only to students in the Honors College. This class will focus on both contextual and close text analysis of masterworks as they have influenced film art and industry. Students in this course are expected to develop basic research, communication, viewing and critical thinking skills as they apply their knowledge to the analysis of the film experience.

COMM 244 Introduction to Production Design (3 Credit Hours)

An introduction to principles, methods, and materials used in designing stage and film productions.

COMM 260 Understanding Media (3 Credit Hours)

An examination of mass communication--books, newspapers, magazines, radio, TV, film, sound recordings, and the Internet--as a global institution, industry, and social force. Media literacy skills are emphasized, as are matters of technology, content, economics, history and impact.

COMM 269 Visual Storytelling (3 Credit Hours)

This online course will introduce students to the process of making movies. Students will learn basic conceptual and technical principles of the filmmaking process using personal equipment, such as an iPhone. The course is intended for non-cinema majors and does not satisfy the prerequisite requirement for higher-level production courses.

COMM 270A Film Appreciation (3 Credit Hours)

This class focuses on both contextual and close text analysis of masterworks as they have influenced film art and industry. Students in this course are expected to develop basic research, communication, viewing and critical thinking skills as they apply their knowledge to the analysis of the film experience.

COMM 271 Introduction to Filmmaking (3 Credit Hours)

This course will introduce the beginning student to making movies. Students will learn the basics of working with cameras, lights, sound recording, video editing and post production. This is a hands-on production course and the required prerequisite to most higher-level production courses. Students who complete COMM 271 cannot enroll in COMM 269 and have that course count toward their major.

COMM 272G Digital Literacy (3 Credit Hours)

Digital literacy refers to the unequal understanding people have about how digital technologies work, how that work is regulated, and how digital technologies are used - by us and by others - as effective and strategic communication and information tools. This course offers students a pathway to become digitally literate by teaching them how the work they perform on digital platforms impacts their interpersonal, communal, and social interactions as consumers, citizens, and content producers.

COMM 278G Advertising & Society (3 Credit Hours)

Advertising influences consumer beliefs and decision-making. This course introduces students to fundamental concepts in advertising and consumer culture while developing skills and knowledge in information and digital literacy. Topics covered include consumerism and resistance, representation in advertising, audience segmentation, and digital advertising. As they learn to critically evaluate and analyze advertising and its audiences, students will practice message evaluation and research skills. Students will also consider legal and ethical use of information in advertising.

COMM 280T Entertainment Technologies (3 Credit Hours)

This course is an introduction to the entertainment industry including working methods, processes, and equipment for live, recorded, and interactive entertainment. The exploration will include theatre, opera, dance, concert productions, theme parks, themed-retail, film production, immersive, interactive and virtual environments, and gaming technology. Attention is given to the positive and negative aspects of entertainment technologies and how they impact culture and society.

COMM 295 Topics in Communication (1-3 Credit Hours)

A study of selected topics designed for nonmajors or for elective credit within a major. These courses will appear in the course schedule and will be more fully described by academic advisors.

COMM 300 International Sojourning (3 Credit Hours)

This course is designed to prepare ODU study-abroad students for successful international sojourns. Topics to be covered include culture, culture shock, reverse culture shock and strategies for a successful study-abroad experience.

Prerequisites: junior standing or permission of instructor

COMM 301 Critical Methodologies (3 Credit Hours)

This survey course introduces students to critical methodologies utilized in the study of media texts. Through case studies and hands-on exercises, students will learn how to study the production, consumption, and engagement with popular culture and how to decode its meanings.

Prerequisites: COMM 260

COMM 302 Communication Research Methods I (3 Credit Hours)

An introduction to communication research from a social science perspective. Experiment, survey, content analysis and observational approaches are covered. Students learn statistical data collection and data analysis techniques.

Prerequisites: STAT 130M, COMM 200S and six hours of 300-400 level communication courses or permission of instructor

COMM 303 Introduction to Strategic Communications (3 Credit Hours)

A study of interactions within and among communication workplaces and the public. Attention is given to the media, promotions, community relations, and public information.

Prerequisites: COMM 308W or permission of the instructor

COMM 304 Advanced Public Speaking (3 Credit Hours)

An analysis and expression of professional speeches, delivered in public, business and special occasion contexts. Attention is given to audience analysis, library research, development of arguments/evidence as content, creation and use of professional visual aids, expression of appropriate verbal and nonverbal speech cues, speaker credibility, and extemporaneous delivery skills.

Prerequisites: COMM 101R

COMM 305 Work-Life Communication (3 Credit Hours)

This course is an examination of both the theory and practice of communication in the professional setting. Content includes communication theory, work-life communication, as well as the roles of interpersonal, organizational, and mediated communication as related to the workplace.

Prerequisites: Junior standing or permission of instructor

COMM 307 Understanding European Film (3 Credit Hours)

This course provides students with an historic overview of films from a variety of European countries. Students gain the vocabulary necessary to analyze individual films and for the comparative analysis of films from different cultural and historical contexts. The course will focus on issues such as national and individual identity, film as aesthetic form, gender and sexuality, and popular culture.

Prerequisites: Junior standing or permission of instructor

COMM 308W Effective Media Writing (3 Credit Hours)

This writing-intensive course equips students with the foundational skills for effective writing across multiple media platforms, including print, digital, and broadcast. Emphasizing clarity, accuracy, and ethical practices, students will learn to craft news stories, feature articles, and press releases while adapting their work to diverse audiences. The course also introduces the role of data in enhancing media writing, demonstrating how analytics can shape content strategy and improve audience engagement. Students will also integrate multimedia elements and explore storytelling techniques essential for professional media environments. Ultimately, this prerequisite course for the Journalism/Public Information and Strategic Communication concentrations seeks to ensure a solid writing foundation for all future media professionals.

Prerequisites: Sophomore standing

COMM 309 Media Relations (3 Credit Hours)

Companies and organizations from just about every sector have a person or in some cases entire offices tasked with media relations. This course will take an in-depth look at the evolving landscape of multimedia communications, including seismic changes in the media in general, the rise of bloggers, influencers, and other shared media models, and the increasing role that content generation plays in traditional media relations. The course will include hands-on instruction and projects in content generation, media pitching and contact lists, media interviews, press conferences, as well as non-traditional earned media practices.

Prerequisites: COMM 260 or permission of the instructor

Pre- or corequisite: COMM 303 or permission of the instructor

COMM 310 Strategic Communications Campaigns (3 Credit Hours)

This course emphasizes a multi-disciplinary and multi-media approach to problem solving. Students will prepare a strategic communication campaign on behalf of a real client. It will include the production of research, strategy, and media material for use by the client. These materials, in turn, may be used in student portfolios as examples of professional capabilities.

Prerequisites: COMM 260 or permission of the instructor

Pre- or corequisite: COMM 303 or permission of the instructor

COMM 311 Strategic Communications Tactics (3 Credit Hours)

This course provides students skills needed to enter the workforce with a robust set of domain-specific skills, which includes practicing those skills in a realistic, hands-on setting, so they feel more ready to win and succeed in jobs in the competitive, modern marketplace. This course will provide relevant skills training to strategic communication students, while fortifying these students for professional success.

Prerequisites: junior standing

Pre- or corequisite: COMM 303

COMM 314 Nonverbal Communication (3 Credit Hours)

An introduction to the theories, processes and effects of communication in nonverbal codes. Topics include kinesics, proxemics and paralanguage. Critical analysis and contemporary research emphasized.

Prerequisites: Junior standing and COMM 200S, or permission of the instructor

COMM 315W Sex, Gender, and Communication (3 Credit Hours)

An overview of communication theory and research examining gendered verbal and nonverbal communication. Topics include communication differences as a function of gender, theories that seek to explain these differences, and critical examination of social practices that create gender prescriptions. This is a writing intensive course.

Prerequisites: Junior standing, COMM 200S, and a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, or permission of the instructor

COMM 321 Production Management for Television and Stage (3 Credit Hours)

This course assists students in understanding the elements of production management both in television and on stage. The course emphasizes organizational and communication skills; technical production knowledge; professional rehearsal and performance protocol according to the rules of AEA, AFTRA and SAG as well as basic production budgeting and scheduling.

Prerequisites: Junior standing or permission of the instructor

COMM 323 Leadership and Events Management (3 Credit Hours)

The course covers the systematic process of organizational assessment from basic communication channels (verbal, printed, and electronic modes of communication), to interpersonal and group communication, to the management of events and staff. This course examines the importance of leadership roles within organizations in planning any event as well as the communication dynamics between management and those being supervised.

Prerequisites: COMM 200S or permission of the instructor

COMM 325 Sound Design for Stage and Camera (3 Credit Hours)

This class introduces the concepts and techniques of sound design and sound effects for the stage and camera. Students learn design of sound elements in both a live and recorded environment as well as learn the current equipment and software in digital sound reproduction.

Prerequisites: Junior standing or permission of the instructor

COMM 326 Foundations of Group Communication (3 Credit Hours)

An introduction to the study of communication in task groups. Course reviews foundational literature and emphasizes communication competencies relevant to optimizing group outcomes including group observation, participation, assessment, and leadership.

Prerequisites: Junior standing and COMM 200S or permission of the instructor

COMM 330 The Short Script (3 Credit Hours)

This course builds upon the principles taught in Screenwriting 1 (or equivalent) using the short script as a basis for the exploration. Utilizing concepts of characterization, plot, dialogue and narrative style, students should complete the course with several production-ready short scripts.

Prerequisites: COMM 346 or THEA 346

COMM 333 Persuasion (3 Credit Hours)

An overview of the rhetorical and social scientific theories and research about persuasion and applications in speeches and campaigns.

Prerequisites: COMM 200S or permission of the instructor

COMM 334 Narrative Adaptation (3 Credit Hours)

This screenwriting course explores the ways teleplays, stage plays, and screenplays can be crafted using a variety of primary source materials. Through multiple screenings, writing exercises, and deep reading, it examines what constitutes an adaptable piece of prose and how that material can be transformed. Primary weight is given to the movement from novel to film.

Prerequisites: COMM 346 or THEA 346

COMM 335W Rhetorical Criticism (3 Credit Hours)

With the goal of being able to critique a communication event, students study a variety of rhetorical approaches that may include neo-Aristotelian, generic, feminist, metaphoric, fantasy theme, and pentadic approaches to rhetorical criticism. This is a writing intensive course.

Prerequisites: COMM 101R and a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, or permission of the instructor

COMM 339 Entertainment Journalism (3 Credit Hours)

In this course, students learn how to transform casual expressions of opinion about celebrities and media into polished reviews and articles worthy of publication in newspapers, magazines, and online platforms. Students will examine models of good entertainment journalism, past and present, in print, on the Web and in podcasts. In particular, students will consider critical reviews, profiles of artists and entertainers, interviews, and trend stories.

Prerequisites: junior standing

Pre- or corequisite: COMM 260

COMM 340 Media and Popular Culture (3 Credit Hours)

This course examines the basic ways in which the mass media intersect with the currents of contemporary culture. Both historical and critical approaches to the study of mass communication and popular culture trace the full implications of their mutual determination and interdependence.

Prerequisites: COMM 260

COMM 341 Lighting Design for Stage and Film (3 Credit Hours)

This is a production course introducing students to the world of light and shadow, mood and composition by surveying lighting design, its technologies for stage and camera, and such principles as basic electrical theory and stage/studio/location design aesthetics.

Prerequisites: COMM 225/THEA 225 and COMM 271/THEA 271 or permission of instructor

COMM 342 Post-Production 1 (3 Credit Hours)

This course serves as an introduction to the art of video post-production. Students explore the theory and practice of various editing styles in order to gain a better understanding of how stories are constructed in the editing room. The course covers principles of post-production of narrative, documentary, and experimental films. Through demonstrations and hands-on experience, students learn editing techniques with an in-depth examination of tools and approaches in a non-linear editing system.

Prerequisites: COMM 271 or THEA 271 or DANC 271

COMM 344 Introduction to Media Industries (3 Credit Hours)

This course provides students with an overview of a range of media industries, exploring their histories and structures and their impact on contemporary media production. Students will track ongoing industry developments, applying course concepts and learning how media is made and how that process is restricted by a range of social, cultural, political, and economic forces.

Prerequisites: COMM 260

COMM 345 Media Audiences (3 Credit Hours)

This course is designed to introduce students to the major theories and perspectives that inform the ways media audiences are made meaningful to the creation, distribution, promotion, regulation, and evaluation of media and popular culture.

Prerequisites: COMM 260

COMM 346 Screenwriting I (3 Credit Hours)

This course is an introduction to narrative screenwriting focusing on the traditional feature film. Students will study screenwriting principles through text reading, film viewing, script analysis and substantial writing assignments. Focus is on story structure, character development, action, dialogue, and proper screenplay format.

Prerequisites: ENGL 110C with a grade of C or better and ENGL 211C with a grade of C or better

COMM 348 Acting for the Camera (3 Credit Hours)

This course examines the process of building characters for the camera, and the ways in which the conventions of the stage are adapted for the film or video audience.

Prerequisites: THEA 152R

COMM 349 Costume Design for Stage and Camera (3 Credit Hours)

This course explores the design aesthetic, historical context, and contemporary impact on performance of the costume garment and its accessories. Students explore the application of design principles in a practical experience.

Prerequisites: THEA 244

COMM 351 Interpersonal Communication in Organizations (3 Credit Hours)

Focuses on communication theory, research, and applications of a variety of forms of communication in organizational relationships. Topics include superior-subordinate communication, interviewing, and presentations with an emphasis on a diversity of perspectives and types of organizations.

Prerequisites: Junior standing and COMM 200S or permission of the instructor

COMM 353 Animation (3 Credit Hours)

This is a project oriented, studio class that will focus on the art of animated storytelling from the traditional perspective of stop motion animation combined with digital post production. Students will engage in individual research, writing, storyboarding, editing, and sound creation to produce original short animations. Crosslisted with THEA 353.

Prerequisites: COMM 271, DANC 271, or THEA 271

COMM 354 Drafting and Rendering for Stage and Screen (3 Credit Hours)

This course is an intermediate level course designed to introduce the student to the fundamentals of graphic skills necessary for the implementation of a scenic design on either the stage or in front of a lens. Techniques and skills will be demonstrated in drafting (hand and computer generated) and perspective sketching and rendering. Crosslisted with THEA 354.

Prerequisites: THEA 225/COMM 225

COMM 355 Organizational Communication (3 Credit Hours)

Focuses on critical analysis of theory and research organizations as functional communication systems at the individual, dyadic, small group, and organizational levels. Topics include information processing, problem solving, impression management, compliance gaining, and network analysis.

Prerequisites: COMM 200S or permission of instructor

COMM 356 3D Animation 1 (3 Credit Hours)

This is a project-oriented studio class that will focus on the art of animated storytelling through the use of computer-based 3D animation.

Prerequisites: COMM 271 or THEA 271 or DANC 271

COMM 357 3D Animation 2 (3 Credit Hours)

This is a project-oriented studio class that will focus on the art of animated storytelling from the perspective of computer-based 3D animation, building on the skills developed in 3D Animation 1. Students will engage in individual research, writing, storyboarding, editing, and sound creation to produce original short animations.

Prerequisites: COMM 356 or THEA 356

COMM 358 Color for Digital Cinema & TV (3 Credit Hours)

This course will introduce students to color workflow in the digital cinema environment. The focus will be on working with color beginning with the camera, through color correction to delivery, mixing software-specific techniques with a deepening understanding of the underlying theories of color theory and practice. Students will learn and apply industry standard best practices in the field of visual post-production. This is a hands-on workshop style post-production course.

Prerequisites: COMM 271 or DANC 271 or THEA 271

COMM 359 Costume Crafts (3 Credit Hours)

This course will develop design principles and craft techniques to create a wide variety of costume crafts. The course will focus on individual research, design elements and technical challenges. Projects will encourage students to explore textile modification, various applications for clothing design, costume crafts and art materials. Cross-listed with THEA 355.

Prerequisites: Junior standing or permission of the instructor

COMM 361 Editing Aesthetics (3 Credit Hours)

This course is designed to provide students with an in-depth knowledge of the theory of film editing and concepts in film editing such as pacing, rhythm, juxtaposition, and color. The course will encourage students to investigate and understand the effectiveness of various editing techniques deployed by film editors.

Prerequisites: COMM 270A/THEA 270A or COMM 271/THEA 271

COMM 363 Introduction to Journalism (3 Credit Hours)

This class focuses on media literacy and on the role of media in society. Students learn and practice elements of news writing, including writing leads, organizing stories, reporting techniques, and interviewing. Story assignments come from handouts, press releases, press conferences, speeches, and public meetings. Some assignments are completed under simulated deadline pressure in the computer lab. This course is identical to the course previously named Reporting and News Writing I and satisfies that requirement.

Prerequisites: COMM 308W or permission of instructor

COMM 367 Cooperative Education (1-3 Credit Hours)

Available for pass/fail grading only. Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures as formally determined by the department prior to the semester in which the work experience takes place. May be repeated for credit.

Prerequisites: Approval by department is required; Additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

COMM 368 Internship (3-6 Credit Hours)

A structured work experience with or without remuneration, in an appropriately related disciplinary field. An ePortfolio, 150 hours of site work, plus satisfactory evaluations by supervisor and cooperating faculty member are required. Available for pass/fail grading only. Available to Communication, Theatre, and Dance majors and minors only. Cross-listed with DANC 368 and THEA 368.

Prerequisites: Approval of departmental internship director prior to registration

COMM 369 Research Practicum (3 Credit Hours)

A structured research experience, under the supervision of communication faculty member. A paper evaluating/analyzing the research, a log of research progress, and satisfactory evaluation by the supervising faculty are required.

Prerequisites: Completion of core courses and 6 hours of upper-level major courses; approval of supervising faculty and department chair prior to registration

COMM 372T Introduction to New Media Technologies (3 Credit Hours)

Introduction to new media practices and theories. Focuses upon the powers of composition, networked communities, information management, social networking and identification in digital environments. Students will examine practical applications such as blogging, online mapping and tagging, online collaborative work such as wikis and self composition in online social networks.

Prerequisites: Junior standing or permission of the instructor

COMM 375 Television Production (3 Credit Hours)

This course explores the basic process of producing television from script to presentation.

Prerequisites: COMM 271 or THEA 271 or permission of the instructor

COMM 380 Documentary Production I (3 Credit Hours)

This course offers the student an opportunity to explore the world of documentary filmmaking. Students will perform research to develop evidence in support of a thesis, then utilize the camera to capture a narrative story based on the thesis. Through this process, the student is better able to understand documentary filmmaking. Students will develop and deliver short documentary films by the end of the semester.

Prerequisites: THEA 271 or COMM 271 or DANC 271 with grade of C or higher

COMM 382 Reporting News for Television and Digital Media (3 Credit Hours)

This course focuses on writing for television news and producing online news reports. Students will strengthen their journalistic skills and learn the importance of writing clearly for a viewing audience while working under newsroom deadlines. By the end of the course, students should feel confident in producing accurate, detailed reports for television news and online news sites.

Prerequisites: ENGL 110C and ENGL 211C

COMM 383 Directing the Actor (3 Credit Hours)

This course is designed as a practical guide for directors to elicit strong performances from the actors who tell their stories. The class will establish vocabulary and practice techniques that are equally applicable to work in film or theatre. Ideally, the course will encourage students to think beyond genre as they create work that is both dramatically and humanly compelling.

Prerequisites: COMM 271 or THEA 271 or DANC 271 or THEA 152R

COMM 385 Cinematography (3 Credit Hours)

Introduces students to cinematography. The course explores camera technique, blocking actors, lighting, and cinematography fundamentals. The concepts of the course are applied to fiction and nonfiction cinema. This is a production class.

Prerequisites: THEA 271 or COMM 271 or DANC 271 with grade of C or higher

COMM 386 Post-Production 2 (3 Credit Hours)

This course builds on the fundamentals learned in Post-Production I, exploring advanced post-production techniques in picture editing, color correction and grading, sound editing and mixing, VFX editing, title and graphics editing, chroma key and compositing. The focus will be on mixing software-specific techniques with deepening understanding of the underlying theories of editing, color theory and principles of sound post-production. The students will learn and apply industry standard best practices in the field of audiovisual post-production. This is a hands-on workshop style post-production course.

Prerequisites: COMM 342 or THEA 342

COMM 387 TV News Production (3 Credit Hours)

This course is designed to provide students with an introduction to the reporting, writing, and production aspects of a television news program. Students will learn how to create 15- and 30-minute news broadcasts by developing story ideas and news gathering. Students will also learn the intricacies of shooting and editing video along with the production process involved in recording a live news broadcast. Each student will spend time both in front of and behind the television studio cameras. The goal of this course is to produce weekly news programs worthy of broadcast on local television. Students will assume the roles of reporter, writer, producer, floor director, photojournalist, videographer, technician, and more.

Prerequisites: COMM 271 or THEA 271 or DANC 271

Pre- or corequisite: COMM 382 or ENGL 382

COMM 388 Motion Picture Aesthetics (3 Credit Hours)

This course is designed to develop within students a heightened and multifaceted awareness and appreciation for aesthetics of a particular type - motion picture aesthetics. Aesthetic considerations impact us intellectually, emotionally, psychologically, and viscerally. Professionals most definitely employ a language to filmmaking. One must learn the language of motion picture production and aesthetic design in order to convey concepts to their audiences.

Prerequisites: COMM 270A or THEA 270A

COMM 389 Sound Recording and Mixing for Film (3 Credit Hours)

This course will explore the best concepts in recording, editing and mixing audio for film and post-production. Students will be using Pro Tools hands-on to sync and mix audio to picture. Topics will include location audio, sound design, ADR, mixing, and more.

Prerequisites: COMM 271 or THEA 271 or DANC 271

COMM 395 Topics in Communication (1-3 Credit Hours)

A study of selected topics designed for non-majors, or for elective credit within a major. These courses will appear in the course schedule, and will be more fully described in information distributed to all academic advisors.

Prerequisites: Junior standing and permission of the instructor

COMM 396 Topics in Communication (1-3 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major. These courses will appear in the course schedule, and will be more fully described in information distributed to all academic advisors.

Prerequisites: Junior standing and permission of the instructor

COMM 400W/500 Intercultural Communication (3 Credit Hours)

This course is designed to introduce students to the study of communication in cultural contexts, the purpose of which is to prepare one to live and work within an increasingly multicultural world. This is accomplished by defining and critically analyzing concepts of culture. Throughout the semester, the course will investigate theories of culture and communication that address the development of cultural identity, intercultural communication competence, the role of verbal and nonverbal communication across cultures, the cultural composition of the U.S., and ethical communication and challenge in a globalized era. This is a writing intensive course.

Prerequisites: COMM 200S and a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, or permission of instructor

COMM 401/501 Communication Theory (3 Credit Hours)

An overview of general and contextual theories of communication. Focus is on the nature of communication theory, the role of theory in communication inquiry, and the relationships among theory, research, and practice.

Prerequisites: COMM 200S or permission of the instructor

COMM 402 Communicating Data (3 Credit Hours)

An overview of effective oral, written and visual means to communicate data and to communicate about data to a variety of audiences.

Prerequisites: COMM 101R

COMM 403/503 Public Information and Crisis Communications (3 Credit Hours)

This course introduces students to the basic elements of public information as it pertains to assisting organizations avoid, mitigate and recover from crisis situations. Students will have the opportunity to both observe and participate in crisis communications situations.

Prerequisites: COMM 308W or permission of instructor

COMM 404/504 Emergency Management Communication (3 Credit Hours)

This course introduces students to the multi-layered challenges associated with communication in the event of accidents, crises and natural disasters. In addition to incorporating basic elements of public relations as it pertains to assisting organizations avoid, mitigate and recover from external crisis situations, students will have the opportunity to both observe and participate in crafting multi-agency responses to these unplanned events.

Prerequisites: COMM 308W or permission of the instructor

COMM 405/505 Communication and Culture in the Middle East (3 Credit Hours)

The course examines the tensions between modernity and tradition in the context of Middle East culture. Cultural variables for study include myth and religion, family structures and the use of science and technology.

Prerequisites: Six hours of lower-level social science course work

COMM 408 Health Communication (3 Credit Hours)

This course provides an overview of contemporary scholarship on phenomena within the scope of interpersonal health communication. Students will become familiar with fundamental communication processes that are involved in the interprofessional management of physical and mental health. Additionally, students will develop an awareness of how communication among friends, family members, professionals, and others influences people's well-being, and how, in turn, health and illness shape communication and relationship dynamics.

Prerequisites: COMM 200S

COMM 412W/512 Interpersonal Communication Theory and Research (3 Credit Hours)

A survey of classic and contemporary theories and research of communication in personal and social relationships across the lifespan. Emphasizes communication as a means to facilitate conditions for development of positive relational outcomes. This is a writing intensive course.

Prerequisites: COMM 200S and ENGL 211C or ENGL 221C or ENGL 231C with a grade of C or better

COMM 421/521 Communication and Conflict Management (3 Credit Hours)

Focus on theory and research of communication processes in conflict episodes across social and personal relational contexts. Applications of communication approaches to conflict management emphasized.

Prerequisites: Junior standing and COMM 200S or permission of the instructor

COMM 422/522 Listening to Self, Others, Nature and the Divine (3 Credit Hours)

The listening course introduces students to: 1) Practices for exploring and developing listening competencies, 2) Theoretical perspectives and models of listening, and 3) Research on listening. Practice, theory, and research are all integrated across the contexts of self, others, nature, and the divine.

Prerequisites: Junior Standing

COMM 423/523 Nonviolent Communication and Peace (3 Credit Hours)

Perspectives on nonviolent communication and peace are covered from the micro level (e.g., individual beliefs and worldviews) to interpersonal relationships (e.g., conflict management), groups (e.g., tribes, gangs), organizational systems (e.g., businesses, governments), and macro or global level (e.g., political relationships between nations).

Prerequisites: Junior standing

COMM 424/524 Communicating Love (3 Credit Hours)

This course investigates the history, types, characteristics, functions, and applications of love in everyday life, emphasizing the communication of altruistic/compassionate/agape love in four interrelated contexts: self, spirit, others, and creation. Theory, research, and applications of love will be explored within the spiritual, scientific, and dialogic (the conversation between science and spirit) perspectives.

Prerequisites: Junior standing

COMM 425/525 Family Communication Theory and Research (3 Credit Hours)

A survey of classic and contemporary theories and research of communication in family units, family relationships, and family interfacing with society. The course emphasizes communication in the social construction of evolving 'family' realities as well as communication as means to facilitate conditions for development of positive domestic outcomes.

Prerequisites: Junior standing and COMM 200S or permission of the instructor

COMM 427/527 Children's Communication Theory and Research (3 Credit Hours)

A survey of theories and research of communication during childhood. Emphasis is on children as developing communicators, their relationships, and their interactions with media. Factors affecting optimal development of children's communication and development of applications to enhance children's communication development are emphasized.

Prerequisites: COMM 200S or permission of instructor

COMM 430 TV Screenwriting (3 Credit Hours)

This course concentrates on the development and delivery of industry standard one-hour long TV scripts and the associated script 'bible.' Students will study sample scripts from broadcast TV programs and develop their own spec scripts. Cross-listed with THEA 430.

Prerequisites: COMM 346 or THEA 346

COMM 433 Capstone (3 Credit Hours)

This capstone course requires students to exhibit knowledge from disciplinary curricula. Students will review an informed snapshot of current topics, methods and research within the communication discipline. Students will demonstrate communication competency through the development of a relevant final project (with required research).

Prerequisites: Senior in good academic standing, COMM 200S, COMM 260, COMM 301 or COMM 302, and completion of the writing intensive course in the major

COMM 435 Arts Journalism (3 Credit Hours)

This course offers ways for artists—and people invested in the arts—to contribute to the development, production, and distribution of radio programs, criticism, podcasts, and documentary films that engage audiences with topics in creative and appealing ways. Students will be exposed to how critics have both opened—and foreclosed—paths for artists to achieve 'success.' Students will develop projects that are grounded in humanities scholarship and that demonstrate how approaches to artistic creation can be thoughtful, balanced, and analytical, and may be (mis)interpreted by critics in mainstream press. Ultimately, this course investigates how creativity intersects with digital platforms to explore how both writing and discourse about the arts benefit from digital circulations.

Prerequisites: COMM 308W

COMM 436 Multimedia Journalism (3 Credit Hours)

This course focuses on the act and application of writing journalistic content across a variety of media. Students will create content and integrate multiple modalities of writing to form cohesive reports. Students will work on deadline to produce meaningful and informative news stories for their portfolios.

Prerequisites: COMM 308W or COMM 363 or permission of instructor

COMM 437/537 Podcasting (3 Credit Hours)

In today's digital landscape, storytelling is a powerful tool for effective communication. This course explores the intersection of strategic communication and podcasting, equipping students with the skills to craft compelling narratives that engage audiences across various platforms. Through a combination of theoretical insights, practical exercises, and hands-on podcasting projects, students will learn how to develop, produce, and distribute podcasts strategically to achieve communication objectives.

Prerequisites: COMM 308W or permission of instructor

COMM 438/538 The Advertising Industry (3 Credit Hours)

This course explores the history, theory, industry, and practice of advertising as a communication discipline. This course explores the origins of advertising and its evolution into its contemporary, technologically-driven form while introducing students to skills and concepts necessary for work in the field.

Prerequisites: COMM 308W or permission of instructor

COMM 439 WHRO Production (3 Credit Hours)

This is an experiential style course in the art and business of documentary production in the hands-on, professional environment of WHRO, which operates Hampton Roads' PBS affiliate TV station as well as two public radio stations. Students will be guided through the production of content for WHRO by an ODU faculty member and the WHRO staff. Cross-listed with THEA 439.

Prerequisites: COMM 271 or THEA 271 or DANC 271

COMM 440 Documentary Filmmaking Study Abroad (3 Credit Hours)

This is an in-the-field study abroad course where students will, in small groups, produce a short documentary film about a local NGO (Non-Governmental Organization) creating positive change in the local community.

Prerequisites: COMM 271 or THEA 271 or DANC 271 with a grade of C or higher

COMM 441 The Music Industry and Communication (3 Credit Hours)

This course will seek to better understand the music industry. To do this, the organization and operation of the modern music industry will be examined. Issues of publishing, copyright and intellectual property and technology will also be examined.

Prerequisites: COMM 260 or permission of instructor

COMM 442 Media Spaces (3 Credit Hours)

This course explores the geographic dimensions of media, considering how issues of space and place intersect with the production and consumption of different forms of media. Employing semester-long cases that explore a range of mediated spaces from theme parks to television productions, students in the course will consider how spatiality shapes the cultural, economic, and creative dynamics of that production/experience.

Prerequisites: COMM 260 and Junior standing

COMM 443/543 Hispanic Film (3 Credit Hours)

A topical study of the major works of Spanish and Latin American film from Bunuel to the present. The course will explore many issues, including those related to gender, race, symbolism, and class struggle.

Prerequisites: COMM 270A or THEA 270A or permission of the instructor

COMM 444/544 German Cinema I (3 Credit Hours)

The first half of the 20th century was the most creative and destructive period in German and European history. Its rich cultural achievements included Viennese psychoanalytical theory of the turn of the century, Art Nouveau, German Expressionism, and the avant garde aesthetics of the Weimar Republic. Conversely, World War I and II exposed the cultural agony and human depravity of modern civilization. This course will trace these various aspects and developments in a variety of exemplary genres. Readings and discussions in German. (Cross-listed with WCS 445/WCS 545 and GER 445/GER 545)

Prerequisites: COMM 270A or permission of the instructor

COMM 445/545 Communication Analysis and Criticism (3 Credit Hours)

A survey of the key methods used in critiquing various forms of human and mediated communication for the purpose of becoming more discerning consumers of public and mass mediated messages. Analysis will include films, television, and radio programs, advertisements, newspapers, public discourses, speeches, and conversations.

Prerequisites: COMM 200S or permission of the instructor

COMM 446 Directing for the Camera (3 Credit Hours)

This course seeks to provide students with fundamental principles and practical techniques of directing the narrative fiction film: script development and analysis, production planning, shot composition and framing, and working with actors and crew.

Prerequisites: COMM 383 or THEA 383 with a grade of C or higher

COMM 447W/547 Electronic Media Law and Policy (3 Credit Hours)

This course focuses on legal and policy issues related to modern media systems and technologies, with an emphasis on legal considerations of electronic media. Topics include First Amendment issues concerning news, programming, and advertising; station licensing; and challenges to traditional legal thought brought about by new technologies. This is a writing intensive course.

Prerequisites: COMM 260 and a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, or permission of the instructor

COMM 448/548 Global Media Industries (3 Credit Hours)

An examination of the rise of broadcast technology and world flow of information and entertainment. Theory and policy issues of systems of broadcast ownership, access, regulation, programming, transborder, broadcasting and cultural imperialism and dominance of Western programming will be addressed.

Prerequisites: COMM 260 or permission of the instructor

COMM 453 Voice Over (3 Credit Hours)

This course is for students who are interested in the field of voice over for commercials, narration, industrials, animation, Internet, and gaming. Students will practice voicing copy using acting techniques, vocal techniques, building characters, and analyzing copy. Students will learn to select, edit and prepare copy for a future demo and learn to perform cold voice over auditions. This is a performance-oriented course that is a workout session each day. Crosslisted with THEA 453.

Prerequisites: Junior standing or permission of instructor

COMM 454 Strategic Communications Case Studies (3 Credit Hours)

Strategic communications is best learned by doing, including researching what has worked and what hasn't worked in strategies and tactics conducted by other professionals. This course will introduce students to a series of case studies organized thematically, grounding the knowledge gained in COMM 303 and allowing students to apply that knowledge to contemporary industries and cases of their own choosing.

Prerequisites: COMM 303 or permission of the instructor

COMM 455/555 Critical Analysis of Journalism (3 Credit Hours)

A critical examination of the news industry as practiced in the printed press, network and cable television, magazines, the Internet, and alternative press. Class examines the political economy of journalism, the sociology of journalistic practice, international news flows, ideological/political control of news, and mythological narrative forms within news.

Prerequisites: COMM 260 or permission of instructor

COMM 456/556 Organizations and Social Influence (3 Credit Hours)

Focuses on theories, research and applications of the social influence function of communication in a variety of organizational contexts. Examines traditional and nontraditional social influence theories and research as applied to organizational change.

Prerequisites: COMM 333 or COMM 355 or permission of the instructor

COMM 457/557 Market Research (3 Credit Hours)

The foundation of any successful strategic communications, from marketing to public relations to advertising, is research. This course introduces students to secondary and primary research methods in an applied way, having students actually design and conduct full research studies for a client in the community. Students will discuss and conduct various forms of market research (situation, stakeholder, and competitor), explaining how it is integral to strategic thinking and responsible growth in order to directly prepare them for work in the field.

Prerequisites: COMM 303 or permission of the instructor

COMM 460/560 Social Marketing (3 Credit Hours)

Social marketing, the process through which communications professionals attempt to introduce, reinforce, or augment social change through theories and practices of marketing, is a growing field with implications ranging from social entrepreneurship to international relations to community resiliency. This course will introduce the theories of social marketing, applying them through collaborations with a local organization or cause. Students will focus on a practical approach to constructing a brand through communication strategy and media tactics, and how those relate to constructing and maintaining the identity of a larger organization while also promoting social benefit.

Prerequisites: COMM 303

COMM 462/562 Sport Communication (3 Credit Hours)

A survey of sport media and communications. This course will expose students to the rapidly evolving sport media landscape, analyzing the communication processes involved in both strategic communication and journalism, through the mediums used to convey messages. The internal and external audiences involved in sport communication will be examined, both through an analysis of journalism's impact on sport and an exploration of the strategic communication planning process.

Prerequisites: COMM 398W or permission of instructor

COMM 463W Reporting and News Writing II (3 Credit Hours)

Designed to familiarize students with the fundamentals of beat reporting and its practice in the multimedia environment of 'converged' newsrooms. The course emphatically focuses on writing but also provides instruction on how the tools and techniques of multimedia platforms are used to enhance storytelling. Emphasis is also placed on accessing information through web-based resources and government documents. This is a writing intensive course.

Prerequisites: ENGL 211C or ENGL 231C and COMM 363

COMM 466 Feature Story Writing (3 Credit Hours)

Course includes discussion and practice of writing a variety of newspaper and magazine feature stories. Students will write and critique stories on people, places, businesses, trends, and issues. Assistance is given in the marketing of manuscripts.

Prerequisites: COMM 363

COMM 469 Communication Education Practicum (3 Credit Hours)

An examination of communication education theory and methodology via structured experiences and readings. Students taking this course serve as teaching assistants for COMM 200S, which serves as a lab for practicing skills and techniques.

Prerequisites: Completion of core courses and 6 hours of upper-level major courses, and approval of supervising faculty and department chair

COMM 471W/571 International Film History (3 Credit Hours)

An examination of world cinema as a technology, a business, an institution, and an art form from its inception to the present. Emphasis is on the narrative fiction film, its technological and aesthetic development, economic organization, and socio-cultural context. Representative classic and contemporary works will be screened and analyzed. This is a writing intensive course.

Prerequisites: COMM 270A or THEA 270A, a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, and junior standing or permission of the instructor

COMM 472/572 New Media Topics: Theories and Practices (3 Credit Hours)

This upper-division seminar investigates one or two particular emergent new media practices and theories. The topics will be chosen at the discretion of the instructor but may include issues such as 'mobile media,' 'micro media and audiences,' and 'social media.'

Prerequisites: COMM 372T or permission of the instructor

COMM 473/573 Television and Society (3 Credit Hours)

The role of television in the cultural, psychological, and economic life of America. The structure and design of television programs; and the history and function of television in reinforcing or altering public perceptions of ideas, events, and people. Major critical approaches are employed in examining television's social impact and global reach.

Prerequisites: Junior standing and COMM 260

COMM 474 Reality Television (3 Credit Hours)

In the past two decades, reality television has become television's most replicated genre, documenting real people in 'real' situations across broadcast, cable, and streaming outlets. This class investigates the historical, cultural, and industrial logics that govern the rise of reality TV, exploring how the genre intersects with issues of race, gender, sexuality, and class, and asking students to apply their understanding of the genre to detailed analysis of its ongoing efforts to capture the complexities of everyday life.

Prerequisites: COMM 260

COMM 478/578 Media Marketing and Promotion (3 Credit Hours)

This course introduces students to the ways in which different media forms are used for advertising and marketing purposes. Emphasis is on electronic media, though other approaches, such as direct marketing techniques and the increasing use of new media technologies for marketing, are also examined.

Prerequisites: Junior standing and COMM 260 or permission of the instructor

COMM 479W/579 American Film History (3 Credit Hours)

An examination of American motion pictures as an art form, a business and an institution from inception to the present. Primary attention is accorded to the narrative fiction film, its aesthetic and technological development, economic organization and social impact. This course highlights the many connections between film history and American culture. This is a writing intensive course.

Prerequisites: COMM 270A or THEA 270A, a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, and junior standing or permission of the instructor

COMM 480/580 Documentary Production II (3 Credit Hours)

Students will continue the work performed in COMM 380 with more advanced proposals, research, and production work.

Prerequisites: COMM 380 or THEA 380

COMM 482 Screenwriting II (3 Credit Hours)

Students will explore storytelling for cinema through screenplay analysis, scene study, character development, narrative structure, and story development. This upper-level, hands-on course applies a range of screenwriting principles to writing exercises, critique, and construction of the first half of a feature-length screenplay.

Prerequisites: COMM 346 or THEA 346 with a grade of C or better

COMM 483 Advanced Cinema Projects (3 Credit Hours)

This is an intensive capstone course in film production. Students experience pre-production, production, and post-production phases while creating a product to be entered in regional and national competitions.

Prerequisites: COMM 383 or THEA 383

COMM 484/584 Strategic Media Design and Production (3 Credit Hours)

This course is designed to extend students' knowledge of the media elements of strategic communications, from graphics to images to video. Students will discuss how to ground creative production in strategy for a client, how to focus on content and storytelling for a specific stakeholder, and how to create an extended, coherent plan using both creative and organizational goals. This is not intended to make students 'creative' but instead to show students how to design, direct, and manage the work that a media production team might do.

Prerequisites: COMM 303 or permission of the instructor

COMM 485/585 Film and Television Genres (3 Credit Hours)

This course is designed to examine the conventions and meanings of various film and television genres within their broader aesthetic, socio-historical, cultural, and political contexts. Each time the class is offered it will focus in depth on a different genre, such as the gangster, the Western, the musical, the comedy, science fiction, among others. Class may be repeated for credit as long as the genres are different.

Prerequisites: COMM 270A or THEA 270A or COMM 260

COMM 486/586 Advanced Filmmaking (3 Credit Hours)

This course offers students an opportunity to collaborate on a faculty led project beyond the scope of typical classroom projects. Students will execute an assigned duty for the duration of the semester.

Prerequisites: permission of the instructor

COMM 487 Advanced TV News Production (3 Credit Hours)

This course is designed to provide students with advanced instruction in reporting, writing, and production for a television news program. Students will take on important roles in 15- and 30-minute news broadcasts and refine their skills in shooting and editing video. The goal of this course is to produce weekly news programs worthy of broadcast on local television. Students will receive significant experience in front of the camera as news, sports, and entertainment anchors/reporters as well as leadership positions in the television studio during the live broadcasts.

Prerequisites: COMM 387, THEA 387 or ENGL 387

COMM 488 Introduction to Critical Race and Media Studies (3 Credit Hours)

In this course, students examine how media culture - both historic and contemporary - contribute to the intersectional production of race in the United States. A guiding question will be: How do media and popular culture - as texts, practices, industries, and sites of identity formation and pleasure - construct race? Although students will theorize the politics of representation, they will also work to situate texts within a larger historic, political, and discursive context in order to assess the type of cultural work they perform.

Prerequisites: COMM 260

COMM 489/589 Health and Interpersonal Communication (3 Credit Hours)

This course is designed to give an overview of contemporary scholarship on phenomena within the scope of interpersonal health communication.

Prerequisites: Instructor permission required

COMM 490/590 ROAR Communications Agency (3 Credit Hours)

In this course, students gain hands-on experience working in an agency setting. They work directly with clients to create specific materials, and learn new tools and software suitable for each project. We emphasize building students' professional qualifications connected to their interests and the client's needs that bridge the gap between coursework and a career. Students will conduct situation analyses, choose audiences and strategy, and create professional-quality materials for clients. If they take the class for a second semester, students will have more senior roles, where they interface more extensively with the client and become team leaders with bigger projects.

Prerequisites: COMM 303 or permission of the instructor

COMM 491/591 Communication and Activism (3 Credit Hours)

This course will delve into activism and social change from a local and global perspective in order to enhance students' perspectives of social change as it manifests via popular media and community action.

Prerequisites: Instructor permission required

COMM 492 Cinematography 2 (3 Credit Hours)

This course builds on the fundamentals learned in Cinematography 1, exploring advanced camera and lighting techniques primarily used in narrative cinema. Advanced cameras, grip, electric, and lighting equipment will be covered, exposing students to gear and practices beyond the scope of a standard student production. This is a production class.

Prerequisites: COMM 385 or THEA 385

COMM 493 Feature Film Production (6 Credit Hours)

This intensive course will bring students onto the set of a Feature Film Production, working crew positions as the film is shot. Cross-listed with THEA 493.

Prerequisites: COMM 271/THEA 271/DANC 271 and two of the following: COMM 380/ THEA 380, COMM 383/THEA 383, COMM 385/ THEA 385, COMM 386/THEA 386, COMM 389/THEA 389, COMM 483/ THEA 483, COMM 486/THEA 486, COMM 492/THEA 492 with a grade of C or better

COMM 494 Entrepreneurship and Public Relations (3 Credit Hours)

This course is designed to help students enhance their personal and professional development through innovation guided by faculty members and professionals, while at the same time, meeting a critical need for Old Dominion University. Through a partnership with ODU's Office of Strategic Communication and Marketing, a select group of upper-level public relations, marketing or related discipline students will work, individually and in teams, as a "bureau" for the University's central marketing and communications office.

Prerequisites: COMM 303 or equivalent

COMM 495/595 Topics in Communication (1-3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule, and will be more fully described in information distributed to all academic advisors.

Prerequisites: Appropriate survey course or permission of the instructor

COMM 496/596 Topics in Communication (1-3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule, and will be more fully described in information distributed to all academic advisors.

Prerequisites: Appropriate survey course or permission of the instructor

COMM 497/597 Tutorial Work in Special Topics in Communication (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: Senior standing and approval of the department chair

COMM 498/598 Tutorial Work in Special Topics in Communication (3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: Senior standing and approval of the department chair

COUN - Counseling

COUN 495 Topics (1-6 Credit Hours)

Study of selected topics in counseling.

Prerequisites: permission of the instructor

COUN 497 Topics in Counseling (1-6 Credit Hours)

Study of selected topics in counseling.

Prerequisites: permission of the instructor

CPD - Center for Professional Development

CPD 100S Leadership and Society (3 Credit Hours)

This course addresses the social, political, psychological, economic, and international dimensions of leadership through a social science framework. A specific focus is given to the dynamic interactions between social structures and leadership behavior. Students explore how society shapes leaders and how leaders shape society. Using an introspective approach, students consider their role as current and future leaders in a diverse society.

CPD 303T Maritime Leadership, Technology, and Society (3 Credit Hours)

This course introduces students to the intersections between maritime leadership, technology, and society. It will explain the important elements of the marine transportation and technological systems, which consist of waterways and ports that allow for various modes of transportation to move people and goods to, from, and on the water. Specific topics include an introduction to different types of cargo, how cargo is moved, ship types, ship equipment, ship routes, basic navigation and ship stability, emerging industries including offshore wind and autonomous systems, maritime law, maritime safety, and leadership.

Prerequisites: ENGL 110C

CPD 330 Public Safety Leadership (3 Credit Hours)

This class uses leadership theory and research to introduce students to leadership principles and practices related to the management, supervision, and governance of public safety agencies. Attention is given to the way that leadership in public safety (law enforcement, homeland security, emergency management, information security, and fire and rescue) agencies is distinct from leadership in private companies and businesses. Specific attention is given to the ethical, social, political, economic, and technological dimensions of public safety leadership.

Prerequisites: Junior standing or permission of the instructor

CPD 340 AWS Cloud Foundations (3 Credit Hours)

AWS Academy Cloud Foundations is intended for students who seek an overall understanding of cloud computing concepts, independent of specific technical roles. It provides a detailed overview of cloud concepts, AWS core services, security, architecture, pricing, and support.

Prerequisites: Junior standing or permission of the instructor

CPD 368 Internship in Professional Studies (1-6 Credit Hours)

An opportunity to integrate service and applied learning experience with leadership perspectives.

Prerequisites: junior standing

CPD 395 Topics (1-3 Credit Hours)

The study of selected topics which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule.

Prerequisites: junior standing or permission of the instructor

CPD 397 Independent Study (1-6 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor.

Prerequisites: Permission of instructor

CPD 398 Independent Study (1-6 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor.

Prerequisites: Permission of instructor

CPD 400 Foundations of Leadership (3 Credit Hours)

This course is designed to provide students with a basic introduction to leadership, with a focus on leadership history, leadership styles, traits, and skills. The differences between managers and leaders will be explored.

Prerequisites: junior standing or permission of the instructor

CPD 404 Red Hat Linux System Administrator I (3 Credit Hours)

The first of two courses covering the core system administration tasks needed to manage Red Hat Enterprise Linux servers Red Hat System Administration I is designed for IT professionals without previous Linux system administration experience. The course provides students with Linux administration competence by focusing on core administration tasks. This course also provides a foundation for students who plan to become full-time Linux system administrators by introducing key command-line concepts and enterprise-level tools. This course is the first of a two-course series that takes a computer professional without Linux system administration knowledge to become a fully capable Linux administrator.

Prerequisites: Junior level standing or higher, or permission of the instructor

CPD 405 Red Hat Linux System Administrator II (3 Credit Hours)

Red Hat System Administration II is the second part of the RHCSA training track for IT professionals who have already attended Red Hat System Administration I. The course goes deeper into core Linux system administration skills in storage configuration and management, installation and deployment of Red Hat Enterprise Linux, management of security features such as SELinux, control of recurring system tasks, management of the boot process and troubleshooting, basic system tuning, and command-line automation and productivity. This course assumes that students have attended Red Hat System Administration I.

Prerequisites: Junior level standing or higher, or permission of the instructor and CPD 404

Pre- or corequisite: CPD 404

CPD 406 Cyber Law (3 Credit Hours)

This course tackles two major cyber law subjects. The first part of the course examines various U.S. laws and legal considerations that impact the digital and cyberspace worlds from traditional civil, and to a lesser extent, traditional criminal perspectives. The second part will familiarize cyber operations professionals about the extent of and limitations on their authorities to ensure operations in cyberspace are in compliance with U.S. law, regulations, directives and policies. The course will also introduce students to miscellaneous cybersecurity topics such as the Federal Acquisition Requirements.

Prerequisites: junior standing

CPD 408 Global Leadership (3 Credit Hours)

This course will introduce students to the concepts and complexity of leadership in a globalized society and provide the opportunity to put leadership theory into practice. Emphasis will be on the development of the student as a leader who thinks globally, appreciates cultural diversity, is technologically savvy, knows how to build partnerships and alliances, and has the capacity to share leadership. Students will also evaluate their current mindset and leadership skills and create a professional plan for development as a global leader.

Prerequisites: junior standing or permission of the instructor

CPD 409 Leadership and Cultural Competence (3 Credit Hours)

This course focuses on the study of contemporary leadership theory and practice, with particular emphasis on public and non-profit sectors. The critical themes of ethics and cultural competence are woven throughout the course.

Prerequisites: Junior standing or higher, or permission of the instructor

CPD 410 Leadership Ethics (3 Credit Hours)

This course examines how ethical principles can be used to guide effective leadership practices. Students will gain an understanding of how ethical principles in the workplace have developed over time. They will also explore the connections between individual ethics and workplace behaviors, in addition to leadership strategies that promote ethical behavior by workers.

Prerequisites: junior standing or permission of the instructor

CPD 412 Leadership and Law (3 Credit Hours)

This course addresses leadership in public, private, and non-profit organizations relative to laws that impact such organizations. Students will examine their role as leaders within legal systems that influence business operations such as employment law, intellectual property, antitrust, white collar crime, and bankruptcy.

Prerequisites: junior standing or permission of the instructor

CPD 414 Design Thinking for Leaders (3 Credit Hours)

Design thinking is a human-centered approach to problem solving and innovation. With design thinking one can confidently generate solutions to problems in organizations or to launching a new product or enterprise. It is being used by leaders for developing meaningful and useful responses to contemporary challenges. In this course, an overview of design thinking is provided, along with a model containing key questions and tools to help leaders understand design thinking as a problem solving approach.

Prerequisites: junior standing or permission of the instructor

CPD 415 Women in Leadership (3 Credit Hours)

This course examines gender differences in leadership, including communication styles, leadership style, and experiences in business environments. Students will explore media and cultural representations of women in leadership, as well as women leaders in popular industries. Personal leadership development and skills will be explored from the perspective of advancing women in leadership roles.

Prerequisites: junior standing or permission of the instructor

CPD 416 Trends and Issues in Leadership (3 Credit Hours)

This course is focused on examining and expanding on the application of leadership principles and decision making. It is designed to have students step out of their comfort zones and look at leadership issues from various sides. The course will provide background and learning on primary leadership concepts with ethics ideals sprinkled within the content. Students will be challenged to find articles and examples for leadership application in multiple business, industry, government, and societal realms, taking on both protagonist and antagonist roles in the examination of the issues.

Prerequisites: junior standing or permission of the instructor

CPD 417/517 Digital Leadership (3 Credit Hours)

This course explores technology as it relates to leadership experiences. Theories, case studies and real world examples are analyzed to show both successful and unsuccessful uses of online and digital approaches that inform leaders' communication strategies. Students will explore how their own digital identities may impact their futures as leaders. They will also learn how to create digital identities that will shape their professional identities throughout their careers.

Prerequisites: junior standing or permission of instructor

CPD 494 Entrepreneurship in Professional Studies (3 Credit Hours)

This course is designed to help students enhance their personal and professional development through innovation guided by faculty members and professionals. This course offers students an opportunity to integrate disciplinary theory and knowledge through developing a nonprofit program, product, business, or other initiative. The real-world experiences that entrepreneurs provide will help students understand how academic knowledge leads to transformations, innovations, and solutions to different types of problems.

Prerequisites: Junior standing or permission of the instructor

CPD 495 Topics (1-3 Credit Hours)

The advanced study of selected topics which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule.

Prerequisites: junior standing or permission of the instructor

CRJS - Criminal Justice

CRJS 215S Introduction to Criminology (3 Credit Hours)

Introduction to criminology as a science, including the study of crime, criminals, and society's response to them.

CRJS 222 The Criminal Justice System (3 Credit Hours)

A study of social response to criminal behavior as cases move through the machinery of justice. Describes the interdependence of crime statistics, law enforcement, criminal courts, and correctional procedures for purposes of analyzing the entire system.

CRJS 226S Honors: Introduction to Criminology (3 Credit Hours)

Open only to students in the Honors College. Special honors section of CRJS 215S.

CRJS 262 Law and the Criminal Justice System (3 Credit Hours)

The course covers both substantive and procedural law related to the definitions, investigations, processing and punishment of crimes. It is meant to provide the students with an overall understanding of the articulation between law and the criminal justice system.

CRJS 310 Cybercriminology: Foundations (3 Credit Hours)

This course will provide students with an overview of computer-related crimes and how law enforcement officials investigate them. The course begins by describing the environment that has been created through information and communication technologies, and how this new environment facilitates different types of behavior. The course then moves into defining and describing the different types of computer-related crimes, the techniques used by officials, and the legal issues inherent in combating cybercrime.

Prerequisites: CRJS 215S

CRJS 316 Juvenile Delinquency (3 Credit Hours)

A study of juvenile misbehavior in the contemporary community, its nature, extent, treatment, and control, including juvenile court procedure and philosophy.

Prerequisites: CRJS 215S or SOC 201S or permission of instructor

CRJS 317 Correctional Institutions (3 Credit Hours)

Examines the history of prisons and jails, their formal and informal organization, their effects on individuals, and issues and philosophies of penal reform.

Prerequisites: CRJS 215S or CRJS 222 or permission of the instructor

CRJS 318 Probation, Parole and Community-Based Corrections (3 Credit Hours)

Examines the history, law, administration and social setting of probation, parole and other noninstitutional sentencing alternatives. Also explores nontraditional alternatives to criminal adjudication such as arbitration and diversion programs.

Prerequisites: CRJS 215S or permission of the instructor

CRJS 319 Public and Private Security (3 Credit Hours)

The organization of security systems in public and private agencies and institutions.

Prerequisites: CRJS 215S or permission of the instructor

CRJS 320 Law and Social Control (3 Credit Hours)

Examines the creation, use and effectiveness of formal and informal mechanisms of social control for both criminal and noncriminal deviant behavior. Cross-cultural comparisons are given special emphasis.

Prerequisites: CRJS 215S or permission of the instructor

CRJS 321 Death Penalty (3 Credit Hours)

This course examines the historical and philosophical foundations of the death penalty in the United States, the Supreme Court case precedent that has effectively narrowed its modern application, and the contentious issues that surround America's most severe punishment. Topics will include the moral/legal arguments surrounding the death penalty; the legal process of capital cases; the racial, ethnic, socioeconomic, and gender disparities that exist in death sentencing and executions; recent trends and scholarly evidence related to capital punishment; reasons for continued support; and the movement toward abolition.

Prerequisites: CRJS 215S or permission of instructor

CRJS 323 Police in American Society (3 Credit Hours)

Examines the role of police in a free society. Police functions, subculture, community relations and decision making receive special attention. Problems such as police corruption, violence and the methods by which society attempts to control police behavior are also discussed.

Prerequisites: CRJS 215S or CRJS 222 or permission of the instructor

CRJS 325 Women and Crime (3 Credit Hours)

Examines the role of women as offenders, victims and employees of the criminal justice system. Theories of female criminality and the treatment of female offenders are explored. Attention is given to the victimization of women, specifically wife abuse and rape, problems of minority women, and the impact of current legislation.

Prerequisites: CRJS 215S or permission of the instructor

CRJS 326 LGBTQ People, Crime, and Justice (3 Credit Hours)

Learning appropriate terminology to discuss LGBTQ individuals, as well as a review of the social issues facing these populations, including damaging cultural stereotypes. Critically exploring the history of interactions between LGBTQ communities and agents of formal control, such as schools and the police, including responses to bullying and bias crimes. Interrogating how changing political and social contexts affect policy regarding formal responses to LGBTQ communities.

Prerequisites: SOC 201S or CRJS 215S

CRJS 340 White-Collar Crime (3 Credit Hours)

This course will describe and explain corporate, state-corporate, government (state) crime and crimes of globalization from sociological and criminological perspectives. Although the course will deal with the general topic of white collar crime, the specific focus will be on organizational offenders such as business corporations, government, state agencies and international finance organizations.

Prerequisites: CRJS 215S

CRJS 344 Social Science and Crime Mapping (3 Credit Hours)

A critical exploration of applying geographic information system (GIS) to view, understand, question, interpret, and visualize social science and crime data that reveal relationships, patterns, and trends. Students will learn to 1) frame a research question or hypothesis from a location-based perspective; 2) collect, create and examine geographically referenced demographic, social, and criminological data; 3) learn to use GIS mapping software to visualize, manage and analyze this data in order to investigate the relationship between geographic, demographic, social and criminological variables; and 4) arrive upon decisions and conclusions and communicate these via the creation of publishable maps.

Prerequisites: SOC 201S or CRJS 215S or permission of the instructor

CRJS 345 Organized Crime: A Survey of Domestic and World-Wide Organized Crime Activities (3 Credit Hours)

A broad survey of the history and consequences of organized crime in the United States and the world. Special focus will be directed at the economic, social and developmental effects of organized criminal activities.

Prerequisites: CRJS 215S, CRJS 222, or CRJS 262

CRJS 348 Film and Society (3 Credit Hours)

Sociological examination of film as an art form, an industry, and a social institution. Major topics include socialization through film, how one's unique socialization affects the film experience, social inequality (racism/ethnocentrism/sexism/ageism) as exhibited in film, and as they occur within the film industry, film as an educational tool, gender roles as exhibited in film and perpetuated within the film industry, film and copycat crime, crime in the film industry, portrayal of crime in film, international cinema and globalization.

Prerequisites: SOC 201S or permission of the instructor

CRJS 350 Victimology (3 Credit Hours)

Examination of the multifaceted problem of criminal victimization. Focuses on defining victimization, the incidents of victimization, social characteristics of victims, treatment of victims in the criminal justice system, and efforts designed to alleviate the consequences of victimization.

Prerequisites: SOC 201S or CRJS 215S or six hours of social science perspective or permission of the instructor

CRJS 355 Crime and the Community (3 Credit Hours)

This course focuses on the effect of crime on communities and the ways in which communities affect crime. The class considers both ethnographic community studies as well as larger-scale demographic analysis.

Prerequisites: CRJS 215S or SOC 201S or permission of the instructor

CRJS 356 Gangs (3 Credit Hours)

This course seeks to evaluate issues central to the study of modern gangs, such as gang definitions, prevalence, proliferation, migration, formation, histories, and gang/gang member characteristics. Another objective is to understand why and how young people both join and leave their gangs and explore how gang structure and organization can influence gang and gang member behavior, including their involvement in violence, other illegal acts, their victimization, and the gendered experiences of female gang members. Students will also review assess policies and efforts regarding gang prevention, intervention, and suppression and distinguish between stereotypes/myths and realities about gangs and gang members based on empirical research and theory.

Prerequisites: SOC 201S or CRJS 215S

CRJS 368 Internship (1-6 Credit Hours)

This course allows students to volunteer to work in an agency related to their major. Students must volunteer for 50 hours per course credit.

Prerequisites: Approval by the department internship director

CRJS 370 State Crime (3 Credit Hours)

This course explores state crime from a sociological and criminological perspective. It examines historical and current cases of governmental crime at home and abroad. It also explores the intertwining of states with other states, corporations, and, when applicable, international financial institutions as well as their roles in facilitating or constraining acts of state crime. Finally, the class discusses the problems of control, domestically and internationally.

Prerequisites: CRJS 215S or permission of the instructor

CRJS 375 Crime Prevention (3 Credit Hours)

This course provides an introduction to the approaches and practices of crime prevention. In addition, the course discusses primary, secondary, and tertiary crime prevention measures aimed at reducing or eliminating crime. Finally, the course addresses research and information on many aspects of crime prevention, including the physical environment and crime, neighborhood crime prevention, and crime in schools.

Prerequisites: CRJS 215S or permission of the instructor

CRJS 395 Topics in Criminal Justice (1-3 Credit Hours)

A study of selected topics designed for nonmajors or for elective credit within a major. These courses will appear in the course schedule, and will be more fully described in information distributed to academic advisors.

Prerequisites: CRJS 215S or permission of the instructor

CRJS 396 Topics in Criminal Justice (1-3 Credit Hours)

A study of selected topics designed for nonmajors or for elective credit within a major. These courses will appear in the course schedule, and will be more fully described in information distributed to all academic advisors.

Prerequisites: CRJS 215S or permission of the instructor

CRJS 401 Understanding Violence (3 Credit Hours)

Examines a variety of forms of violence from suicide, child abuse, rape and family violence, terrorism, torture, death squads and the death penalty and hate violence. Explores the circumstances, rationalizations, patterns, explanations and effects on survivors.

Prerequisites: CRJS 215S or SOC 201S or permission of instructor

CRJS 403 Violence in the World of Children (3 Credit Hours)

This child-centered course examines the interaction of adults in violent conflict with the world of children, children's experience of violence and its meaning in the lives of children. Topics include: valuing children, violence toward children in culture, families, and schools; child physical and sexual abuse and neglect; gangs, violent communities and children and war. The effects of childhood experiences of violence, children's coping with violence, and alternatives to violence are also developed.

Prerequisites: SOC 201S or CRJS 215S or six hours in human behavior or permission of the instructor

CRJS 404 Law and Digital Forensics (3 Credit Hours)

This course will focus on the intersection between digital forensics and the criminal justice system, namely how digital forensics is understood and applied to key criminal justice, constitutional and statutory considerations within the criminal justice system. Students will explore such topics as the nature and types of cybercrime; search and seizure principles in the digital world; finding, handling and maintaining chain of custody of digital evidence; interviewing individuals relating to digital evidence and related activities; and testifying in court about digital evidence matters.

Prerequisites: Junior standing or permission of instructor

CRJS 406 Cyber Law (3 Credit Hours)

This course tackles two major cyber law subjects. The first part of the course examines various U.S. laws and legal considerations that impact the digital and cyberspace worlds from traditional civil, and to a lesser extent, traditional criminal perspectives. The second part will familiarize cyber operations professionals about the extent of and limitations on their authorities to ensure operations in cyberspace are in compliance with U.S. law, regulations, directives and policies. The course will also introduce students to miscellaneous cybersecurity topics such as the Federal Acquisition Requirements. Cross-listed with CYSE 406 and CPD 406.

Prerequisites: CRJS 262 or junior standing

CRJS 407 Violence Against Children Internationally (3 Credit Hours)

This course focuses on the research on child maltreatment abuse internationally, in particular on the most common types of child abuse and neglect—i.e., perpetrated by parents, family members. The negative effects of child abuse and neglect are associated subsequently with every social problem from poverty, teenage motherhood, substance abuse, violent crime, domestic violence, and mental health problems, to ill-health—from cancer to diabetes.

Prerequisites: SOC 201S or CRJS 215S

CRJS 408 Children's Rights and the Law (3 Credit Hours)

A study of the law concerning children from a children's rights perspective. The rights of children in the US will be compared to other nations with special emphasis being placed on the UN Convention on the Rights of the Child.

Prerequisites: SOC 201S OR CRJS 215S or related social science Way of Knowing or permission of the instructor

CRJS 409 Crime and Computer Applications (3 Credit Hours)

The purpose of this interdisciplinary course is to introduce students to the ways in which computers are involved in the commission and the investigation of crime. Students will learn the fundamentals of cryptography and steganography and the tools used to perform these activities. Students will also use forensic software to identify, gather, and verify relevant digital evidence. Cross-listed with CYSE 409.

Prerequisites: CRJS 310 or permission of the instructor

CRJS 410 Correctional Treatment (3 Credit Hours)

Methods and programs which attempt to correct the behaviors of juvenile delinquents and adult criminal offenders are explored. Treatment strategies employed in both community and institutional settings are examined. Techniques of classification and the role of the correctional worker are also discussed.

Prerequisites: CRJS 215S or CRJS 222 or permission of the instructor

CRJS 415 Courtroom As a Social System (3 Credit Hours)

An overview of the role of all of the actors in the American courtroom, the interaction of these actors and the effect of social forces on their behavior. Includes prosecutor, plaintiff and defense lawyers, judges, juries, eye witnesses, expert witnesses, and court staff.

Prerequisites: CRJS 222 or permission of the instructor

CRJS 416 The American Jury (3 Credit Hours)

A review of the literature, law and practical materials that cover the American jury system from the creation of the master list through the verdict. Includes history, social context and jury selection.

Prerequisites: CRJS 222 or permission of the instructor

CRJS 418 Crime, Society, and the Media (3 Credit Hours)

A critical exploration of media portrayals of crime and criminal justice. News and entertainment genres are examined. Connections between the mass media and crime, culture, politics, society, and individual behavior receive special attention.

Prerequisites: CRJS 215S or CRJS 222 or permission of the instructor

CRJS 419 Animals and Society (3 Credit Hours)

This is a class about the role of nonhuman animals in society. Animals are used to entertain, to do work, to provide companionship, to provide food, and more. In this class, we discuss the causes and consequences of both individual and institutional animal abuse. Society's relation to wildlife is also an important component and includes poaching, sport and trophy hunting, and society's reaction to wolves, coyotes, and wild horses in the West. Cross-listed with SOC 419.

Prerequisites: Any human behavior (S) course, such as SOC 201S, CRJS 215S, PSYC 201S, COMM 200S, or permission of instructor

CRJS 421/521 Deviant Behavior (3 Credit Hours)

A study of various definitions and forms of deviant behavior, theoretical explanations of causes of deviant behavior, and the impact of deviant behavior on society and the individual.

Prerequisites: SOC 201S or CRJS 215S or permission of the instructor

CRJS 423 Public Policy in Criminal Justice (3 Credit Hours)

A study of the nature, development, and utilization of public policy within agencies of the criminal justice system. Topics include policy formulation, constraints on policy makers, influence of constituencies, and the role of research information. Case studies of issues such as crime control, prison overcrowding, police use of deadly force, the death penalty and parole guidelines will be undertaken.

Prerequisites: CRJS 215S

CRJS 424 Juvenile Justice: Issues, Policy, and Practice (3 Credit Hours)

This course will provide an overview of significant policy issues in contemporary juvenile justice. The first objective of the course is to examine the nature, extent, treatment and control of juvenile delinquency. The second objective of the course is to discuss the history of juvenile justice policy reform and evidence-based practices. Third, the course will identify and analyze a number of key juvenile justice policy issues, including: mental health, gender disparities, disproportionate minority contact (DMC), trauma, adult transfer and certification, as well as policies and practices for preventing and responding to delinquency.

Prerequisites: CRJS 215S

CRJS 426W/526 Criminological Theory (3 Credit Hours)

An in-depth study of the major theoretical issues in criminology. Deals extensively with issues of crime causation. This is a writing intensive course.

Prerequisites: Senior standing, CRJS 215S, and grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, or permission of the instructor

CRJS 427/527 Gender-Based Violence (3 Credit Hours)

This course takes an expansive and intersectional approach to studying various forms of gender-based violence, from the interpersonal to the systemic, institutional, and cultural. Prevalence, risk factors, theoretical explanations, and legal remedies related to topics such as intimate partner violence, sexual assault on college campuses, gender-based violence in the military, sexual violence against undocumented immigrants, commercial sexual exploitation, and racism and reproductive health will be examined.

Prerequisites: SOC 201S or CRJS 215S or other human behavior course or permission of instructor

CRJS 430 Homicide (3 Credit Hours)

This course explores the topic of homicide in the U.S. It includes a discussion of the types of homicide, historical patterns and trends, and characteristics of offenders and victims. A variety of theoretical frameworks are utilized to examine homicide at micro and macro levels. In-depth examination of specific types of homicide is included.

Prerequisites: SOC 201S or CRJS 215S or another human behavior course

CRJS 431 Serial Offenders (3 Credit Hours)

This course explores the topic of serial offenders, also referred to as repeat offenders, recidivists, and career criminals. The course begins with an overview and discussion of patterns of crime, followed by a discussion of relevant theoretical perspectives. We also discuss profiling and the role it can play in the investigation of serial crimes. Next, we move into modules devoted to specific types of crime (arson, rape, homicide, etc.), and discuss the research on serial offenders in each group. Finally, prevention, as well as social policy issues, are addressed.

Prerequisites: SOC 201S or CRJS 215S

CRJS 436 Capstone Research Project (3 Credit Hours)

Students work in groups to plan, design, and carry out a research project. Final papers which report the results for the study are presented in a formal research seminar. The projects reflect knowledge gained from undergraduate work and training received in STAT 130M and SOC 337.

Prerequisites: Senior standing, STAT 130M and SOC 337

CRJS 441/541 Drugs and Society (3 Credit Hours)

The study of sociological and social-psychological explanations of drug-using behaviors and of legal and medical control of drugs. Topics include changes in the legal status of drugs, cross-cultural and historical variations in the control of drugs, and social epidemiology of drug use in contemporary society.

Prerequisites: SOC 201S or CRJS 215S

CRJS 444 Community Justice (3 Credit Hours)

This is a service learning course designed to study how the emerging field of community justice, a neighborhood-based strategy, can reduce crime and improve public safety by investing in social, human and cultural capital.

Prerequisites: SOC 201S or CRJS 215S

CRJS 445 Workplace Law and Society (3 Credit Hours)

This course examines the laws of the workplace from a sociological and issue-driven approach considering two perspectives – both employer and employee. Relevant laws are identified, explored and made relevant through examples of their application in real-world situations. Sometimes the wisdom of these laws will be challenged; students will be encouraged to raise questions about a law's utility, justice or fairness, whether in principle or in application.

Prerequisites: Junior standing

CRJS 448 Women, Sex Discrimination and the Law (3 Credit Hours)

This course introduces students to legal issues which specifically affect women and examines historical attitudes that have been used to justify differential treatment of women. It explores various legal approaches used to achieve equal protection under the law and examines a variety of specific topics such as: the equal protection analysis; Title VII and Title IX and their relationship to sex discrimination; affirmative action; and reproductive freedom.

Prerequisites: CRJS 215S or permission of the instructor

CRJS 450/550 Blacks, Crime and Justice (3 Credit Hours)

Examines historical and contemporary theories and research on African-Americans, criminal behavior and the administration of justice. Selected topics will include African-American perspectives, the death penalty, victimization, police brutality, and justice systems in Africa and the Caribbean.

Prerequisites: CRJS 215S and CRJS 222 or permission of the instructor

CRJS 451 Race, Ethnicity, Crime and Justice (3 Credit Hours)

This course will examine the intersectionality of race, ethnicity, crime, justice and the operation of the criminal justice system and will critically assess controversial issues surrounding race, ethnicity, crime, and justice. Students will discuss contemporary social justice issues as they relate to race, ethnicity, crime, and justice. The theoretical frameworks that explain the intersection between race, ethnicity, crime and justice will be examined. The course will also investigate the broad range of policy issues and recommendations impacting communities of color and the administration of criminal and social justice.

Prerequisites: CRJS 215S or SOC 201S

CRJS 452 Diversity in Criminal Justice Organizations (3 Credit Hours)

This course examines the impact of diversity, culture, and ethnic origin in criminal justice organizations. The course is designed to better prepare students to meet the challenge of diversity in criminal justice organizations.

Prerequisites: SOC 201S or CRJS 215S or permission of instructor

CRJS 462/562 Substantive Criminal Law (3 Credit Hours)

This course deals with the major substantive concepts involved in American criminal law, including development of criminal law, elements of criminal liability, defenses against criminal responsibility, and descriptions and definitions of specific offenses.

Prerequisites: CRJS 215S or CRJS 222 or permission of the instructor

CRJS 475/575 Criminal Justice Systems Around the World (3 Credit Hours)

The study of criminal justice systems around the world in order to understand how criminal behavior is defined and responded to in various cultures. Cultural differences will be highlighted in order to recognize that definitions of and responses to crimes closely reflect the cultures in which they exist.

Prerequisites: CRJS 215S or CRJS 222 or permission of the instructor

CRJS 494 Entrepreneurship in Sociology/Criminal Justice (3 Credit Hours)

This course is designed to help students enhance their personal and professional development through innovation guided by faculty members and professionals. It offers students an opportunity to integrate disciplinary theory and knowledge through developing a nonprofit program, product, business, or other initiative. The real-world experiences that entrepreneurs provide will help students understand how academic knowledge leads to transformations, innovations, and solutions to different types of problems. The course can be delivered either as an independent project for individual students or as group projects similar to those sometimes offered in topics courses.

Prerequisites: junior standing

CRJS 495/595 Topics in Criminal Justice (3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule, and will be more fully described in information distributed to academic advisors.

Prerequisites: CRJS 215S or permission of the instructor

CRJS 496/596 Topics in Criminal Justice (3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule, and will be more fully described in information distributed to academic advisors.

Prerequisites: CRJS 215S or permission of the instructor

CRJS 497/597 Independent Study (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: Senior standing and approval of the department chair

CRJS 498/598 Tutorial Work in Special Topics in Criminal Justice (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: Senior standing and approval of the department chair

CS - Computer Science

CS 112 Information Literacy for Former Engineering Majors (1 Credit Hour)

The objective of this course is to enhance the ability of students to locate, manage, critically evaluate, and use information for problem solving, research, and decision making in a complex digital world. Emphasis in this course will be on information security, laws, regulations, institutional policies and ethical issues surrounding the access and use of information.

Prerequisites: CEE 111 or ECE 111 or ENGT 111 or MAE 111 or MSIM 111

CS 115 Introduction to Computer Science with Python (1 Credit Hour)

An overview of computer science as a problem-solving discipline and as a career path. Topics include fundamentals of software, hardware computing fundamentals, and an introduction to the development of software to solve problems. Software development is introduced using the Python programming language. Intended for prospective CS majors. Laboratory work required. Computer science majors who already have credit for CS 150, CS 151, CS 152, or ENGN 122 cannot subsequently take CS 115 for credit toward their degree.

CS 120G Introduction to Information Literacy and Research (3 Credit Hours)

Students will learn to locate, manage, critically evaluate and use information for problem solving, research and decision making. Includes collaborative tools for document development and office productivity tools for presentation. Information security, laws and etiquette related to use and access of information are covered.

CS 121G Introduction to Information Literacy and Research for Scientists (3 Credit Hours)

Students will learn to locate, manage, critically evaluate and use information for scientific problem solving and research. Includes mathematical tools for data analysis and presentation and office and collaborative tools, as well. Information security, laws and etiquette related to use and access of information are covered.

CS 126G Honors: Introduction to Information Literacy and Research (3 Credit Hours)

Open only to students in the Honors College. A special honors version of CS 120G.

CS 150 Introduction to Programming with C++ (4 Credit Hours)

Laboratory work required. Introduction to computer-based problem solving and programming in C++. Topics include problem solving methodologies, program design, algorithm development, and testing. C++ language concepts include variables, data types and expressions, assignment, control-flow statements, functions, arrays, pointers, structs, and classes.

Prerequisites: MATH 162M

CS 151 Introduction to Programming with Java (4 Credit Hours)

Laboratory work required. Introduction to computer-based problem solving and programming in Java. Topics include problem solving methodologies, program design, algorithm development, and testing. Java language concepts including variables, data types and expressions, assignment, control-flow statements, I/O, exception handling, functions, arrays, and classes.

Prerequisites: MATH 162M

CS 153 Introduction to Programming with Python (4 Credit Hours)

Laboratory work required. Introduction to computer-based problem solving and programming in Python. Topics include problem solving methodologies, program design, algorithm development, and testing. Python language concepts include variables, data types and expressions, assignment, control-flow statements, functions, tuples, lists, and dicts.

Prerequisites: MATH 162M

CS 170 Introduction to Computer Architecture I (3 Credit Hours)

Fundamentals of the architecture and operation of modern computers. Basic computer logic: logic equations; gates; combinatorial logic. Basic computer arithmetic: binary numbers; floating point representation. System hierarchy, overview of a computer; integrated circuit technology. Performance: metrics; choosing benchmarks; Amdahl's law. Instruction Sets and Operations: assembly language; machine language; examples of other instruction sets.

Prerequisites: MATH 162M and a grade of C or better in any one of: CS 150, CS 151, CS 153, DASC 257, or ENGN 122

CS 195 Topics (1-3 Credit Hours)

Special topics in computer science that are not part of the current curriculum at the freshman/sophomore level.

CS 197 Undergraduate Research Experience in Computer Science (0 Credit Hours)

Student participation in a supervised, undergraduate research experience for which credit will not apply to the degree. Experience must be related to the student's major, minor or career area of interest.

Prerequisites: permission of the instructor

CS 202G Information Literacy for Cybersecurity (3 Credit Hours)

This course provides an in-depth introduction to information literacy from library and information science, information ethics, and computer science perspectives along with applications to cybersecurity research and professional activity. This course is aligned with Old Dominion University's general education learning outcomes for information literacy.

Prerequisites: ENGL 110C

CS 222 Introduction to Digital Image Processing (3 Credit Hours)

This course introduces the basic concepts and algorithms of digital image processing. Topics include image representation, sampling, quantization, enhancement, filtering, restoration, segmentation, color image processing, imaging geometry, image transforms, and morphological processing.

CS 250 Programming with C++ (4 Credit Hours)

Laboratory work required. Design issues arising in software systems and C++ programming techniques aiding in their solution. Topics include the software life cycle, methods of functional decomposition, design documentation, abstract data types and classes, inheritance, common data structures, dynamic data structures, algorithmic patterns, and testing and debugging techniques.

Prerequisites: CS 150 or ENGN 122 with a grade of C or better and MATH 163

CS 251 Programming with Java (4 Credit Hours)

Laboratory work required. Design issues arising in software systems and Java programming techniques aiding in their solution. This course provides the conceptual basis for programming techniques and program design with object and classes. Topics include the software life cycle, methods of functional decomposition, abstract data types and classes, inheritance, references, common data structures, algorithmic patterns, and testing and debugging techniques.

Prerequisites: MATH 163 and a grade of C or better in any one of: CS 150, CS 151, CS 153, DASC 257, ENGN 122

CS 252 Introduction to Unix for Programmers (1 Credit Hour)

Laboratory work required. Available for pass/fail grading only. An introduction to Unix with emphasis on the skills necessary to be a productive programmer in Unix, Linux, and related environments. Topics include SSH, command line shells, files and directories, editing, compiling and debugging, SSH keys, git and programming IDEs.

Prerequisites: A grade of C or better in any one of: CS 150, CS 151, CS 153, ENGN 122, DASC 257, or IT 205

CS 253 Transfer Credit for Programming with Python (4 Credit Hours)

This course is a VCCS transfer credit vehicle. The course will not be offered for credit by Old Dominion University. An equivalent course would be a second programming course, this one in Python, that emphasizes the conceptual basis for programming techniques and program design with object and classes. Topics should include the software life cycle, methods of functional decomposition, abstract data types and classes, inheritance, common data structures, algorithmic patterns, and testing and debugging techniques.

Prerequisites: A prior programming course

CS 260 C++ for Programmers (1 Credit Hour)

Laboratory work required. An introduction to the C++ programming language for students who are familiar with programming in Java or Python. Topics include basic language syntax, data structures, control flow, structs, classes, inheritance, and basic elements of the C++ standard library. Not open to students with credit for CS 250.

Prerequisites: A grade of C or better in CS 251 or CS 253

CS 261 Java for Programmers (1 Credit Hour)

Laboratory work required. An introduction to the Java programming language for students who are familiar with programming in C++ or Python. Topics include basic language syntax, data structures, control flow, classes, inheritance, exception handling, and basic elements of the Java API. Not open to students with credit for CS 251.

Prerequisites: A grade of C or better in any one of: CS 250, CS 253 or ECE 250

CS 263 Python for Programmers (1 Credit Hour)

Laboratory work required. An introduction to the Python programming language for students who are familiar with programming in C++ or Java. Topics include basic language syntax, data structures, control flow, classes, inheritance, and basic elements of the Python standard library. Not open to students with credit for CS 253.

Prerequisites: A grade of C or better in any of: CS 250, CS 251 or ECE 250

CS 270 Introduction to Computer Architecture II (3 Credit Hours)

Fundamentals of the architecture and operation of modern computers. Building an ALU. The cache-Ram interaction. The virtual memory system. The Fetch/Execute cycle. Implementing a set of the ALU, Load/Store and Branch instructions in a single cycle implementation. Basics of microprogramming. Design of the control unit. A pipelined implementation. Multicores, multiprocessors and clusters.

Prerequisites: A grade of C or better in CS 170

CS 295 Topics in Computer Science (1-3 Credit Hours)

Special topics in computer science which are not part of the current curriculum at the freshman/sophomore level.

CS 300T Computers in Society (3 Credit Hours)

Covers changes in the world's society due to continuing implementation of computing technologies. Evaluation of technological expansions in areas of governments, business/industry, education, medicine, transportation, communication and entertainment. Topics include: intellectual property, software piracy, computer crimes and ethics. Students must research a societal topic and present in written and oral forms.

Prerequisites: ENGL 110C

CS 312 Internet Concepts (3 Credit Hours)

Laboratory work required. An in-depth introduction to the Internet and the World Wide Web for CS or similar majors as a basis for more advanced studies in Web programming. Topics include: historical and current development of the Internet Web document publishing. Internet design, communication, and application protocols and the tools that use them. Internet search tools and their design. Internet issues such as netiquette, copyright, spam, computer viruses, cookies, security, and future of the Internet.

Prerequisites: CS 252

CS 315 Computer Science Undergraduate Colloquium (1 Credit Hour)

This course consists of talks by invited speakers, including Old Dominion University faculty and guests from different research and industry communities. The colloquium introduces the possibilities of future research and career opportunities in the various areas of the computer science field. Additionally, students will learn about available scholarships and how to apply for them.

Prerequisites: Junior/senior standing as a computer science major; and a grade of C or better in any of: CS 150, CS 151, CS 153, ENGN 122, DASC 257

CS 330 Object-Oriented Design and Programming (3 Credit Hours)

Laboratory work required. The techniques, idioms, and design patterns of object-oriented programming. Methods of object-oriented analysis and design with the Unified Modeling Language. Multi-thread programs, synchronization, and graphic user interfaces.

Prerequisites: CS 252 and a grade of C or better in any of: CS 250, CS 251, CS 253, ECE 250

CS 350 Introduction to Software Engineering (3 Credit Hours)

Laboratory work required. An exploration of the software development process, with an emphasis on the tools and techniques that support project teams. Topics include: software development process models, requirements, automated testing, documentation, build, version and configuration management, issue tracking, and agile methods. The course requires each student to participate as a member of a project team and to demonstrate proficiency with a variety of development tools.

Prerequisites: CS 252 and a grade of C or better in CS 330 or CS 361

CS 355 Principles of Programming Languages (3 Credit Hours)

Survey of significant features of programming languages. Language types including imperative, functional, logical, and object-oriented are covered. Concepts include lexical and syntactic analysis, type systems, flow control, modularity, and parallel programming. Small programs in several languages required. Laboratory work required.

Prerequisites: CS 252 and a grade of C or better in any of: CS 250, CS 251, CS 253, ECE 250

CS 361 Data Structures and Algorithms (3 Credit Hours)

Laboratory work required. Common abstract data types, including vectors, lists, stacks, queues, sets, maps, heaps, and graphs. Standard Java interfaces for these ADTs. Iterators and generics. Choosing data structures and algorithms to implement ADTs, via analysis of their time and space complexity.

Prerequisites: CS 252, MATH 211, and a grade of C or better in CS 251 or CS 261

CS 367 Cooperative Education (1-3 Credit Hours)

Available for pass/fail grading only. Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures as formally determined by the department prior to the semester in which the work experience is to take place. Written report required.

Prerequisites: Approval by department is required; Additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

CS 368 Computer Science Internship (1-3 Credit Hours)

Available for pass/fail grading only. Academic requirements will be established by the department and will vary with the amount of credit desired. Allows students to gain short duration career-related experience. An academic project may be required by the department to enhance the value of the educational experience. Written report required.

Prerequisites: Approval by department is required; additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

CS 381 Introduction to Discrete Structures (3 Credit Hours)

Topics include propositional and predicate logic, rules of inference, methods of proof, set operations, functions, complexity of algorithms, growth of functions, induction, counting, relations, equivalence relations and graphs.

Prerequisites: MATH 163 and a grade of C or better in any of: CS 150, CS 151, CS 153, DASC 257, ENGN 122

CS 390 Introduction to Theoretical Computer Science (3 Credit Hours)

Elementary study of theoretical aspects of computer science. Topics in formal languages and automata theory are covered including regular languages, regular expressions, finite automata, context-free languages, pushdown automata, grammars, Turing machines, and unsolvable problems.

Prerequisites: A grade of C or better in CS 381 and in any one of: CS 250, CS 251, CS 253, ECE 250

CS 395 Topics in Computer Science (1-3 Credit Hours)

Special topics in computer science that are not part of the current curriculum at the junior/senior level.

Prerequisites: permission of the instructor

CS 402/502 Formal Software Foundations (3 Credit Hours)

Laboratory work required. Foundational principles and techniques for building correct-by-construction software systems with provable guarantees. Includes functional programming, algebraic and polymorphic data types, pattern matching, computer-assisted theorem proving, proof automation, extraction of certified executable code, examples of verified algorithms.

Prerequisites: CS 381

CS 410/510 Professional Workforce Development I (3 Credit Hours)

Laboratory work required. Provides students with challenges of business environments in developing a technology based project. Students identify a societal problem, identify solutions, define project solutions, develop project objectives, conduct feasibility analysis, establish organizational group structure to meet project objectives and develop formal specifications. Students make formal technical project presentations and develop web documentation. Students prepare a draft grant proposal.

Prerequisites: A grade of C or better in CS 330 or CS 361

Pre- or corequisite: CS 350

CS 411W/511 Professional Workforce Development II (3 Credit Hours)

Laboratory work required. Students write professional documents and continue the development of the project defined in CS 410. Written work is reviewed and returned for corrective rewriting. Students will design and develop a project prototype using accepted best practices of professional software development. They will demonstrate the prototype to a formal panel and defend its satisfaction of the goals established in CS 410. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C and a grade of C or better in CS 330, CS 350, and CS 410

CS 417/517 Computational Methods and Software (3 Credit Hours)

Laboratory work required. Algorithms and software for fundamental problems in scientific computing. Topics: properties of floating point arithmetic, linear systems of equations, matrix factorizations, stability of algorithms, conditioning of problems, least-squares problems, eigenvalue computations, numerical integration and differentiation, nonlinear equations, iterative solution of linear systems.

Prerequisites: MATH 316 and a grade of C or better in any of: CS 250, CS 251, CS 253, ECE 250

CS 418/518 Web Programming (3 Credit Hours)

Laboratory work required. Overview of Internet and World Wide Web; web servers and security, HTTP protocol; web application and design; server side scripts and database integration, and programming for the Web.

Prerequisites: A grade of C or better in CS 312 and CS 330

CS 422/522 Introduction to Machine Learning (3 Credit Hours)

Laboratory work required. An introduction to machine learning with a focus on practical aspects of various learning techniques. Topics include supervised learning (linear models, probabilistic models, support vector machine, decision trees, neural networks, etc.), unsupervised learning (scaling, dimension reduction, clustering, etc.), reinforcement learning, and model evaluation. The course will also discuss applications on image analysis, text processing, and biomedical informatics.

Prerequisites: MATH 316 and a grade of C or better in any one of: CS 150, CS 151, or CS 153

CS 431/531 Web Server Design (3 Credit Hours)

Laboratory work required. Extensive coverage of the hypertext transfer protocol (HTTP), specifications and commentary (IETF RFCs), and implications for servers and clients. Students will develop a web server providing common HTTP functionality and implementing all HTTP (including unsafe and conditional) methods, content negotiation, transfer and content encoding, basic & digest authentication, and server-side execution of programs (i.e., dynamic resources). Frequent in-class demonstrations of progress and protocol conformance will be required.

Prerequisites: A grade of C or better in any one of: CS 150, CS 151, CS 153

CS 432/532 Web Science (3 Credit Hours)

Provides an overview of the World Wide Web and associated decentralized information structures, focusing mainly on the computing aspects of the Web: how it works, how it is used, and how it can be analyzed.

Students will examine a number of topics including: web architecture, web characterization and analysis, web archiving, Web 2.0, social networks, collective intelligence, search engines, web mining, information diffusion on the web, and the Semantic Web.

Prerequisites: A grade of C or better in any one of: CS 250, CS 251, CS 253, CS 260, CS 261, CS 263, or DASC 255

CS 433/533 Web Security (3 Credit Hours)

Provides detailed experience with: principles of web security, attacks and countermeasures, the browser security model, web app vulnerabilities, injection, denial-of-service, TLS attacks, privacy, fingerprinting, same-origin policy, cross site scripting, authentication, JavaScript security, emerging threats, defense-in-depth, techniques for writing secure code, web archiving, and rehosting.

Prerequisites: A grade of C or better in CS 312 and CS 330

CS 441/541 App Development for Smart Devices (3 Credit Hours)

Laboratory work required. Project-oriented coverage of the principles of application design and development for Android platform smart devices. Topics include user interface; input methods; data handling; network techniques; localization and sensing. Students are required to produce a professional-quality mobile application.

Prerequisites: CS 330 and either CS 251 or CS 261

CS 445/545 Introduction to Quantum Computing (3 Credit Hours)

The course covers the fundamental concepts of quantum information and computation, including the quantum bits, single- and multi-gate circuits, and related concepts like superposition, entanglement, interference, measurements, basic theory, quantum communication protocols, and time-permitted basic algorithms in quantum computing. The class focuses on the material required to transition from theory to practical use cases based on the class's interests. Familiarity with Jupyter Notebooks, linear algebra, and discrete structures is recommended.

Prerequisites: A grade of C or better in CS 150, CS 151, CS 153, CS 260, CS 261 or CS 263

CS 450/550 Database Concepts (3 Credit Hours)

Laboratory work required. Three level database architecture. The relational database model and relational algebra. SQL and its use in database procedures and with conventional programming languages. Entity relationship modeling. Functional dependencies and normalization. Transactions, concurrency and recovery.

Prerequisites: CS 252 and a grade of C or better in CS 381 and either CS 330 or CS 361

CS 454/554 Network Management (3 Credit Hours)

Laboratory work required. The administration of computer networks and their interaction with wide area networks: network topologies for local and wide area networks, common protocols and services, management of distributed file services, routing and configuration, security, monitoring and trouble-shooting.

Prerequisites: A grade of C or better in CS 455

CS 455/555 Introduction to Networks and Communications (3 Credit Hours)

Internet and the 5-layered protocol architecture for the Internet, applications built on top of data networks, specifically the Internet, the web, the transport layer, TCP and UDP protocols, the network layer, the data link layer, also some of the technologies for the physical layer.

Prerequisites: CS 252, CS 270, and a grade of C or better in any one of: CS 250, CS 251, CS 253, ECE 250

CS 458/558 Unix System Administration (3 Credit Hours)

Laboratory work required. Aspects of administering a SOLARIS/UNIX operating system in a networked environment are covered. Topics covered include installation, file system management, backup procedures, process control, user administration, device management, Network File Systems (NFS), Network Information Systems (NIS), UNIX security, Domain Name Services (DNS), and integration with other operating systems.

Prerequisites: experience with UNIX

CS 460/560 Computer Graphics (3 Credit Hours)

Laboratory work required. An introduction to graphical systems and methods. Topics include basic primitives, windowing, transformations, hardware, interaction devices, 3-D graphics, curved surfaces, solids, and realism techniques such as visible surface, lighting, shadows, and surface detail. Requires project involving OpenGL programming.

Prerequisites: A grade of C or better in CS 361

CS 462/562 Cybersecurity Fundamentals (3 Credit Hours)

Introduction to networking and the Internet protocol stack; Vulnerable protocols such as HTTP, DNS, and BGP; Overview of wireless communications, vulnerabilities, and security protocols; Introduction to cryptography; Discussion of cyber threats and defenses; Firewalls and IDS/IPS; Kerberos; Transport Layer Security, including certificates; Network Layer Security.

Prerequisites: MATH 162M

CS 463/563 Cryptography for Cybersecurity (3 Credit Hours)

This course covers mathematical foundations, including information theory, number theory, factoring, and prime number generation; cryptographic protocols, including basic building blocks and protocols; cryptographic techniques, including key generation and key management, and applications; and cryptographic algorithms--DES, AES, stream ciphers, hash functions, digital signatures, etc.

Prerequisites: MATH 162M

CS 464/564 Networked Systems Security (3 Credit Hours)

Authentication in cyber systems including password-based, address-based, biometrics-based, and SSO systems; Authorization and accounting in cyber systems; Securing wired and wireless networks; Secured applications including secure e-mail services, secure web services, and secure e-commerce applications; Security and privacy in cloud environments.

Prerequisites: MATH 162M

CS 465/565 Information Assurance for Cybersecurity (3 Credit Hours)

Introduction to information assurance. Topics to be covered include metrics, planning and deployment; identity and trust technologies; verification and evaluation, and incident response; human factors; regulation, policy languages, and enforcement; legal, ethical, and social implications; privacy and security trade-offs; system survivability; intrusion detection; and fault and security management.

Prerequisites: MATH 162M and familiarity with computer security area

CS 466/566 Principles and Practice of Cyber Defense (3 Credit Hours)

This course is designed to help students gain a thorough understanding of vulnerabilities and attacks in systems and networks and learn cyber defense best practices. It covers fundamental security design principles and defense strategies and security tools used to mitigate various cyber attacks. The topics may include identification of Recon Ops, intrusion detection, identification of C2 Ops, data exfiltration detection, identifying malicious codes, network security techniques, cryptography, malicious activity detection, system security architectures, defense in depth, distributed/cloud and virtualization.

Prerequisites: A grade of C or better in any one of: CS 250, CS 251, CS 253, CS 270, CS 455, CS 462, CS 471, or ECE 250; no prior knowledge of computer security is necessary

CS 467/567 Introduction to Reverse Software Engineering (3 Credit Hours)

Laboratory work required. Covers all the major components such as static analysis, dynamic analysis, Windows x86/64 Assembly, APIs, DLL/process injection, covert launching methods, behaviors, anti-disassembly, anti-VM, packing/unpacking, shell code, C++, buffer overflow attacks and various kinds of networking attacks; includes a final project that analyzes a piece of real malware.

Prerequisites: CS 270 and a grade of C or better in any one of: CS 250, CS 251, CS 253, ECE 250

CS 468W Research Methods in Mathematics and Sciences (3 Credit Hours)

Emphasizes the tools and techniques used to solve scientific problems. Topics include use and design of experiments, use of statistics to interpret experimental results, mathematical modeling of scientific phenomena, and oral and written presentation of scientific results. Students will perform four independent inquiries, combining skills from mathematics and science to solve research problems. Required for Physics teaching licensure track; not available as upper-division elective in content area. This is a writing intensive course.

Prerequisites: Admission to the Monarch Teach Program; CS 361 or MATH 212; and a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C

CS 469/569 Data Analytics for Cybersecurity (3 Credit Hours)

The course introduces classical and advanced models and techniques in machine learning and deep learning. It applies these techniques in the cybersecurity domain including anomaly detection, network security, and malware detection and classification. Advanced applications such as self-driving cars and IoT systems are also discussed. In addition, cyber-attacks on machine learning techniques and AI systems and the possible consequences are also discussed.

Prerequisites: CS 462 or CS 455 or experience in cybersecurity

CS 470/570 Introduction to Computer Architecture (3 Credit Hours)

This course provides an overview of the fundamentals of computer architecture. Major components include basic computer logic, integrated circuits, instruction sets, cache-RAM interaction, virtual memory, the fetch/execute cycle, basics of microprogramming, pipelined implementation, parallel processors including SISD, MIMD, SIMD, and SPMD. The course also introduces hardware multithreading, multicores, multiprocessors, GPUs, multiprocessor network topologies, and cluster networking.

Prerequisites: A grade of C or better in CS 170

CS 471/571 Operating Systems (3 Credit Hours)

Operating system structures. Multiprogramming and multiprocessing. Process management. Memory and other resource management. Storage management, I/O systems, distributed systems. Protection and security. The concepts will be illustrated through example systems such as Unix and Windows.

Prerequisites: ECE 346 or ECE 443 or a grade of C or better in CS 361 and CS 170; a grade of C or better in ENGN 122 or CS 150 or CS 260

CS 472 Network and Systems Security (3 Credit Hours)

Laboratory work required. Basic protocols, techniques and programming issues to secure network and computer systems. Topics include: cryptographic algorithms and concepts (Secret Key Cryptography, Hashes and Message Digests, Public Key and Authentication); Security Standards (Kerberos, Public Key Infrastructure, IPsec, SSL/TLS); Security applications (PEM, S/MIME, PGP, HTTP, Firewalls); Hands-on programming using OpenSSL.

Prerequisites: A grade of C or better in CS 361

CS 475/575 Introduction to Computer Simulation (3 Credit Hours)

Laboratory work required. Efficient implementation methods. Time management. Planning and design of simulation experiments. Statistical issues in simulation. Generation of random numbers and stochastic variates. Programming with graphically- and text-based simulation languages. Verification and validation of simulation models. Distributed simulation. Special topics such as HLA will be discussed.

Prerequisites: STAT 330 and a grade of C or better in CS 330 or CS 361

CS 476/576 Systems Programming (3 Credit Hours)

Laboratory work required. This course is to help students fully understand and utilize the internal workings and capabilities provided by modern computing, networking and programming environments. Topics include: Shell Script Programming, X Windows (Xlib and Motif), UNIX internals (I/O, Processes, Threads, IPC and Signals), Network Programming (UDP/TCP Sockets and Multicasting) and Java Systems Programming (SWING, Multithreading and Networking).

Prerequisites: A grade of C or better in CS 330 and CS 361

CS 478/578 Computational Geometry, Methods and Applications (3 Credit Hours)

The discipline of Computational Geometry is devoted to the study of algorithms which are formulated in terms of spatially embedded arrangements of objects, such as points, lines, surfaces, and solids. This course covers fundamental algorithms including convex hulls, polygon triangulations, point location, Voronoi diagrams, Delaunay triangulations, binary space partitions, quadrees, and other topics.

Prerequisites: CS 361 and MATH 211

CS 480/580 Introduction to Artificial Intelligence (3 Credit Hours)

Laboratory work required. Introduction to concepts, principles, challenges, and research in major areas of AI. Areas of discussion include: natural language and vision processing, machine learning, machine logic and reasoning, robotics, expert and mundane systems.

Prerequisites: A grade of C or better in any one of: CS 250, CS 251, CS 253, CS 260, CS 261, CS 263, or DASC 255

CS 481/581 Trustworthy Health Analytics (3 Credit Hours)

This course offers a comprehensive, project-driven approach to integrating AI in healthcare, focusing on building prototype models for prevention, diagnosis, and treatment while stressing the need of adopting ethical, responsible methods to reduce risks and improve patient outcomes.

Prerequisites: Instructor permission required

CS 486/586 Introduction to Parallel Computing (3 Credit Hours)

Laboratory work required. The motivation for and successes of parallel computing. A taxonomy of commercially available parallel computers. Strategies for parallel decompositions. Parallel performance metrics. Parallel algorithms and their relation to corresponding serial algorithms. Numerous examples from scientific computing, mainly in linear algebra and differential equations. Implementations using public-domain network libraries on workstation clusters and computers.

Prerequisites: MATH 316; knowledge of a high level language

CS 487 Applied Parallel Computing (3 Credit Hours)

Laboratory work required. Fundamental concepts of parallel computing: Machine models, architectures, parallel topologies and languages, parallel algorithm design and parallel programming, architecture independent message passing interface (MPI) communication library, and scaled-speedup. Group project required.

Prerequisites: A grade of C or better in CS 270 and either CS 361 or CS 330; CS 417 or linear algebra is recommended

CS 488/588 Principles of Compiler Construction (3 Credit Hours)

Laboratory work required. Theoretical and practical aspects of compiler design and implementation. Topics will include lexical analysis, parsing, translation, code generation, optimization, and error handling.

Prerequisites: A grade of C or better in CS 361

CS 491/591 Honors Research I in Computer Science (3 Credit Hours)

Laboratory work required. Students perform mentored research in a group environment to develop computational approaches in addressing computer science challenges. The project needs approval by the Computer Science Honors Program director, and registration requires approval of the mentor. A GPA of 3.00 or better is required, or approval by the director of the Computer Science Honors Program.

Prerequisites: grade of C or better in CS 350

CS 492/592 Honors Research II in Computer Science (3 Credit Hours)

Laboratory work required. Students continue mentored research using the project defined in CS 491. Students will present the work and findings to the public. The project needs approval by the Computer Science Honors Program director, and registration requires approval of the mentor.

Prerequisites: A grade of B or better in CS 491

CS 495/595 Topics in Computer Science (1-3 Credit Hours)

Special topics.

Prerequisites: permission of the instructor

CS 497/597 Independent Study in Computer Science (1-3 Credit Hours)

Independent study under the direction of an instructor.

Prerequisites: permission of the instructor

CS 499W Honors Thesis in Computer Science (3 Credit Hours)

Laboratory work required. Each student writes a thesis and continues the development of the project defined in CS 491. Written work is reviewed and returned for corrective rewriting. Students will present the work and findings to the public. The project needs approval by the Computer Science Honors Program director, and registration requires approval of the mentor. This is a writing intensive class.

Prerequisites: A grade of C or better in CS 491

CSD - Communication Sciences and Disorders

CSD 350 Survey in Communication Disorders (3 Credit Hours)

This course is designed to acquaint students with the discipline of speech-language pathology and audiology and provide an introduction to developmental and acquired disorders of speech and language.

Prerequisites: Permission of instructor

CSD 351 Anatomy of Speech, Language, and Swallowing (3 Credit Hours)

Study of the psycholinguistic, acoustic, anatomical, and physiological aspects of speech and language, as well as anatomical and physiological aspects of swallowing.

Prerequisites: permission of the instructor

CSD 352 Phonetics (3 Credit Hours)

Study of the production and classification of sounds in American English; practice in phonetic transcription.

Prerequisites: permission of the instructor

CSD 446 Neural Bases of Communication and Swallowing Disorders (3 Credit Hours)

The content of this course focuses upon the neurological bases of speech, language, and swallowing, and communication and swallowing disorders that result from acquired neuropathologies affecting the central and peripheral nervous system.

Prerequisites: Grade of C- or better in CSD 350 and CSD 351

CSD 447 Introduction to Language Disorders in Children (3 Credit Hours)

This course presents an introduction to the various language disorders manifested by children and adolescents with a focus on characteristics, etiologies, assessment, and general intervention approaches.

Prerequisites: a grade of C- or higher in CSD 453

Pre- or corequisite: ENGL 370 or ENGL 350

CSD 449W/549 Clinical Observation and Writing in Communication Sciences and Disorders (3 Credit Hours)

Speech-language pathology/audiology students will learn practical and foundational clinical skills necessary for deconstructing speech-language pathology treatment sessions, for identifying important parts-of-speech, and for completing disciplinary writing tasks. Objectives in this class are met using guided observations. This is a writing intensive course.

Prerequisites: Grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C

Pre- or corequisite: Senior standing and a grade of C- or better in CSD 447

CSD 451/551 Introduction to Speech Sound Disorders (3 Credit Hours)

This course emphasizes causes, identification, and treatment of speech sound disorders. The class is designed to acquaint students with speech development from infancy through childhood, introduce assessment procedures and treatment principles, and build awareness and understanding of cultural and linguistic differences.

Prerequisites: CSD 453

Pre- or corequisite: CSD 352

CSD 452 Introduction to Voice and Fluency Disorders (3 Credit Hours)

This content of this course focuses upon the basic tenets related to fluency and voice disorders. The purpose is to introduce students to the basic terminology, concepts of the role of articulation, phonation, and respiration as they relate to both fluency and voice disorders. Diagnosing and treating fluency and voice disorders will be discussed.

Prerequisites: Grade of C- or better in CSD 351

CSD 453/553 Speech and Language Development (3 Credit Hours)

This course reviews speech and language development from the perspective of the speech-language pathologist.

Prerequisites: Grade of C- or better in CSD 350

CSD 458/558 Speech and Hearing Science (3 Credit Hours)

The content of this course focuses upon basic acoustics, speech acoustics, psychoacoustics, speech perception, and clinical laboratory instrumentation. The course is designed to provide fundamental information regarding normal and abnormal aspects of speech and hearing processes.

Prerequisites: Grade of C- or better in CSD 460

CSD 460/560 Hearing Disorders and Basic Audiometry (3 Credit Hours)

A study of the physics of sound, anatomy, and physiology of the human ear, basic audiometry and hearing disorders.

Prerequisites: Permission of instructor

CSD 461/561 Aural Rehabilitation I (3 Credit Hours)

A study of audiological findings and the implications for hearing therapy; speech and language development of the deaf.

Prerequisites: Grade of C- or better in CSD 460

CSD 465 Sign Language and Deaf Culture I (3 Credit Hours)

Study of the grammatical structure and use of American sign language; exposure to ideals and culture of the deaf community. (This course does not satisfy the general education foreign language skills requirement.)

Prerequisites: Permission of the instructor

CSD 466 Sign Language and Deaf Culture II (3 Credit Hours)

Advanced studies of the grammar and symbols of American Sign Language, and appreciation for concepts and issues surrounding deaf culture. (This course does not fulfill the general education foreign language requirement.)

Prerequisites: Grade of C- or higher in CSD 465

CSD 469 Practicum in Speech-Language Pathology (3 Credit Hours)

The clinical practicum in speech-language pathology takes place off campus, giving students the opportunity to earn clinical hours with an ASHA-certified speech-language pathologist in their senior year. The practicum involves 90 hours, divided between direct and indirect clinical services, as well as class meetings. A background check is required before students can be placed at the practicum site. Students are required to have a GPA in the major of 3.0 or higher.

Prerequisites: A grade of B- or better in CSD 447 and CSD 451; senior standing

Pre- or corequisite: CSD 449W

CSD 497/597 Independent Study in Communication Sciences and Disorders (1-3 Credit Hours)

Independent study of special topics in communication sciences and disorders.

Prerequisites: Permission of the instructor

CSD 498 Directed Research in Speech-Language Pathology (1-6 Credit Hours)

Supervised research on a specific problem in speech-language pathology. Regular meetings with faculty and a written/oral report are required.

Prerequisites: permission of instructor

CYSE - Cybersecurity

CYSE 001 Cybersecurity SFS LeADERS (0 Credit Hours)

This course outlines the curricular and co-curricular requirements for Scholarship for Service Students in the Cyber LeADERS program.

CYSE 100 Cyber Explorers and University Orientation (1 Credit Hour)

This course provides an introduction to cyber hygiene and orientation to university life.

CYSE 200T Cybersecurity, Technology, and Society (3 Credit Hours)

Students will explore how technology is related to cybersecurity from an interdisciplinary orientation. Attention is given to the way that technologically-driven cybersecurity issues are connected to cultural, political, legal, ethical, and business domains.

CYSE 201S Cybersecurity and the Social Sciences (3 Credit Hours)

This course addresses the social, political, legal, criminological, and economic dimensions of cybersecurity through a social science framework. Students are introduced to a human-factors approach to understanding cybersecurity threats. Attention is given to the social factors that contribute to cyber incidents and the political and legal mechanisms that are developed to control the behaviors of those who create risks and cybersecurity incidents. The class also explores how cybersecurity is studied by social scientists in various social science disciplines.

CYSE 202G Information Literacy for Cybersecurity (3 Credit Hours)

This course provides an in-depth introduction to information literacy from library and information science, information ethics, and computer science perspectives along with applications to cybersecurity research and professional activity. This course is aligned with Old Dominion University's general education learning outcomes for information literacy.

Prerequisites: ENGL 110C

CYSE 250 Basic Cybersecurity Programming and Networking (3 Credit Hours)

This course introduces the cybersecurity-centric programming and networking concepts. Students will develop problem solving skills by using low-level programming languages (including C and assembly) and learn fundamentals of network protocols. This course is the technical base for students to take cybersecurity major courses. No prior knowledge of programming and networking is assumed.

Prerequisites: MATH 162M or higher

CYSE 270 Linux System for Cybersecurity (3 Credit Hours)

This course introduces the basic operations in major Linux distros for cybersecurity using both graphical interface and command line interface. Students will learn about the basic installation and configuration, file systems management, shell scripts, and user authentication in Linux systems. This course is the technical base for students to take cybersecurity major courses.

CYSE 280 Windows System Management and Security (3 Credit Hours)

This course introduces tools and techniques used to configure, manage and implement Windows and its security-related features. Students will install, configure, manage and secure Windows client & server operating systems and related networking environment using a variety of software tools. This course also details how to mitigate malware threats, identify security issues by using auditing and the Advanced Threat Analysis feature in Windows Server, secure virtualization platform, and use new deployment options for enhancing the security.

CYSE 300 Introduction to Cybersecurity (3 Credit Hours)

This course provides an overview of the field of cybersecurity. It covers core cybersecurity topics including computer system architectures, critical infrastructures, cyber threats and vulnerabilities, cryptography, information assurance, network security, and risk assessment and management. Students are expected to become familiar with fundamental security concepts, technologies and practices, and develop a foundation for further study in cybersecurity.

Prerequisites: MATH 162M or permission of the instructor

CYSE 301 Cybersecurity Techniques and Operations (3 Credit Hours)

This course introduces tools and techniques used to secure and analyze large computer networks and systems. Students will explore and map networks using a variety of diagnostic software tools, learn advanced packet analysis, configure firewalls, write intrusion detection rules, perform forensic investigation, and practice techniques for penetration testing.

Prerequisites: MATH 162M and CYSE 270 or permission of the instructor

CYSE 368 Cybersecurity Internship (3-6 Credit Hours)

Internships provide a personalized exploration of structured employment within the major. This course mandates an initial or ongoing internship that the student obtains, as assignments are rooted in their concurrent internship experience. Course assignments will define the employment relationship, articulate learning outcomes, and offer opportunities for reflection to enhance the student's academic, career, and professional readiness. Students must complete 50 hours of site work per course credit.

Prerequisites: The student's internship placement must be coordinated with the site supervisor and approved by the School of Cybersecurity's Internship Director

CYSE 395 Topics in Cybersecurity (1-3 Credit Hours)

Study of selected topics in cybersecurity.

Prerequisites: junior standing

CYSE 404 Law and Digital Forensics (3 Credit Hours)

This course will focus on the intersection of digital forensics and the criminal justice system, namely how digital forensics is understood and applied to key criminal justice, constitutional and statutory considerations within the criminal justice system. Students will explore such topics as the nature and types of cybercrime; search and seizure principles in the digital world; finding, handling and maintaining chain of custody of digital evidence; interviewing individuals relating to digital evidence and related activities; and testifying in court about digital evidence matters.

Prerequisites: Junior standing or permission of instructor

CYSE 406 Cyber Law (3 Credit Hours)

This course tackles two major cyber law subjects. The first part of the course examines various U.S. laws and legal considerations that impact the digital and cyberspace worlds from traditional civil, and to a lesser extent, traditional criminal perspectives. The second part will familiarize cyber operations professionals about the extent of and limitations on their authorities to ensure operations in cyberspace are in compliance with U.S. law, regulations, directives and policies. The course will also introduce students to miscellaneous cybersecurity topics such as the Federal Acquisition Requirements.

Prerequisites: junior standing

CYSE 407 Digital Forensics (3 Credit Hours)

This course introduces the basic concepts and technologies of digital forensics. Students will learn the fundamental techniques and tools utilized for collecting, processing, and preserving digital evidence on computers, mobile devices, networks, and cloud computing environments. Students will also engage in oral and written communication to report digital forensic findings and prepare court presentation materials.

Prerequisites: declared major and junior standing

CYSE 409 Crime and Computer Applications (3 Credit Hours)

The purpose of this interdisciplinary course is to introduce students to the ways in which computers are involved in the commission and the investigation of crime. Students will learn the fundamentals of cryptography and steganography and the tools used to perform these activities. Students will also use forensic software to identify, gather, and verify relevant digital evidence. Cross-listed with CRJS 409.

Prerequisites: CRJS 310 or permission of instructor

CYSE 410/510 Artificial Intelligence (AI) Methods and Models (3 Credit Hours)

This course offers an introduction to Artificial Intelligence (AI). Students will explore the field's fundamental concepts, techniques, and applications. Methods, such as Generative AI (GenAI) that enable machines to learn and process information, and models, such as machine learning (ML) that uses data sets to recognize patterns and make decisions without human intervention will be covered. The course is designed for non-specialists and does not require prior computer science or programming knowledge.

Prerequisites: Permission of the instructor

CYSE 416/516 Cyber Defense Fundamentals (3 Credit Hours)

This course focuses on cybersecurity theory, information protection and assurance, and computer systems and networks security. The objectives are to understand the basic security models and concepts, learn fundamental knowledge and tools for building, analyzing, and attacking modern security systems, and gain hands-on experience in cryptographic algorithms, security fundamental principles, and Internet security protocol and standards. (Offered fall)

Prerequisites: permission of the instructor

Pre- or corequisite: ECE 355 or equivalent or permission of the instructor

CYSE 417 Digital Leadership (3 Credit Hours)

This course explores technology as it relates to leadership experiences. Theories, case studies and real world examples are analyzed to show both successful and unsuccessful uses of online and digital approaches that inform leaders' communication strategies. Students will explore how their own digital identities may impact their futures as leaders. They will also learn how to create digital identities that will shape their professional identities throughout their careers.

Prerequisites: Junior standing or permission of instructor

CYSE 419/519 Cyber Physical System Security (3 Credit Hours)

Cyber Physical Systems (CPS) integrate computing, networking, and physical processes. The objectives of this course are to learn the basic concepts, technologies and applications of CPS, understand the fundamental CPS security challenges and national security impact, and gain hands-on experience in CPS infrastructures, critical vulnerabilities, and practical countermeasures.

Prerequisites: ECE 355 or permission of the instructor

CYSE 420/520 Applied Machine Learning in Cybersecurity (3 Credit Hours)

This course introduces the concepts and technologies of machine learning with a focus on applications related to cybersecurity. The objectives are to learn fundamental knowledge and practical experience and identify the use case of machine learning techniques in cybersecurity. The course will discuss traditional and advanced machine learning techniques, e.g., neural network, deep convolutional neural network, generative adversarial network, and transfer learning algorithms. Students will engage in oral and written communication by reporting and presenting the materials of the course project.

Prerequisites: CYSE 250 or permission of the instructor

CYSE 421/521 Generative AI in Cybersecurity (3 Credit Hours)

This course provides an in-depth examination of the intersection between Generative AI (Gen AI) and Cybersecurity. It focuses on the dual nature of advanced AI systems as both enhancers and potential threats to security infrastructure. Students will acquire a comprehensive understanding of the underlying principles, algorithms, and practical applications of Gen AI models in the discovery of attack vectors, identification of cyber threats, and automation of security tasks. Additionally, the course will address defensive strategies aimed at mitigating the risks stemming from AI-driven cyberattacks.

Prerequisites: Permission of instructor

CYSE 425W/525 Cybersecurity Strategy and Policy (3 Credit Hours)

This writing intensive course explores cybersecurity policy and strategy and introduces students to the essentials of strategy development and policy making in cybersecurity. Topics considered include planning principles in cyber strategy; risk management and cybersecurity policy; the connections between cybersecurity policies, businesses, and governmental institutions; the knowledge, skills, and abilities needed to develop and implement cybersecurity policy; the social, political and ethical implications that arise in cybersecurity policies and strategies; strategies to assess cybersecurity policy; and the ties between national security and cybersecurity policy.

Prerequisites: ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C with a grade of C or better and CYSE 200T or IT 200T or POLS 101S

CYSE 426/526 Cyber War (3 Credit Hours)

This course explores the national security dimensions of cybersecurity and examines cyber war in international relations. Exploration of cyber war begins with an examination of cybersecurity as a component of national security and investigates the topics of U.S National Cybersecurity and other national approaches to cyber war. The topics of cyber deterrence, cyber as a military domain, the roles of international organizations in cyber war, cyber terrorism, the role of social media, and information warfare will be discussed. The international dimension of cybersecurity is also discussed.

Prerequisites: CYSE 200T or POLS 101S or permission of the instructor

CYSE 430/530 Introduction to Cybersecurity Risk Management (3 Credit Hours)

This course addresses the broad topic of risk management and how risk, threats, and vulnerabilities impact information systems. Areas of instruction include how to assess and manage risk based on defining an acceptable level of risk for information systems. Elements of a business impact analysis (BIA), business continuity plan (BCP), disaster recovery plan (DRP), and computer incident response team (CIRT) plan will also be discussed.

Prerequisites: CYSE 300

CYSE 431/531 Advanced Techniques Cybersecurity Risk Management (3 Credit Hours)

Expert-level approach on the Risk Management Framework (RMF) system Authorization to Operation (ATO), including Continuous cATO. Curriculum that is aligned to the NIST SP 800-53, Revision 5. Advanced topics include Assess and Authorize, System Categorization, Security Control Assessment, System Test Results, Plan of Action and Milestones (POA&M), and Continuous Monitoring (CONMON).

Prerequisites: CYSE 430

CYSE 432/532 Cyber Risk CSF/CMMC (3 Credit Hours)

This course introduces cybersecurity, the NIST Cybersecurity Framework (CSF), and the Cybersecurity Maturity Model Certification (CMMC) program. Topics to be addressed include the risk management fundamentals, IT risk management, and cyber risk controls; cyber threats and vulnerabilities; data security and sanitization; the NIST CSF, including its core functions, categories, and subcategories; and the CMMC comprising its levels, domains, and implementation guidelines.

Prerequisites: CYSE 431

CYSE 433/533 Cyber Risk FedRAMP/Audit (3 Credit Hours)

This course explores the Federal Risk and Authorization Management Program (FedRAMP) and Auditing. Topics to be addressed include an overview of the FedRAMP framework, including its objectives, components, and stages; the needed documents and guidelines to develop system security plans and security assessment reports; the NIST Risk Management Framework (RMF) comprising its different stages and the adoption mechanism; FISMA compliance and auditing assessment; and real-world case studies and future challenges.

Prerequisites: CYSE 432

CYSE 450 Ethical Hacking and Penetration Testing (3 Credit Hours)

This course introduces the basic terminologies used in ethical hacking and useful tools in relation to penetration testing on Kali Linux. Students will learn to explore the vulnerabilities in various systems and operate the industry-leading tools and framework to perform the penetration testing on different target systems.

Prerequisites: CYSE 270 and CYSE 301 or permission of the instructor

CYSE 494 Entrepreneurship in Cybersecurity (3 Credit Hours)

This course is designed to help students enhance their personal and professional development through innovation guided by faculty members and professionals. It offers students an opportunity to integrate disciplinary theory and knowledge through developing a nonprofit program, product, business, or other initiative. The real-world experiences that entrepreneurship provide will help students understand how academic knowledge leads to transformations, innovations, and solutions to different types of problems. The course can be delivered either as an independent project for individual students or as group projects similar to those sometimes offered in topics courses.

Prerequisites: Approval by the Director of the Center for Cybersecurity Education and Research

CYSE 495/595 Topics in Cybersecurity (1-3 Credit Hours)

The advanced study of selected cybersecurity topics designed to permit small groups of qualified students to work on subjects of mutual interest. These courses will appear in the course schedule, and will be more fully described in information distributed to academic advisors.

Prerequisites: permission of the instructor

CYSE 497/597 Tutorial Work in Special Topics in Cybersecurity (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: Senior standing and approval of the instructor

CYTO - Cytotechnology

CYTO 403 Gynecological Screening Laboratory (3 Credit Hours)

Laboratory experience in the screening of gynecological smears.

Prerequisites: Acceptance into the Cytotechnology Program and/or permission of the cytotechnology program director

Pre- or corequisite: CYTO 405 and CYTO 415

CYTO 404 General Pathology (3 Credit Hours)

This course is an overview of general disease processes and causes in the human. All body systems will be covered including respiratory, gastrointestinal, circulatory, nervous, reproductive, and urinary. Aging, dietary, and stress factors will be discussed in the disease process. Bacteria, fungi, and viruses will be discussed in general and for each body system. Neoplasms will be covered for each body site. This course will be of benefit to anyone interested in diseases of the human body or entering the medical field. (cross listed with MLS 401)

Prerequisites: junior standing

Pre- or corequisite: BIOL 250 and BIOL 251 or equivalent

CYTO 405 Normal Gynecological Cytology (3 Credit Hours)

Introduction to histological and cytological features of the normal female genital tract with emphasis on normal and non-neoplastic abnormalities. Principles of cytological diagnostic techniques will be discussed.

Prerequisites: Acceptance into the Cytotechnology Program or permission of program director

Pre- or corequisite: CYTO 403

CYTO 407 Clinical Histology (3 Credit Hours)

This course consists of the systematic study of cellular components as well as the grouping/organization of tissues into major 'organ' systems. Additionally, the cellular basis of examples of human diseases will be studied. Microscopic and virtual identification and morphology of cells, tissues, and organ substructures will be emphasized. This course will be of benefit to anyone interested in diseases of the human body or entering the medical field.

Prerequisites: permission of the instructor

CYTO 415 Abnormal Gynecological Cytology (4 Credit Hours)

Introduction to diagnostic cytological techniques and pathology of the female reproductive tract with emphasis on premalignant and malignant changes.

Pre- or corequisite: CYTO 403 and CYTO 405

CYTO 424 Respiratory Cytology (4 Credit Hours)

Principles of diagnostic cytology and pathology of the respiratory tract, including benign conditions, inflammatory and infectious diseases, premalignant conditions and primary and metastatic malignancies.

Prerequisites: Admission to the cytotechnology program

Pre- or corequisite: CYTO 405 and CYTO 415

CYTO 428W Cytopreparatory Techniques and Procedures (3 Credit Hours)

Introduction to collection, processing and preparation of cytologic specimens from all body sites and general laboratory procedures and regulations.

A portion of this course consists of practical experience acquired in the laboratory. Practical experience will be perfected during clinical site rotations throughout the Cytotechnology Program. Students will learn how to properly write lab reports and papers related to health science fields. This is a writing intensive course.

Prerequisites: Pre-admission to the Cytotechnology Program or Program Director permission; completion of ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C with a grade of C or higher

CYTO 430 Cytopreparation & Ancillary Techniques (4 Credit Hours)

The course offers an introduction to cytopreparation and ancillary diagnostic techniques. Upon completion, students should be able to understand the principles of cytology preparatory techniques as well as fixation and staining theory and use. In addition, students will learn the application and interpretation of various special and immunohistochemical stains, and understand the various molecular tests available for use in cytopathology.

Prerequisites: CYTO 404

Pre- or corequisite: CYTO 403, CYTO 405 and CYTO 415

CYTO 442 Gastro-Intestinal Cytology (2 Credit Hours)

Study of the pathology and cytology of the gastro-intestinal tract, including the oral cavity, esophagus, stomach, colon, and rectum. Emphasis on normal conditions, benign inflammatory, infections, parasitic conditions, gastric ulcers, premalignant and malignant lesions.

Pre- or corequisite: CYTO 405 and CYTO 415

CYTO 444 Genitourinary Cytology (2 Credit Hours)

Study of the pathology and cytology of the genitourinary tract, with emphasis in normal conditions, benign inflammatory and infectious conditions, crystals, premalignant and malignant lesions.

Pre- or corequisite: CYTO 405 and CYTO 415

CYTO 445 Breast Cytology (2 Credit Hours)

Study of pathology and cytology of the breast, with emphasis on benign, inflammatory conditions, premalignant and malignant disease in both breast smears and fine needle aspirations.

Prerequisites: CYTO 407

Pre- or corequisite: CYTO 405 and CYTO 415

CYTO 446 Body Fluids Cytology (3 Credit Hours)

Study of the pleural, peritoneal and pericardial cavity fluids, synovial and cerebral spinal fluids, with emphasis on benign, inflammatory conditions, and primary and metastatic malignancies.

Prerequisites: CYTO 407

Pre- or corequisite: CYTO 405 and CYTO 415

CYTO 448 Non-Epithelial Cytology (1 Credit Hour)

Study of the pathology and cytology of non-epithelial lesions with emphasis on benign, inflammatory, and malignant conditions.

Prerequisites: Admission to the cytotechnology program

Pre- or corequisite: CYTO 405, CYTO 415, CYTO 424, CYTO 444, CYTO 445, and CYTO 446

CYTO 456 Fine Needle Aspiration Cytology I (3 Credit Hours)

Study of specialized collection techniques, processing and diagnosis of fine needle aspirations from various body sites, including thyroid, liver, lymph nodes, pancreas, lung, mediastinum, salivary gland, and ovary. Clinical practical application of these principles will be continued at the clinical sites.

Prerequisites: CYTO 403, CYTO 405, CYTO 415, and CYTO 428W

CYTO 457 Fine Needle Aspiration Cytology II (3 Credit Hours)

Study of specialized collection techniques, processing and diagnosis of fine needle aspirations from various body sites, including kidney, retroperitoneum, breast, soft tissue, bone, eye, central nervous system, and skin. Clinical practical application of these principles will be continued at the clinical sites.

Prerequisites: CYTO 403, CYTO 405, CYTO 415, CYTO 424, CYTO 428W, CYTO 445, CYTO 446, CYTO 448, and CYTO 456

CYTO 458 Cytology Internship I (3 Credit Hours)

Directly supervised experience in a clinical setting: includes evaluation of gynecologic smears and study set assignments. Students will be exposed to cytopreparatory techniques.

Pre- or corequisite: CYTO 405 and CYTO 415

CYTO 468 Cytology Internship II (4 Credit Hours)

Directly supervised experience in a clinical setting. Includes evaluation of gynecologic and non-gynecologic specimen slides and study set assignments. Students will pre-screen gynecologic and non-gynecologic smears and study set assignments. Students will be exposed to cytopreparatory techniques.

Pre- or corequisite: CYTO 405, CYTO 415, CYTO 424, CYTO 444, CYTO 445, and CYTO 446

CYTO 478 Cytology Internship III (8 Credit Hours)

Directly supervised experience in a clinical setting. Includes evaluation of gynecologic and non-gynecologic smears and study set assignments. Students will be exposed to cytopreparatory techniques.

Prerequisites: Admission to the cytotechnology program

Pre- or corequisite: CYTO 405, CYTO 415, CYTO 424, CYTO 444, CYTO 445, CYTO 446, CYTO 456, and CYTO 457

CYTO 495 Topics in Cytology (1-3 Credit Hours)

Independent study of selected topics in clinical cytology. Review of cytologic specimens from various body sites

Prerequisites: permission of the program director

CYTO 497 Cytology Senior Seminar (1 Credit Hour)

Supervised experience consists of clinical cases and seminar presentations into current advances within the specialty of clinical cytology. A student research project and oral presentation of current journal articles and the research paper are required.

Prerequisites: permission of the program director

CYTO 498 Topics (1-3 Credit Hours)

Topics.

Prerequisites: Instructor approval

CYTO 499 Comprehensive Cytology Review (1 Credit Hour)

The course is a comprehensive review course that includes the review and study of the exfoliative and non-exfoliative (including fine needle aspirations) cytomorphologic features of neoplastic and non-neoplastic lesions of the female genital tract, respiratory tract, urinary tract, body fluids, lymph nodes, thyroid, salivary glands, pancreas and biliary tract, the diagnostic pitfalls associated with the various body sites, the appropriate use of ancillary techniques in diagnostic cytology, the principles of quality assurance, and the new developments in the field of cytopathology.

Prerequisites: CYTO 403, CYTO 405, CYTO 415, CYTO 424, CYTO 428W, CYTO 442, CYTO 444, CYTO 445, CYTO 446, CYTO 448, CYTO 456, CYTO 457, CYTO 458, and CYTO 468

DANC - Dance

DANC 152R Acting One (3 Credit Hours)

An introduction to the physical and vocal principles of performance coupled with an opportunity to increase awareness of the constructed nature of social interactions. Students will explore confident self-expression through the physical, vocal, emotional and technical aspects of acting, as an art form and a daily experience, in a format that encourages freedom of imagination and personal growth. Emphasis is on the fundamental communication skills of presence, body language, imagination, and social communication.

DANC 185A Dance and Its Audience (3 Credit Hours)

This course is designed to acquaint students with the components of theatrical dance performance, its historical and ethnic origins, its role as a creative expression of peoples and societies and its relationship to other art forms. Through films, videos, live performances, guest speakers, readings and discussions, students consider philosophical approaches to language, communication, aesthetics and style of choreography.

DANC 195 Topics in Dance (1-3 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major.

DANC 196 Topics in Dance (1-3 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major. These courses will appear in the course schedule, and will be more fully described in a booklet distributed to academic advisors.

DANC 201 Ballet Technique 1 (2 Credit Hours)

Introduction to ballet technique.

DANC 211 Modern Dance Technique 1 (2 Credit Hours)

Introduction to modern dance technique.

DANC 231 Ballroom Dance 1 (1 Credit Hour)

This class introduces students to basic American and Latin ballroom dance. Basic steps of the foxtrot, waltz, swing, tango, cha cha and rumba will be covered. Focus on rhythm, technique, leading and following is also included. This class is open to single students and couples.

DANC 232 Ballroom Dance 2 (1 Credit Hour)

This class is a continuation of basic American and Latin ballroom dance. Basic steps of the foxtrot, waltz, swing, tango, cha cha and rumba will be covered. Focus is on rhythm, technique, leading and following. The class is open to single students and couples.

DANC 235 Yoga (2 Credit Hours)

An introduction to yoga postures, breathing exercises, and relaxation techniques that promote health, alleviate stress, improve skeletal alignment, and increase muscular strength and flexibility. Students are also introduced to the history and philosophy of yoga.

DANC 241 Pilates Mat Class I (1 Credit Hour)

This course will introduce students to the Pilates method. Students will learn beginning-level Pilates exercises on the mat.

DANC 242 Pilates Mat Class 2 (1 Credit Hour)

A continuation of the study of the Pilates method. Students will learn intermediate-level Pilates exercises on the mat.

Prerequisites: DANC 241 or permission of the instructor

DANC 251 Tap Dance I (1 Credit Hour)

Introduction to tap dance styles including classic, hoof and rhythm. Fundamental movements such as time steps, grab-offs, riffs, etc. are incorporated using counterpoint rhythms and challenges. Students gain an understanding of tap dance as an American art form.

DANC 271 Introduction to Filmmaking (3 Credit Hours)

This course will introduce the beginning student to making movies. Students will learn the basics of working with cameras, lights, sound recording, video editing and post production. This is a hands-on production course.

DANC 295 Topics in Dance (1-3 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major. These courses appear in the course schedule, and are fully described in a booklet distributed to academic advisors.

DANC 296 Topics in Dance (1-3 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major. These courses appear in the course schedule, and are fully described in a booklet distributed to academic advisors.

DANC 301 Ballet in Context (1 Credit Hour)

An examination of the history, theory, and practice of Ballet.

Prerequisites: Junior standing

Pre- or corequisite: DANC 201

DANC 302 Ballet Technique 2 (2 Credit Hours)

Continuation of ballet technique.

Prerequisites: DANC 201 or permission of the instructor

DANC 303 Ballet Technique 3 (1-4 Credit Hours)

Continuation of ballet technique at an intermediate level.

Prerequisites: DANC 302 or permission of the instructor

DANC 311 Modern Dance in Context (1 Credit Hour)

An examination of the history, theory, and practice of Modern Dance.

Prerequisites: Junior standing

Pre- or corequisite: DANC 211

DANC 312 Modern Dance Technique 2 (2 Credit Hours)

Continuation of modern dance technique.

Prerequisites: DANC 211 or permission of the instructor

DANC 313 Modern Dance Technique 3 (1-4 Credit Hours)

Continuation of modern dance technique at an intermediate level.

Prerequisites: DANC 312 or permission of the instructor

DANC 320 Jazz in Context (1 Credit Hour)

An examination of the history, theory, and practice of Jazz.

Prerequisites: Junior standing

Pre- or corequisite: DANC 201 or DANC 211

DANC 321 Jazz Dance 1 (1 Credit Hour)

Introduction to jazz dance technique.

Prerequisites: DANC 201 or DANC 211 or DANC 260 or permission of instructor

DANC 322 Jazz Dance 2 (1 Credit Hour)

Continuation of jazz dance technique.

Prerequisites: DANC 321 or permission of the instructor

DANC 330 Extreme Moves (Conditioning for Dancers) (2 Credit Hours)

This course explores the extended physical technique known as Extreme Moves. The Extreme Moves training method focuses on the body's alignment with regard to how forces are present, how they act upon it, and how to build strength to resist or collaborate with these forces. Students will work with props such as large physio balls, elastic bands, mats and the wall in order to improve their core strength, balance, upper and lower body strength and alignments. Through physical practice, readings and videos, students will learn the conceptual framework for Extreme Moves.

Prerequisites: Junior standing or permission of the instructor

DANC 341 Pilates Equipment Lab 1 (1-2 Credit Hours)

This course will focus on learning beginning and some intermediate exercises on the Pilates apparatus, which includes the Reformer, Cadillac, Low Chair and Magic Circle.

Prerequisites: DANC 241 or instructor permission

DANC 342 Pilates Equipment Lab 2 (1-2 Credit Hours)

This course will focus on learning intermediate and some advanced exercises on the Pilates apparatus, which includes the Reformer, Cadillac, Low Chair and Magic Circle.

Prerequisites: DANC 341 or instructor permission

DANC 360 Rhythmic Analysis (1 Credit Hour)

A study of basic music theory specifically designed for the dancer. Emphasis is on score reading, accompaniment for dance, note values and rhythms as they directly relate to choreography in a classroom as well as in the rehearsal studio. Students perform movement studies based on rhythmic structures.

Prerequisites: DANC 201 or DANC 211 or permission of the instructor

DANC 361 Hip Hop Dance & Culture 1 (2 Credit Hours)

This course will explore hip hop dance and culture from several points of entry: movement, historical, political, aesthetic, sonic, and geographical. The historical focus of the course locates hip-hop dance as a personal, interactive, and cultural expression. Students will navigate through the evolution of hip hop dance and culture from its birthplace in the Bronx, NY through its development into a global phenomenon. The course will discuss the elements of hip hop culture: DJ, B-Boy/Girl, Graffiti Art, MC, and Beat Box, and how they intersect. Students will explore how hip-hop influences and is influenced by geopolitics, race, gender, and other social structures.

Prerequisites: DANC 261

DANC 362 Hip Hop Dance & Culture 2 (2 Credit Hours)

This course will continue to explore hip hop dance and culture from several points of entry: movement, historical, political, aesthetic, sonic, and geographical. The historical focus of the course locates hip hop dance as a personal, interactive, and cultural expression. Students will navigate deeper through the evolution of hip hop dance and culture from its birthplace in the Bronx, NY through its development into a global phenomenon. The course will continue its discussion on the elements of hip hop culture: DJ, B-Boy/Girl, Graffiti Art, MC, and Beat Box, and how they intersect. Students will continue to explore how hip-hop influences and is influenced by geopolitics, race, gender, and other social structures.

Prerequisites: DANC 361

DANC 367 Cooperative Education (1-3 Credit Hours)

Student participation for credit based on the academic relevance of the work experience, criteria and evaluative procedures as formally determined by the department prior to the semester in which the work experience takes place. Available for pass/fail grading only.

Prerequisites: Approval by department is required; Additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

DANC 368 Internship (1-3 Credit Hours)

A structured work experience with or without remuneration, in an appropriately related disciplinary field. An ePortfolio, 150 hours of site work, plus satisfactory evaluations by supervisor and cooperating faculty member are required. Available for pass/fail grading only. Available to Communication, Theatre, and Dance majors and minors only. Cross-listed with COMM 368 and THEA 368.

Prerequisites: Approval of departmental internship director prior to registration

DANC 369 Practicum (1-3 Credit Hours)

Field experience in dance.

Prerequisites: Permission of the instructor

DANC 370 Dance Composition 1 (2 Credit Hours)

Designed for dance majors or minors, this course is a study of the elements and craft of choreography through practical and written experience. Time, space and dynamics are explored through assigned movement studies.

Projects are designed for the creative development of personal movement repertoire and compositional skills for the dancer, choreographer and dance educator.

Prerequisites: DANC 211 and DANC 390 or equivalent (DANC 312, DANC 313, DANC 414, DANC 415, DANC 416)

DANC 373 Production/Performance Lab (1 Credit Hour)

This course provides students opportunities to participate in productions in Theatre, Dance or Film. These positions provide hands-on experience in the discipline. Cross-listed with THEA 373.

Prerequisites: Junior standing or permission of the instructor

DANC 374 Production/Performance Lab (1 Credit Hour)

This course provides students opportunities to participate in productions in Theatre, Dance or Film. These positions provide hands-on experience in the discipline. Cross-listed with THEA 374.

Prerequisites: Junior standing or permission of the instructor

DANC 389W Dancing Power: Dance as Communication and Transformation (3 Credit Hours)

This course focuses on the documentation and communication of 'dance history' as a site that both affirms and challenges dominant ideas. Students will examine which artists and dance forms are included in (and excluded from) canonical narratives. We will study forms of documentation, including film, digital platforms, social media, and dance criticism, and their roles in promoting certain artists, plus the importance of digital technologies in shifting our definitions of dance and expanding settings for dance beyond traditional concert dance stages. This writing intensive class will hone students' critical thinking, reading, and writing skills by placing special attention on ways of describing and analyzing dancing, dancers, and choreography.

Prerequisites: A grade of C or better in ENGL 211C or equivalent

DANC 390 Improvisation (3 Credit Hours)

An exploration of creativity through structured exercises, games and problems. Students participate in experiential studies that explore improvisational approaches, devices and elements to gain skills in the art of improvisation. This course also includes group discussions of reading assignments and feedback sessions following the improvisations performed in class. Through readings, journal writings, and in-class exercises, students develop the skills to articulate what they see, feel and respond to as artists, performers, and observers. Cross-listed with THEA 390.

Prerequisites: Junior standing or permission of the instructor

DANC 393 Functional Anatomy for Movement Practices (3 Credit Hours)

This course is an analysis of human motion through a study of anatomy, kinesiology and movement fundamentals.

Prerequisites: DANC 201 or DANC 211 or DANC 235 or DANC 241 or DANC 321 or DANC 341 or DANC 361

DANC 395 Topics in Dance (3 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major. These courses appear in the course schedule, and are more fully described in a booklet distributed to academic advisors.

Prerequisites: Permission of the instructor

DANC 396 Topics in Dance (1-3 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major. These courses appear in the course schedule, and are more fully described in a booklet distributed to academic advisors.

Prerequisites: Permission of the instructor

DANC 404 Ballet Technique 4 (1-4 Credit Hours)

Continuation of ballet technique at an intermediate level.

Prerequisites: DANC 303 or permission of the instructor

DANC 405 Ballet Technique 5 (1-4 Credit Hours)

Continuation of ballet technique at an advanced level.

Prerequisites: DANC 404 or permission of the instructor

DANC 414 Modern Dance Technique 4 (1-4 Credit Hours)

Continuation of modern dance technique at an intermediate level.

Prerequisites: DANC 313 or permission of the instructor

DANC 415 Modern Dance Technique 5 (1-4 Credit Hours)

Continuation of modern dance technique at an advanced level.

Prerequisites: DANC 414 or permission of the instructor

DANC 423 Jazz Dance 3 (1 Credit Hour)

Continuation of jazz dance technique at an intermediate/advanced level.

Prerequisites: DANC 322 or permission of the instructor

DANC 424 Jazz Dance 4 (1 Credit Hour)

Continuation of jazz dance technique at an intermediate/advanced level.

Prerequisites: DANC 423 or permission of the instructor

DANC 463 Hip Hop Dance and Culture 3 (2 Credit Hours)

This course locates hip hop dance as a personal, interactive, and cultural expression. The course will focus primarily on the movement elements (Breakin, Popping, Locking, Party Dances, and Choreographic elements) of Hip Hop, deepening the breadth of knowledge students have been exposed to in DANC 361 and DANC 362.

Prerequisites: DANC 361 and DANC 362 or permission of instructor

DANC 464 Hip Hop Dance and Culture 4 (2 Credit Hours)

This course locates hip hop dance as a personal, interactive, and cultural expression. The course will continue its study of the movement elements (Breakin, Popping, Locking, Party Dances, and choreographic elements) of Hip Hop, deepening the breadth of knowledge students have been exposed to in Hip Hop DANC 361, DANC 362 and DANC 463. Lastly a major focus of this course will be a test of self and how each student embraces the cypher and its many elements as a tool to continue the exploration into knowledge production, creative expression, and critical inquiry

Prerequisites: DANC 361, DANC 362 and DANC 463 or permission of instructor

DANC 470 Dance Composition 2 (2 Credit Hours)

This course builds on the skills developed in Dance Composition 1, including the exploration of time, space and dynamics, with a focus on constructing fully realized group and solo dance compositions.

Prerequisites: DANC 370 and permission of the instructor

DANC 473 Production/Performance Lab (1 Credit Hour)

This course provides students opportunities to participate in productions in Theatre, Dance or Film. These positions provide hands-on experience in the discipline. Cross-listed with THEA 473.

Prerequisites: Junior standing or permission of the instructor

DANC 474 Production/Performance Lab (1 Credit Hour)

This course provides students opportunities to participate in productions in Theatre, Dance or Film. These positions provide hands-on experience in the discipline. Cross-listed with THEA 474.

Prerequisites: Junior standing or permission of the instructor

DANC 489 Principles of Teaching Dance (2 Credit Hours)

This course covers basic methods of movement education as applied to the teaching of ballet, modern dance, jazz, and movement for children. An understanding of anatomical structure and mechanics is utilized in the analysis of student performance in dance class. Specific objectives for dance exercises are explored. Practical experiences in the planning, organization and structure of technique classes of various styles are designed to prepare students as dance educators.

Prerequisites: Permission of the instructor

DANC 490 Pedagogy for Dance Educators (3 Credit Hours)

Methods and instructional theories and strategies of movement education as applied to the teaching of ballet, modern dance, jazz, and movement for children. Practical experience in the structure, organization and assessment of dance arts programs for the K-12 public school setting.

Prerequisites: A passing score on the Praxis I or equivalent instrument and admittance into the Teacher Education program

DANC 495/595 Topics in Dance (1-3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses appear in the course schedule, and are more fully described in a booklet distributed to academic advisors.

Prerequisites: Appropriate survey course or permission of the instructor

DANC 496/596 Topics in Dance (1-3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses appear in the course schedule, and are more fully described in a booklet distributed to academic advisors.

Prerequisites: Appropriate survey course or permission of the instructor

DANC 497/597 Tutorial Work in Special Topics in Dance (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: Senior standing and approval of the department chair

DANC 498/598 Tutorial Work in Special Topics in Dance (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: Senior standing and approval of the department chair

DANC 499 Senior Project (1 Credit Hour)

Completion of a major research project during one's senior year on a topic of particular interest to the student. Topics to be selected under the direction of an instructor with conferences as appropriate. (Qualifies as a CAP experience.)

Prerequisites: Senior standing and approval of the department chair

DASC - Data Science

DASC 157 Introduction to Data Science Programming (4 Credit Hours)

An introduction to computational problem-solving in the context of data science. This course introduces students to the programming language Python and how to use it as a tool for problem-solving. The course utilizes illustrative examples to help students grasp the fundamental concepts and reinforces their understanding through a variety of practical exercises. No prior programming experience is required to take this course.

Prerequisites: MATH 102M or permission of the instructor

DASC 205S Data, Technology, Society (3 Credit Hours)

This course investigates how data science is transforming not only our sense of science and scientific knowledge, but our sense of ourselves and our communities and our commitments concerning human affairs and institutions generally. Social implications of the digital revolution, including ethical issues associated with algorithmic design and privacy will be examined. Students will use a sociological lens to explore how our increasingly digital lifestyle changes institutions and social relations.

DASC 255 Data Processing with Python (4 Credit Hours)

Python provides several libraries which facilitate data manipulation, processing, analysis, and visualization. This course will introduce standard Python packages used for Data Science, including pandas, numpy, seaborn, matplotlib, and scikit-learn. By the end of the course, students will be equipped to create and modify existing Python code to explore a range of data sets.

Prerequisites: CS 153

DASC 257 Data Science Programming (4 Credit Hours)

This course focuses on problem solving and programming in Python. Emphasis is placed on common algorithms and programming principles utilizing the standard library distributed with Python. Upon completion, students should be able to design, code, test, and debug Python language programs.

Prerequisites: DASC 157

DASC 300 Foundations of Data Science (3 Credit Hours)

This course provides an interdisciplinary overview of data sciences drawing on key elementary topics related to data analytics. A specific focus is given to the way that decisions made about data from those disciplinary pursuits inform policy, product development, and humanity. Topics addressed include elements of data, data collection, the connections between machine learning and data, survey research, programming with Python and R, statistical learning, model evaluations, digital engineering, and ethical uses of data.

Prerequisites: junior standing

DASC 312 The Art of Data Visualization (3 Credit Hours)

This course explores artistic foundations for visualization including art theory and aesthetics, color theory, composition and layout. We will also discuss the psychology of visual perception, and semiotics and the underlying nature of symbolic representation. Students will gain experience applying these principles by sketching and using technological tools, and will also critically evaluate visualizations based on the theories discussed.

Prerequisites: DASC 300

DASC 324 Introduction to Data Visualization (3 Credit Hours)

This course focuses on the design and creation of effective visualizations for communicating data. The Python programming language will be used to create static and interactive visualizations for a variety of data types including tabular, text, and geographic data. Students will develop a portfolio and also will gain experience in analyzing, interpreting, and revising visualizations created by others.

Prerequisites: DASC 300 or permission of the instructor

Pre- or corequisite: CS 153

DASC 357E Ethics and Data (3 Credit Hours)

This course explores, from a philosophical perspective, ethical questions arising from collecting, drawing inferences from, and acting on data, especially when these activities are automated and on a large scale. This course will provide students a framework for considering the ethical implications of data usage. Emphasis will be placed on discussing how historic and contemporary examples of potentially unethical practice could be altered to reduce harm and increase equity. Topics to be covered may include, but are not limited to, systematic approaches to assessing ethical issues; privacy and confidentiality; defining research and the responsibilities associated with conducting ethical research; implicit and structural biases in data collection and analysis; freedom of speech; and consent to data collection.

Prerequisites: ENGL 110C

DASC 368 Data Science Internship (1-6 Credit Hours)

This course allows students to work for an employer in a position related to data science. Students must work for 50 hours per course credit and complete course assignments.

Prerequisites: approval by the program coordinator

DASC 424 Data Storytelling (3 Credit Hours)

Data storytelling combines data, narrative, and visualizations to communicate insights and influence decision-making. This course will present the conceptual basis for storytelling and techniques for narrative development, as well as leverage technical skills to analyze and visualize data. By the end of the course, students will have experience in developing cohesive data-driven stories using a variety of platforms and tools.

Prerequisites: DASC 324 or instructor permission

DASC 434 Data Curation and Management (3 Credit Hours)

Large data sets are rarely ready for analysis after collection. Data must be organized, processed, integrated, and evaluated for accuracy and relevance, and subsequently maintained and enhanced over time. In this course, students will learn how to make data accessible and ensure its validity for analytic projects during course of the data lifecycle.

Prerequisites: DASC 300 or permission of the instructor

DASC 436W Data Science Capstone Project (3 Credit Hours)

Students work individually or in groups to plan, design, and carry out a research project demonstrating expertise with data science. Final papers that report the results for the study are presented in a formal research seminar. The projects reflect knowledge gained from undergraduate work and training received in discipline-specific research methods and statistics courses. This is a writing intensive course.

Prerequisites: ENGL 211C/ENGL 221C/ENGL 231C with a grade of C or better and senior standing

DASC 494 Entrepreneurship in Data Science (3 Credit Hours)

This course is designed to help students enhance their personal and professional development through innovation guided by faculty members and professionals. It offers students an opportunity to integrate disciplinary theory and knowledge through developing a nonprofit program, product, business, or other initiative. The real-world experiences that entrepreneurship provide will help students understand how academic knowledge leads to transformations, innovations, and solutions to different types of problems. The course can be delivered either as an independent project for individual students or as group projects similar to those sometimes offered in topics courses.

Prerequisites: junior standing

DASC 496/596 Topics in Data Science (3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule, and will be more fully described in information distributed to academic advisors.

Prerequisites: junior standing

DASC 497/597 Independent Study (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: senior standing and approval of the program coordinator

DNTH - Dental Hygiene

DNTH 300 Dental Hygiene Theory I (4 Credit Hours)

An introduction to the theoretical foundations of preventive and therapeutic oral health services used in the dental hygiene process. Emphasis is on prevention of disease transmission, patient assessment, dental hygiene instrumentation, oral health instruction, treatment planning and ethical decision making. (offered fall)

Prerequisites: junior standing

Pre- or corequisite: DNTH 302 and DNTH 304

Corequisites: DNTH 301

DNTH 301 Dental Hygiene Services I (3 Credit Hours)

Preclinical experience in the on-campus supervised clinic. Clinical and laboratory application of introductory skills essential to rendering oral health services to patients with emphasis on basic dental hygiene instrumentation and ergonomics. Offered each fall.

Pre- or corequisite: DNTH 300 and DNTH 302

DNTH 302 Oral Anatomy and Histology (3 Credit Hours)

A study of the anatomical, histological, embryological and morphological features and development of the head, neck and dentition. Emphasis is on nomenclature, nerve and vascular innervation, muscles of mastication, orofacial embryology and histological features of the oral cavity for practice and forensic identification.

Prerequisites: BIOL 240 or BIOL 250 and BIOL 241 or BIOL 251 or equivalent

DNTH 303 Applied Dental Materials (3 Credit Hours)

An introduction to biomaterials with emphasis on those materials and techniques common in dental hygiene practice and used and maintained by the dental hygienist. (offered fall)

Prerequisites: CHEM 105N-CHEM 106N

DNTH 304 Oral Radiology I (3 Credit Hours)

Study of the nature and production of x rays and basic principles and procedures in oral radiology. Emphasis is on radiation physics, radiation biology, radiation protection and safety, basic intraoral radiographic techniques and imaging procedures. (offered fall)

Prerequisites: permission of the instructor

DNTH 305 Dental Hygiene Theory II (3 Credit Hours)

Continuation of study of the theoretical foundation of preventive and therapeutic oral health services used in the dental hygiene process. Emphasis is on preparation for ethical, evidence-based client care. (offered spring).

Prerequisites: DNTH 300 and DNTH 301

DNTH 306 Dental Hygiene Services II (3 Credit Hours)

Clinical experience in the on-campus supervised clinic. Continued development of clinical proficiency and ethical, evidence-based decision making in rendering comprehensive preventive oral health services using the dental hygiene process. Emphasis is on clinical application and development of competence in maintenance, management and evaluation of the periodontal patient; care planning, disease control strategies; and scaling and oral debridement on periodontally involved patients (offered spring).

Prerequisites: DNTH 300, DNTH 301 and DNTH 304

Corequisites: DNTH 305

DNTH 307 Pharmacology and Medical Emergencies (3 Credit Hours)

A study of pharmacologic agents used in oral healthcare and of medications that the patient may be taking, their clinical effects, adverse effects, and dental implications, and the prevention and management of medical emergencies. Emphasis is on agents commonly used by patients which may require the alteration of treatment procedures, therapeutic agents used adjunctively in dental hygiene therapy and agents used in medical emergency procedures. (offered spring)

Prerequisites: DNTH 302 and BIOL 240 or BIOL 250 and BIOL 241 or BIOL 251 or equivalent

DNTH 308 Oral Pathology (3 Credit Hours)

Principles of the disease process and general pathology including cell injury, infection, inflammation, neoplasia and circulatory disturbances are followed by the study of pathology of the teeth, supporting and associated oral structures. Emphasis is on the clinical and radiological appearance of local and systemic disease processes affecting the oral and facial structures. (offered spring)

Prerequisites: DNTH 202

DNTH 309 Oral Radiology II (2 Credit Hours)

Continued development of the principles and techniques obtained in Oral Radiology I with emphasis on supplemental intraoral techniques especially for client management; extraoral techniques; radiographic interpretation of film-based and digitally acquired images; and use of dental photography in patient care. (offered spring)

Prerequisites: DNTH 304

DNTH 310 Dental Hygiene Therapies and Practice (3 Credit Hours)

Emphasis is on principles of periodontics, evaluation of periodontal disease, and theoretical and clinical preparation for delivery of dental hygiene interventions. (offered spring)

Prerequisites: DNTH 300 and DNTH 301

DNTH 316 Dental Hygiene Theory and Services III (3 Credit Hours)

Clinical experience in the on-campus supervised clinic. Continued development of clinical competency and ethical, evidence-based decision making in rendering comprehensive preventive and therapeutic oral health services and technologies using the dental hygiene process of care. (offered summer)

Prerequisites: DNTH 305, DNTH 306, DNTH 307 and DNTH 309

DNTH 317 Anxiety and Pain Control (2 Credit Hours)

Clinical experience in the on-campus supervised clinic. Principles and techniques for local anesthesia injections and nitrous oxide-oxygen analgesia administration, neurophysiologic considerations, prevention of anesthesia-associated emergencies and application of techniques in laboratory. Five hours of instruction will be web-based. (Offered summer)

Prerequisites: DNTH 305, DNTH 306, DNTH 307, and DNTH 309

Corequisites: DNTH 316

DNTH 395 Topics in Dental Hygiene Practice (1-6 Credit Hours)

Selected topics in dental hygiene vary by semester. (offered fall, spring, summer)

Prerequisites: permission of the instructor

DNTH 397 Independent Study in Dental Hygiene (1-6 Credit Hours)

Independent reading and study on a topic selected under direction of a faculty member. (offered fall, spring, summer)

Prerequisites: permission of the instructor

DNTH 410 Dental Hygiene Theory IV (3 Credit Hours)

Study of the psychosocial, physical and oral characteristics of patients with special needs. Emphasis is on the care and clinical management of the following patients: cognitively, developmentally and physically challenged, aged, pregnant, epileptic, diabetic, cancer, AIDS, chemically dependent and the blind and deaf. (offered fall)

Prerequisites: DNTH 305, DNTH 306, and DNTH 316

DNTH 411 Dental Hygiene Services IV (6 Credit Hours)

Clinical experience in the on-campus supervised clinic. Continued development of clinical proficiency and ethical, evidence-based decision making in providing comprehensive preventive and therapeutic oral health services. Emphasis is on intra/interprofessional clinical application and development of competencies for the treatment of diverse, special needs and periodontally involved patients using the dental hygiene process of care. (offered fall)

Prerequisites: DNTH 305, DNTH 306, and DNTH 309

Corequisites: DNTH 410

DNTH 412W/512 Perspectives on Dental Hygiene Practice (3 Credit Hours)

Course is designed for the licensed dental hygienist who seeks to maintain an awareness of changing trends, perspectives, evidence-based interventions and technologies in dental hygiene, health, and society that influence the dental hygiene process of care. This is a writing intensive course. (Offered summer)

Prerequisites: grade of C or better in ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C and admission into the dental hygiene program

DNTH 413 Community Oral Health Planning (3 Credit Hours)

Introduction to the principles of dental public health, health literacy, oral epidemiology, evidenced-based prevention and control of oral disease on a population basis. Emphasis is on program assessment, planning, implementation, and evaluation for the development of community-based dental programs. This course prepares students for the role of oral health educator, client advocate and resource person in community settings. (offered fall)

Prerequisites: DNTH 305, DNTH 306 or permission of the instructor

DNTH 414/514 Educational Concepts for the Health Professional I (3 Credit Hours)

This course is designed to explore various educational concepts, principles and methods of teaching for adults. Students will learn to present educational information to a diverse client population, in a variety of settings, in an ethical and professional manner. Topics include, but are not limited to, objectives, planning, implementation and evaluation of instruction; instructional strategies; delivery models; presentation skills; and techniques for communicating health information.

Prerequisites: admission to the dental hygiene program

DNTH 415/515 Research Methods in the Health Sciences (3 Credit Hours)

Designed to develop skills in scientific methods, evidence based decision making and critical analysis of research findings. Emphasis on types of research, levels of evidence, problem selection and hypothesis writing, research planning and design, data collection and measuring techniques, analysis and interpretation of data, research proposal writing and computer application. A written research proposal is required for graduate credit. (offered fall)

Prerequisites: STAT 130M

DNTH 416/516 Administrative Leadership and Professional Development (3 Credit Hours)

A study of current trends that influence the profession of dental hygiene including oral health care delivery, manpower, financing mechanisms, quality improvement, third party payers, professional associations, regulatory agencies and legislation. Emphasis is on ethical, political, and legal issues as they relate to the dental hygiene profession. offered spring)

Prerequisites: Admission to the dental hygiene program

DNTH 417W Dental Hygiene Theory V (3 Credit Hours)

Designed to transition students into diverse employment settings nationally and globally. Emphasis is on written communication skills, practice management, working in multicultural settings, selecting an employment setting, values clarification, resume writing, interview techniques, networking, ethical dilemmas and cross-cultural competencies necessary for contemporary healthcare environments. Various national and international career opportunities are explored. This is a writing intensive course.

Prerequisites: DNTH 410, DNTH 411 and a grade of C or better in ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C

Corequisites: DNTH 418

DNTH 418 Dental Hygiene Services V (6 Credit Hours)

Clinical experience in the on-campus supervised clinic. Continued development of proficiency and ethical, evidence-based decision making in providing comprehensive preventive and therapeutic oral health services within the dental hygiene process of care. Emphasis is on intra/interprofessional development of competencies for the treatment of periodontally involved, special needs and diverse patients. (offered spring)

Prerequisites: DNTH 410 and DNTH 411

Corequisites: DNTH 417W

DNTH 419 Community Oral Health Practice (3 Credit Hours)

Interprofessional service-learning and internship experiences designed to prepare students to function as oral health practitioners, educators, client advocates and resource persons in community health settings. Emphasis is on providing evidenced-based educational, preventive, and therapeutic services for vulnerable and underserved populations including low-income, geriatric, pediatric, institutionalized, and cognitively, developmentally, and physically challenged individuals. Design and delivery of a poster session is required. (offered spring; varies days and times)

Prerequisites: DNTH 413

DNTH 440T/540 Telehealthcare Technology (3 Credit Hours)

This course examines the concept, global impact, and trends in telehealthcare technology on the client/patient, multidisciplinary practitioners, and various healthcare systems. Emphasis is on effective evidence-based decision making to reduce errors in patient care, promote care in remote or underserved geographical areas, and the ability to retrieve and evaluate healthcare information that improves access to quality, cost effective health care. (Offered spring)

Prerequisites: sophomore standing and permission of the instructor

DNTH 450 International Dental Hygiene (1-3 Credit Hours)

International locations are determined by the School of Dental Hygiene in conjunction with the Office of Study Abroad. Program participation requires approval from the School of Dental Hygiene and the Office of Study Abroad. Provides an on-location international experience in oral care delivery, practice and regulation, and dental hygiene education. Students will be required to give presentations, review the dental care delivery system, and explore how the cultural beliefs and practices affect oral health, dental care seeking behaviors, and the oral health status of the population. Orientations will be conducted prior to travel.

Prerequisites: DNTH 316

DNTH 451 Ergonomics and Exercises for Static Posture Occupations (1 Credit Hour)

This active participation course is designed for persons who work in static posture professions (e.g., dental hygienists, laboratory and computer office personnel) and who seek to practice ergonomic body mechanics and exercise therapies to prevent musculoskeletal disorders and repetitive strain injuries. Topics include biomechanics, creating an ergonomically sound work space, alternative sitting and standing techniques during clinical care, types of disorders and injuries, risk management, comprehension and demonstration of full body exercises with emphasis on core strength training, and self-monitoring. (offered online summer session only)

Prerequisites: permission of instructor

DNTH 495 Topics in Dental Hygiene (1-3 Credit Hours)

Seminars on selected topics in dental hygiene. Topics vary by semester. (offered fall, spring, summer)

Prerequisites: permission of the instructor

DNTH 497/597 Independent Study in Dental Hygiene (1-6 Credit Hours)

Independent reading and study on a topic selected under direction of a faculty member. (Offered fall, spring, summer)

Prerequisites: permission of instructor

DNTH 498 Directed Research in Dental Hygiene (1-6 Credit Hours)

Supervised research on a specific problem in dental hygiene. Regular meetings with faculty and a written/oral report are required.

Prerequisites: Permission of instructor

ECE - Electrical and Computer Engineering

ECE 195 Topics in Electrical and Computer Engineering (1-3 Credit Hours)

Study of topics in electrical and computer engineering.

Prerequisites: Departmental approval

ECE 201 Circuit Analysis I (3 Credit Hours)

An introduction to the analysis and theory of linear electrical circuits. Topics include: passive component definitions and connection rules; independent and dependent sources, concepts of power & energy; Kirchhoff's laws; development of network reduction techniques; formulation of mesh-current and node-voltage equations; network theorems including Thevenin, Norton, Maximum power transfer, and superposition Theorem, Operational Amplifiers, Energy Storage Elements, and initial conditions. Time Domain Analysis of First Order and Second Order Circuits, Introduction to Phasors. Basics of matrices and linear algebra with Gaussian elimination; matrix applications to linear circuit analyses; MATLAB and Circuit Simulation software (Multisim) with analyses and applications to passive circuits. (offered fall, spring, summer)

Prerequisites: ECE 111 or ENGN 121 or equivalent and a grade of C or better in MATH 212

Pre- or corequisite: PHYS 232N or PHYS 262N

ECE 202 Circuit Analysis II (3 Credit Hours)

Time domain analysis; Sinusoidal steady state analysis; Phasor representation of AC Circuits, Maximum power transfer and Thevenin-Norton theorems for AC circuits; Frequency response of circuits (with R, L, and C components), Laplace Transforms and transfer functions of linear circuits; extension to frequency domain circuit analysis including Bode plots. Active and passive filter design and analysis. (offered fall, spring, summer)

Prerequisites: PHYS 232N or PHYS 262N; MATH 280 or MATH 307 and a grade of C or better in ECE 201

ECE 241 Fundamentals of Computer Engineering (4 Credit Hours)

This course develops the foundation of computer engineering for computer engineers as well as an introductory breadth appropriate for electrical engineers. Class topics include computer information, digital design (combinational and sequential circuits), computer organization, and assembly language. The laboratory includes building digital circuits (focusing on programmable logic), assembly language programming, and system interfacing. The use of a hardware description language is employed in class and the laboratory to specify, simulate and synthesize digital circuits.

Prerequisites: A grade of C or better in CS 150 or ENGN 150 or ENGN 122 and a grade of C or better in MATH 211

ECE 242 Fundamentals of Computer Engineering Lab (1 Credit Hour)

Available for pass/fail grading only. The laboratory includes building digital circuits (focusing on programmable logic), assembly language programming, and system interfacing. The use of a hardware description language is employed in the laboratory to specify, simulate and synthesize digital circuits. This course is only for students who do not have the laboratory component in ECE 241.

Prerequisites: (CS 150 or ENGN 122 or ENGN 150) and MATH 211 with a grade of C or better for both, and written permission of the Chief Departmental Advisor of the Electrical & Computer Engineering Department

ECE 250 Object-Oriented Programming in C++ for Engineers (3 Credit Hours)

Provides coverage of object-oriented programming in C++. Topics include classes, data structures, algorithms, the Standard Template Library (STL), and abstract data types. Assignments will follow a current engineering theme such as autonomous systems to introduce functional decomposition and illustrate course topics.

Prerequisites: ENGN 122

Pre- or corequisite: ECE 241

ECE 287 Fundamental Electric Circuit Laboratory (2 Credit Hours)

Objective of course is to provide students in electrical and computer engineering with a 'hands-on' introduction to selected topics in electrical engineering. Students will use basic circuit analysis skills and programming skills to design, build, and test electrical networks interfacing to an Arduino Uno micro-controller. Labs will also provide an introduction to basic measurement techniques and electrical laboratory equipment (power supplies, oscilloscopes, voltmeters, etc).

Prerequisites: A grade of C or better in both CS 150 or ENGN 150 or ENGN 122 and a grade of C or better in ECE 201

Pre- or corequisite: ENGL 211C or ENGL 221C or ENGL 231C and ECE 202

ECE 300 Math Review for Graduate Engineering Analysis (3 Credit Hours)

Complex algebra, linear algebra and matrix methods, aspects of multivariable calculus, differential equations, Laplace transforms, and aspects of probability. Applications and examples in the field of electrical engineering will be used. The use of Matlab in engineering problem solving will be presented. Course not available to ECE undergraduate majors.

Prerequisites: Departmental approval

ECE 301 Review of Electrical Engineering Analysis (3 Credit Hours)

Electrical engineering problems, including time-domain and frequency-domain circuit analysis, analysis of networks with electronic components. The use of Matlab and Simulink in electrical engineering problem solving will be presented. Course not available to ECE undergraduate majors.

Prerequisites: Departmental approval

ECE 302 Linear System Analysis (3 Credit Hours)

This course covers the fundamental concepts of signal and linear system representation and analysis in continuous time. Topics include: Operations with sinusoids and complex exponentials. Signal properties, operations, and models. System properties, classification, and models. Time-domain system analysis, including impulse response, total system response, stability, and convolution. Fourier analysis of continuous-time signals and signal transmission through linear time-invariant systems. Ideal and practical filters. Advanced matrix operations and linear algebra with applications to signal and system analysis. Characteristic equation of a matrix, eigenvalues and eigenvectors. Performing time and frequency domain analysis using MATLAB. (offered fall, spring).

Prerequisites: MATH 280 or MATH 307 and a grade of C or better in ECE 201 and ECE 202

Pre- or corequisite: ECE 287

ECE 303 Introduction to Electrical Power (3 Credit Hours)

AC steady state power, single-phase and three-phase networks, electric power generation, transformers, transmission lines, electric machinery and the use of power. Energy resources, power plants, renewable energy, electric safety. (offered fall, summer)

Prerequisites: a grade of C or better in ECE 201

ECE 304 Probability, Statistics, and Reliability (3 Credit Hours)

Introduction to probability, probability models, discrete and continuous random variables, statistics, reliability, and stochastic processes. Applications include modeling of physical systems, data analysis, communications, designed engineering experiments, stochastic processes, and hypothesis testing.

Prerequisites: a grade of C or better in MATH 212

Pre- or corequisite: ECE 202

ECE 306 Discrete System Modeling and Simulation (3 Credit Hours)

An introduction to the modeling and simulation of discrete-state, event-driven systems. Models for Discrete Event Systems (DES) are presented including state automata, Petri nets, queuing models, and event graphs. Event management strategies are developed leading to methodologies for simulating DES models. Example engineering simulation applications covered include digital circuits, computer networks, manufacturing, and traffic. Investigation of the steps of a DES simulation study including problem formulation, conceptual model design, simulation model development, input data modeling, output data analysis, verification and validation, and design of simulation experiments.

Prerequisites: A grade of C or better in ECE 241

Pre- or corequisite: ECE 304

ECE 313 Electronic Circuits (4 Credit Hours)

Introduction to junction diodes, bipolar junction transistors (BJTs), MOS field-effect transistors (MOSFETs) and operational amplifiers (op-amps). Design concepts for discrete analog circuits with diodes, BJTs, MOSFETs and op-amps. The lab component introduces design and techniques for implementation of analog circuits.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, and a grade of C or better in ECE 201, ECE 202 and ECE 287

Pre- or corequisite: a grade of C or better in ECE 241

ECE 314 Electronics (3 Credit Hours)

Students will be introduced to concepts of signal amplification along with detailed analysis and design of operational amplifier circuits. The main emphasis of the course is to introduce students to the basic operation of PN junctions, and bipolar junction (BJT) and Metal Oxide Semiconductor (MOS) transistors and their application in the design electronic circuits. Detailed large signal and small signal models of these devices will be developed. Analysis and design of basic electronic circuit building blocks with diodes, BJT and MOSFETs will be studied. Both discrete and Integrated Circuits analog design techniques will be covered. The building blocks of an operational amplifier along with differential amplifiers will be covered. Not open to electrical engineering majors or electrical engineering/computer engineering dual majors.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, and a grade of C or better in ECE 201, ECE 202 and ECE 287

Pre- or corequisite: a grade of C or better in ECE 241

ECE 320 Continuous System Modeling and Simulation (3 Credit Hours)

An introduction to the fundamentals of modeling and simulating continuous-state, time-driven systems. Topics include state-space model formulation of systems, model representation using block diagrams, stock-flow diagrams and bond graphs, and numerical integration techniques including Taylor series, families of Runge-Kutta and Adams methods. Application domains include electrical systems, signals (including sampling), physical, and biological simulations.

Prerequisites: Junior standing

Pre- or corequisite: ECE 302

ECE 323 Electromagnetics (3 Credit Hours)

This course provides an introduction to the basic concepts of electromagnetics. Topics include math fundamentals for electromagnetic studies, Maxwell's equations, electrostatics, electromagnetic waves, polarization, wave propagation in various media and across interfaces and transmission lines. This fundamental course is to build an electrical engineering/physics foundation for students and enable them to identify, formulate, and solve future engineering problems.

Prerequisites: MATH 285 or MATH 312 and a grade of C or better in ECE 201, ECE 202 and ECE 287

ECE 332 Microelectronic Materials and Processes (3 Credit Hours)

An introduction to fundamental properties of semiconductors and device fabrication processes. The topics include crystal structure, bonding, energy bands, doping, carrier densities, mobility, resistivity, recombination, drift, and diffusion. Basic structure of p-n junctions, BJTs and MOSFETs and their fabrication processes, including solid state diffusion, thermal oxidation of silicon, ion implantation, chemical vapor deposition, thin film deposition, photolithography and etching are reviewed. (offered fall and spring)

Prerequisites: A grade of C or better in ECE 201, ECE 202 and ECE 287

ECE 341 Digital System Design (3 Credit Hours)

Tools and methodologies for top-down design of complex digital systems. Important topics include minimization, mixed logic, algorithmic state machines, microprogrammed controllers, creating and using a gold model, data and control path design and data movement and routing via buses. Design methodologies covered include managing the design process from concept to implementation, verification using a gold model, and introduction to design flow. A hardware description language is used extensively to demonstrate models and methodologies, and is also used in design exercises and projects. (offered fall, spring)

Prerequisites: a grade of C or better in ECE 241

ECE 342 Field Programmable Gate Arrays Design Laboratory (2 Credit Hours)

Introduction to the application of FPGAs for data processing problems. Introduction to interfacing, timing closure, built-in logic analyzers. Emphasis is on the design, simulation, implementation, and testing of digital systems. Design methods incorporate CAD design tools, system on a chip (SoC) tools, implementation with advanced integrated circuit technology and contemporary software tools.

Prerequisites: ECE 341

Pre- or corequisite: ECE 346

ECE 346 Microcontrollers (3 Credit Hours)

This course introduces the principles of microcontrollers and microprocessors. It covers CPU and general architecture based on ARM processor platform. The course will provide students with the necessary knowledge to program, configure, and interface the microcontroller to perform real-world engineering computations using assembly and C programming languages. The course also covers peripheral I/O interfacing such as timers, interrupts, PWM, ADC, and communication interfaces for real-time applications. Students will learn to incorporate microcontrollers into the FPGA boards, and to address safety and security issues. Students will complete the course by designing, building, testing, and troubleshooting a microcontroller consumer application.

Prerequisites: a grade of C or better in ECE 241

ECE 348 Simulation Software Design (3 Credit Hours)

Introduction to data structures, algorithms, programming methodologies, and software architectures in support of computer simulation. Topics include object-oriented programming, data structures (including lists, queues, sets, and trees), algorithms (including searching, sorting, and order of complexity), and advanced topics (reusable code, design patterns, multithreading, and coroutines). Simulation structures developed include event lists, time management, and queuing models. Software models are implemented and tested. Application areas focus on digital circuit and computer networks. The course also analyzes the broader impacts of simulation in a global, economic and societal context.

Prerequisites: ECE 306, CS 381, and a grade of C or better in CS 250 or ECE 250

Pre- or corequisite: ECE 341

ECE 350 Mathematics for Data Analytics Engineering (3 Credit Hours)

Mathematical concepts for data analytics engineering including linear algebra, matrix operations, linear spaces, and advanced differential calculus.

Prerequisites: Grade of C or better in MATH 212

Pre- or corequisite: ECE 304

ECE 355 Introduction to Networks and Data Communications (3 Credit Hours)

This course introduces the basic concepts of computer networks and data communications. Topics include protocol layers, the application layer, the transport layer, the network layer, the data link layer, and the physical layer. Students will learn how to use network packet analyzer tools to do simple network analysis. Emphasis is on gaining an understanding of network engineering as it relates to system operation and maintenance. (offered fall)

Prerequisites: ECE 304 and a grade of C or better in ECE 241

ECE 368 Student Internship/Cooperative Education (1-3 Credit Hours)

Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures. Upon successful completion, the combination of three consecutive semesters of ECE 368 (one-credit internship) can be considered equivalent to one three-credit Technical Elective course. (offered fall, spring, summer)

Prerequisites: Approval by ECE Chief Department Advisor

ECE 381 Introduction to Discrete-time Signal Processing (3 Credit Hours)

This course covers fundamental digital signal processing (DSP) techniques that form the basis to a wide variety of application areas. Topics include continuous Fourier Transform, discrete-time signals and systems, time domain analysis, solutions of difference equations, Z-transform analysis, Fourier transform (FT), Discrete-time Fourier transform (DTFT), and Discrete Fourier transform (DFT), sampling theorem, and Fourier analysis of linear time-invariant systems. The course also analyzes the broader impacts of DSP in a global, economic, and societal context

Prerequisites: ECE 202

ECE 387 Microelectronics Fabrication Laboratory (3 Credit Hours)

The laboratory course will enable students to fabricate MOSFETs, MOS capacitors, diffused resistors and p-n diodes. Students will be trained to operate the equipment required for wet and dry oxidation, thin film deposition, solid state diffusion, photolithography, and etching. Students will fabricate and analyze the devices by current-voltage characteristic, capacitance-voltage characteristic, film thickness and conductivity measurements. (offered fall and spring).

Prerequisites: ECE 332

ECE 395 Topics in Electrical and Computer Engineering (1-3 Credit Hours)

Study of topics in electrical and computer engineering.

Prerequisites: departmental approval

ECE 396 Topics in Electrical and Computer Engineering (1-3 Credit Hours)

Study of topics in electrical and computer engineering.

Prerequisites: departmental approval

ECE 403/503 Power Electronics (3 Credit Hours)

Power electronics provides the needed interface between an electrical source and an electrical load and facilitates the transfer of power from a source to a load by converting voltages and currents from one form to another. Topics include: alternating voltage rectification, Pulse Width Modulation (PWM), DC converters (Buck, Boost, Buck-Boost, Cuk and SEPIC converters), negative feedback control in power electronics, isolated switching mode power supply, flyback and forward power supply, solid state power switches, AC inverter. (Offered spring)

Prerequisites: ECE 303, ECE 313 and a grade of C or better in ECE 202 and ECE 287

ECE 404/504 Electric Drives (3 Credit Hours)

Electric drives efficiently control the torque, speed and position of electric motors. This course has a multi-disciplinary nature and includes fields such as electric machine theory, power electronics, and control theory. Topics include: switch-mode power electronics, magnetic circuit, DC motor, AC motor, Brushless DC motor, induction motor, speed control of induction motor, vector control of induction motor, stepper-motor. (offered fall)

Prerequisites: ECE 303 and a grade of C or better in ECE 202 and ECE 287

ECE 405/505 Power System Design & Analysis (3 Credit Hours)

This course covers basic power circuit analysis and introductory power system engineering and focuses on the transmission line design, power flow study, short circuit protection, and power distribution in electric power systems, followed by a survey of several applications and case studies. (offered fall)

Prerequisites: ECE 303 and a grade of C or better in ECE 202 and ECE 287, or equivalent knowledge in electric machines and circuits

ECE 406/506 Computer Graphics and Visualization (3 Credit Hours)

The course provides a practical treatment of computer graphics and visualization with emphasis on modeling and simulation applications. It covers digital image and signal processing basics such as sampling and discrete Fourier transform, computer graphics fundamentals, visualization principles, and software architecture for visualization in modeling and simulation. Written communication and information literacy skills are stressed in this course. (Offered fall).

Prerequisites: ECE 348 or CS 361

ECE 407/507 Introduction to Game Development (3 Credit Hours)

An introductory course focused on game development theory and modern practices with emphasis on educational game development. Topics include game architecture, computer graphics theory, user interaction, audio, high level shading language, animation, physics, and artificial intelligence. The developed games can run on a variety of computer, mobile, and gaming platforms. (Offered spring).

Prerequisites: CS 361 or ECE 348

ECE 408/508 Fundamentals of Electric Vehicles (3 Credit Hours)

This course covers the fundamentals of electric vehicles and focuses on the components, power control, energy management, power train dynamics and other related topics in purely electric and hybrid electric vehicle systems, including a survey of several applications and case studies. (Offered spring)

Prerequisites: ECE 303 and a grade of C or better in ECE 202 and ECE 287

ECE 409/509 Introduction to Distributed Simulation (3 Credit Hours)

An introduction to distributed simulation. Topics include motivation for using distributed simulation, distributed simulation architectures, time management issues, and distributed simulation approaches. Current standards for distributed simulation are presented.

Prerequisites: ECE 348

ECE 410/510 Model Engineering (3 Credit Hours)

The goal of this course is to develop understanding of the various modeling paradigms appropriate for capturing system behavior and conducting digital computer simulation of many types of systems. The techniques and concepts discussed typically include UML, concept graphs, Bayesian nets, Markov models, Petri nets, system dynamics, Bond graphs, etc. Students will report on a particular technique and team to implement a chosen system model. (Offered spring).

Prerequisites: ECE 306

Pre- or corequisite: ECE 320

ECE 412/512 Advanced Virtual Reality, Augmented Reality, and Haptics System (3 Credit Hours)

This course is designed to introduce students to the hardware and software required for humans to interact with virtual worlds, both visually and tactilely. Students will be introduced to virtual reality (VR), augmented reality (AR), and haptic devices. A discussion of relative coordinate systems will allow them to virtually position the devices in a virtual world. They will learn to build a haptic device and build an interface using a microcontroller. They will also learn how to interface the devices with a virtual world built in a standard game engine such as Unreal. The course will be project based giving the opportunity to work with VR and AR goggles.

Prerequisites: ECE 250, CS 250 or (CS 251 and CS 260) or equivalent

ECE 415/515 Parallel Computing for High-Performance Data Analytics (3 Credit Hours)

Introduction to modeling and analysis of parallel execution performance of emerging simulations on modern high-performance (HPC) and Cloud computing platforms. Hands-on experience with Old Dominion University campus HPC clusters and Cloud-based platforms available globally. Programming models for large-scale and data-analytics applications. Case studies of realistic parallel scientific, engineering, and data-analytics simulations. Course projects may be assigned for students to apply the gained knowledge to analyze execution efficiency of a parallel distributed simulation.

Prerequisites: ENGN 122 or equivalent

ECE 416/516 Cyber Defense Fundamentals (3 Credit Hours)

This course focuses on cybersecurity theory, information protection and assurance, and computer systems and networks security. The objectives are to understand the basic security models and concepts, learn fundamental knowledge and tools for building, analyzing, and attacking modern security systems, and gain hands-on experience in cryptographic algorithms, security fundamental principles, and Internet security protocol and standards. (Offered fall)

Prerequisites: Permission of the instructor

Pre- or corequisite: ECE 355

ECE 418/518 Transportation Simulation and Analytics (3 Credit Hours)

This course is designed to introduce students to i) the fundamental concepts of transportation simulation; ii) traffic simulation models for the planning, design, and operations of modern transportation systems; iii) approaches to develop, calibrate, and validate transportation simulation models; and iv) methods to design and analysis of transportation simulation experiments. This course emphasizes more on the modeling, simulation, and analysis of emerging mobility systems such as connected/autonomous vehicles, electrical vehicles, and micro-mobility. The structured lectures and hands-on work with the simulation tools provide students the ability and practical experience to solve complex, real-world transportation problems with simulation.

Prerequisites: ECE 250, or CS 250, or CS 251 and CS 260, and ECE 306

ECE 419/519 Cyber Physical System Security (3 Credit Hours)

Cyber Physical Systems (CPS) integrate computing, networking, and physical processes. The objectives of this course are to learn the basic concepts, technologies and applications of CPS, understand the fundamental CPS security challenges and national security impact, and gain hands-on experience in CPS infrastructures, critical vulnerabilities, and practical countermeasures. (Offered spring)

Prerequisites: ECE 355 or permission of the instructor

ECE 430/530 Therapy and Function Models for Medical Simulation (3 Credit Hours)

This course introduces students to the main Modeling & Simulation models. (1) Anatomical modeling based on robust medical image segmentation and meshing methodologies. (2) A therapy model to determine the impact of a medical intervention by synthesizing the effect of a therapy on the patient's tissues. (3) A collision model, which interacts with anatomy and therapy models, is used for haptics-driven simulations. This course will also explore physiological simulation and the use of finite elements to model biomechanics.

Prerequisites: ECE 250 or CS 250 or CS 251 and CS 260 or equivalent

ECE 441/541 Advanced Digital Design and Field Programmable Gate Arrays (3 Credit Hours)

Course will present FPGA technologies and methods using CAD design tools for implementation of digital systems using FPGAs. Topics include advanced methods of digital circuit design including specification, synthesis, implementation and prototyping; managing multiple clock domains, static timing analysis, timing closure, system reset design, simulation, and optimization; troubleshooting using embedded logic analyzers and integrated development environments (IDEs). Practical system design examples include general purpose data processing, system on a chip (SOC) prototyping, hardware accelerators, and an introduction to domain specific architectures. (Offered spring)

Prerequisites: ECE 342

ECE 443/543 Computer Architecture (3 Credit Hours)

An introduction to computer architectures. Analysis and design of computer subsystems including central processing units, memories and input/output subsystems. With features based on the ARM architecture, students will learn important concepts, including data paths, computer arithmetic, instruction cycles, pipelining, virtual and cache memories, direct memory access and controller design. (Offered fall).

Prerequisites: ECE 346

Pre- or corequisite: ECE 342

ECE 445/545 Introduction to Computer Vision (3 Credit Hours)

Overview of digital image processing including visual perception, image formation, spatial transformations, image enhancement, color image representation and processing, edge detection, image segmentation, and data processing method for computer vision applications. Hand-on projects will be introduced to better understand computer vision applications. (Offered fall).

Prerequisites: ECE 304 and grade of C or better in either ENGN 122 or ENGN 150 or CS 150 or CS 151 or CS 153

ECE 450/550 Introduction to Machine Learning Engineering (3 Credit Hours)

Machine Learning provides a practical treatment of design, analysis and implementation of algorithms, which learn from examples. Topics include multiple machine learning models: linear regression, logistic regression, neural networks, support vector machines, deep learning, Bayesian learning and unsupervised learning. Students are expected to use popular machine learning tools and algorithms to solve real data engineering problems. (Offered spring)

Prerequisites: ECE 304 and a grade of C or better in either ENGN 122 or ENGN 150 or CS 150 or CS 151 or CS 153

ECE 451/551 Communication Systems (3 Credit Hours)

Fundamentals of communication systems engineering. Modulation methods including continuous waveform modulation (amplitude, angle). Design and analysis of modulation systems and performance in the presence of noise. Communication simulation exercises through computer experiments. (Offered spring)

Prerequisites: ECE 304 and ECE 302

ECE 452/552 Introduction to Wireless Communication Networks (3 Credit Hours)

Introduction to current wireless network technologies and standards. The radio frequency spectrum and radio wave propagation models (pathloss, fading, and multipath). The radio link and link budgets. Modulation, diversity, and multiple access techniques. Wireless network planning and operation. Current and emerging wireless technologies (satellite systems, vehicular/sensor networks). (Offered fall)

Prerequisites: ECE 304 and ECE 302

ECE 453/553 Analysis for Modeling and Simulation (3 Credit Hours)

An introduction to analysis techniques appropriate to the conduct of modeling and simulation studies. Topics include input modeling, random number generation, output analysis, variance reduction techniques, and experimental design. In addition, techniques for verification & validation are introduced. Course concepts are applied to real systems and data.

Prerequisites: ECE 306 and ECE 304

ECE 454/554 Introduction to Bioelectrics (3 Credit Hours)

Covers the electrical properties of cells and tissues as well as the use of electrical and magnetic signals and stimuli in the diagnosis and treatment of disease. Typical topics to be covered include basic cell physiology, endogenous electric fields in the body, electrocardiography, cardiac pacing, defibrillation, electrotherapy, electroporation, electrotherapy in wound healing. In addition, ultrashort electrical pulses for intracellular manipulation and the application of plasmas to biological systems will be covered.

Prerequisites: PHYS 111N or higher; MATH 200 or higher

ECE 455/555 Network Engineering and Design (3 Credit Hours)

This course is an extension of ECE 355 into a semester long project. Emphasis is on gaining an understanding of networking design principles that entails all aspects of the network development life cycle. Topics include campus LAN models and design, VLANs, internetworking principles and design, WAN design, design of hybrid IP networks, differentiated vs. integrated services, traffic flow measurement and management. (offered spring)

Prerequisites: ECE 355 or permission of the instructor

ECE 458/558 Instrumentation (3 Credit Hours)

Computer interfacing using a graphical programming language with applications involving digital-to-analog conversion (DAC), analog-to-digital conversion (ADC), digital input output (DIO), Virtual Instrument System Architecture (VISA) and universal Service Bus (USB). Analysis of sampled data involving use of probability density function, mean and standard derivations, correlations, and the power spectrum. (offered spring, summer)

Prerequisites: ECE 302 or permission of instructor

ECE 461/561 Automatic Control Systems (3 Credit Hours)

This course introduces the fundamental principles and methodologies of feedback control of linear systems. Learn to analyze and design current control systems found in automobiles, aircraft, autonomous vehicles, robots, and many other engineering systems. The course introduces time and frequency domain techniques including root locus, Bode, Nyquist and state space methods together with computer-aided analysis and design. These topics serve as a foundation for further studies in, for example, automation, electrical drives, power electronics, and robotics. (Offered Fall)

Prerequisites: ECE 202

ECE 462/562 Introduction to Medical Image Analysis (MIA) (3 Credit Hours)

Introduction to basic concepts in medical image analysis. Medical image registration, segmentation, feature extraction, and classification are discussed. Basic psychophysics, fundamental ROC analysis and FROC methodologies are covered. (Offered every other spring)

Prerequisites: a grade of C or better in MATH 212

ECE 463/563 Design and Modeling of Autonomous Robotic Systems (3 Credit Hours)

This course focuses on autonomous robotics systems with emphasis on using modeling and simulation (M&S) for system level design and testing. Fundamental concepts associated with autonomous robotic systems are discussed. Course topics include: robotic control, architectures, and sensors as well as more advanced concepts such as error propagation, localization, mapping and autonomy. Design strategies that leverage M&S to accelerate the development and testing of sophisticated autonomous robotic algorithms for individual or teams of robots are covered.

Prerequisites: CS 150 or ENGN 122 or ENGN 150

ECE 464/564 Biomedical Applications of Low Temperature Plasmas (3 Credit Hours)

This course is cross listed between ECE, BME and BIOL. It is designed to be taken by senior undergraduate students and first year graduate students. The course contents are multidisciplinary, combining materials from engineering and the biological sciences. The course covers an introduction to the fundamentals of non-equilibrium plasmas, low temperature plasma sources, and cell biology. This is followed by a detailed discussion of the interaction of low temperature plasma with biological cells, both prokaryotes and eukaryotes. Potential applications in medicine such as wound healing, blood coagulation, sterilization, and the killing of various types of cancer cells will be covered. (Offered fall)

Prerequisites: Senior standing

ECE 468/568 Realtime Interactive Simulation and Visualization (3 Credit Hours)

This course is designed to provide students with advanced knowledge and skills in the field of real-time interactive simulation and visualization using the Unreal game engine with emphasis on applications for engineering and sciences. Topics covered include 3D computer graphics theory fundamentals, software architecture, user interaction, physics engine, artificial intelligence, animation, visual representations of complex data, cross-platform development (desktop, mobile, VR/AR). Applications include robotics simulation, transportation simulation, serious games, medical simulation, virtual laboratories, among others.

Prerequisites: ECE 250 or CS 250 or CS 251 and CS 260 or equivalent

ECE 470/570 Foundations of Cyber Security (3 Credit Hours)

Course provides an overview of theory, tools and practice of cyber security and information assurance through prevention, detection and modeling of cyber attack and recovery from such attacks. Techniques for security modeling, attack modeling, risk analysis and cost-benefit analysis are described to manage the security of cyber systems. Fundamental principles of cyber security and their applications for protecting software and information assets of individual computers and large networked systems are explored. Anatomy of some sample attacks designed to compromise confidentiality, integrity and availability of cyber systems are discussed. (Offered fall).

Prerequisites: A grade of C or better in ENGN 122 or ENGN 150 or CS 150 and junior standing or permission of the instructor

ECE 471/571 Introduction to Solar Cells (3 Credit Hours)

This course is designed to provide the fundamental physics and characteristics of photovoltaic materials and devices. A focus is placed on i) optical interaction, absorption, and design for photovoltaic materials and systems, ii) subsequent energy conversion processes in inorganic/organic semiconductor such as generation, recombination, and charge transport, and iii) photovoltaic testing and measurement techniques to characterize solar cells including contact and series resistance, open circuit voltage, short circuit current density, fill factor, and energy conversion efficiency of photovoltaic devices. (Offered fall)

Prerequisites: ECE 332

ECE 472/572 Plasma Processing at the Nanoscale (3 Credit Hours)

The science and design of partially ionized plasma and plasma processing devices used in applications such as etching and deposition at the nanoscale. Gas phase collisions, transport parameters, DC and RF glow discharges, the plasma sheath, sputtering, etching, and plasma deposition.

Prerequisites: ECE 323

ECE 473/573 Solid State Electronics (3 Credit Hours)

The objective of this course is to understand basic semiconductor devices by understanding semiconductor physics (energy bands, carrier statistics, recombination and carrier drift and diffusion) and to gain an advanced understanding of the physics and fundamental operation of advanced semiconductor devices. Following the initial introductory chapters on semiconductor physics, this course will focus on the theory of p-n junctions, metal-semiconductor Schottky diodes, MOS capacitors, MOS field effect transistors (MOSFET) and bipolar junction transistors (BJTs). (Offered fall)

Prerequisites: ECE 313, ECE 323, ECE 332 and MATH 212

ECE 474/574 Optical Fiber Communication (3 Credit Hours)

This course introduces seniors and first year graduates to the physics and design of optical fiber communication systems. The topics covered are: electromagnetic waves; optical sources including laser diodes; optical amplifiers; modulators; optical fibers; attenuation and dispersion in optical fibers; photodetectors; optical receivers; noise considerations in optical receivers; optical communication systems.

Prerequisites: ECE 323

ECE 475/575 Transportation Data Analytics (3 Credit Hours)

This course presents the basic techniques for transportation data analytics. It will discuss statistical modeling, prominent algorithms, and visualization approaches to analyze both small- and large-scale data sets generated from transportation systems. Practices of using different data for various real-world traffic/transportation applications and decision making will also be discussed.

Prerequisites: STAT 330 or ECE 304

ECE 481W Preparatory ECE Senior Design (3 Credit Hours)

3 credits - The course is the preparatory, proposal development section of the senior capstone design experience for computer engineering and electrical engineering majors. The course will focus on developing a proposal for a group design project. The senior design projects aim at developing engineering design skills of a complete computer/electrical system. Elements of developing a successful proposal are emphasized along with written communication skills, engineering professional development, technical presentation skills, developing an understanding of the societal impact of the project, and developing realistic constraints on the design based on engineering standards. Oral and written communication skills are stressed. This is a writing intensive course. Industry-sponsored multi-disciplinary design projects are an option. (offered Fall, Spring)

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C; ECE 381; (ECE 302; ECE 313) or (ECE 341; ECE 346) or (ECE 302; ECE 320; ECE 341; ECE 346)

Pre- or corequisite: ECE 304; (ECE 303; ECE 323; ECE 332; ECE 451; ECE 461) or (ECE 342 ; ECE 355; ECE 302 or ECE 306 or ECE 350 or ECE 313 or ECE 314; ECE 443) or (ECE 406)

ECE 482 ECE Senior Design (3 Credit Hours)

This is the second semester of the senior capstone design experience for computer engineering, modeling and simulation engineering, and electrical engineering majors. In this course, the students will implement the design proposal developed in ECE 481W. The senior design projects aim at developing engineering design skills of a complete computer/electrical system. Oral and written communication skills are emphasized. Industry-sponsored multi-disciplinary design projects are an option.

Prerequisites: ECE 481W

ECE 483/583 Embedded Systems (3 Credit Hours)

This course covers fundamentals of embedded systems: basic architecture, programming, and design. Topics include processors and hardware for embedded systems, embedded programming and real time operating systems. (Offered fall)

Prerequisites: ECE 346

ECE 484W Computer Engineering Design I (3 Credit Hours)

Emphasis is on the design of a complex digital circuit and microcontroller interfacing. A semester-long project involves the design, simulation and testing of a digital architecture and software GUI. Several moderate scale digital modules are designed, simulated, implemented and tested during the semester. Design methods incorporate CAD design tools, implementation with advanced integrated circuit technology and contemporary software tools. Oral and written communication skills are stressed. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C; ECE 302; ECE 341; ECE 346; and ECE 381 OR ECE 320

Pre- or corequisite: ECE 304, ECE 313, and ECE 406 OR ECE 443

ECE 485W Electrical Engineering Design I (3 Credit Hours)

This course is designed to give senior electrical engineering students the opportunity to design and test electronic subsystems to address realistic engineering problems. Lectures focus on providing professional orientation and exploration of the design process. Small group design projects focus on the development of electronic subsystems. Oral and written communication skills are stressed. The students will be in groups of two or three and they are to develop a robot, test its capabilities and modify them to meet a design challenge in the last few weeks of the semester. Topics include programming the ARDUINO UNO, wire-wrap techniques, sensor testing, motor testing, and overall robot functioning. This is a writing intensive course.

Prerequisites: ECE 302, ECE 313 and ECE 381 and a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C

Pre- or corequisite: ECE 303, ECE 304, ECE 323, and ECE 332

ECE 486 Preparatory ECE Senior Design II (2 Credit Hours)

The course is the preparatory, proposal development section of part two of the senior capstone design experience for electrical and computer engineering majors. The course will focus on developing a proposal for a group design project. The senior design projects aim at developing engineering design skills of a complete computer/electrical system. Elements of developing a successful proposal are emphasized along with written communication skills. Industry-sponsored multi-disciplinary design projects are an option.

Prerequisites: senior standing

Pre- or corequisite: ECE 484W or ECE 485W

ECE 487 ECE Senior Design II (2 Credit Hours)

Part two of the senior capstone design experience for electrical and computer engineering majors. In this course, students will implement the design proposal developed in ECE 486. The senior design projects aim at developing engineering design skills of a complete computer/electrical system. Oral and written communication skills are emphasized. Industry-sponsored multi-disciplinary design projects are an option.

Prerequisites: ECE 486

Pre- or corequisite: ECE 484W or ECE 485W

ECE 488 ECE Senior Design III (3 Credit Hours)

Part three of the senior capstone design experience for electrical and computer engineering majors. Individual and group design projects focus on the development of complete electrical and computer systems. Oral and written communication skills are stressed. Industry-sponsored multi-disciplinary design projects are an option.

Prerequisites: ECE 487

ECE 491 Microelectronics Design Experience (3 Credit Hours)

This is a Virginia Microelectronics Consortium (VMEC) practical hands-on, state-of-the-art summer research internship experience in the laboratory. This is not a regular class, but a summer research internship open only to those undergraduate students who apply for and win a VMEC Summer Research Scholarship. The VMEC internship provides excellent technical knowledge as well as industrial and academic contacts for career development. Students complete a 10-13 week summer project on a microelectronics research project or design activity at an engineering school or in the State-of-the-Art Cleanroom of the industry members of the VMEC, including Micron Technology & British Aerospace Systems (BAE Systems) both in Manassas, VA. Details regarding eligibility and report requirements are available in the department during fall with application deadline of October 30 each fall.

Prerequisites: Sophomore or Junior standing in electrical or computer engineering with GPA above 3.0 and department approval

ECE 495/595 Topics in Electrical and Computer Engineering (1-3 Credit Hours)

Study of topics in electrical and computer engineering.

Prerequisites: departmental approval

ECE 496/596 Topics in Electrical and Computer Engineering (1-3 Credit Hours)

Study of topics in electrical and computer engineering.

Prerequisites: departmental approval

ECE 498 ECE Senior Thesis I (1 Credit Hour)

Part one of a two-semester thesis project involving literature research, development of technical writing skills, and possibly obtaining lab experience using a variety of techniques and equipment. Each student will undertake a research experience under the supervision of a departmental faculty member. A preliminary report of research findings is required at the end of the semester. Upon successful completion, the combination of ECE 498 (1 credit) and ECE 499 (2 credits) can be considered equivalent to one 3-credit ECE Technical Elective Course. (Offered fall, spring, summer)

Prerequisites: Major in Electrical Engineering, Computer Engineering, or Modeling & Simulation Engineering; Cumulative GPA of 3.00 or higher

Pre- or corequisite: ECE 484W or ECE 485W

ECE 499 ECE Senior Thesis II (2 Credit Hours)

Continuation of ECE 498. The research culminates in a thesis that includes a literature review, description of methods, results and conclusions, and an oral presentation. Upon successful completion, the combination of ECE 498 (1 credit) and ECE 499 (2 credits) can be considered equivalent to one 3-credit ECE Technical Elective Course. (Offered fall, spring, summer)

Prerequisites: ECE 498, and a cumulative GPA of 3.00 or better

ECON - Economics

ECON 200S Basic Economics (3 Credit Hours)

The course presents an overview of the major principles of micro- and macroeconomics. Topics include opportunity costs, supply and demand, competition and monopoly, national income determination, creation of money and credit, and international problems. No credit will be given to students pursuing majors in the Strome College of Business.

ECON 201S Principles of Macroeconomics (3 Credit Hours)

Development of the theory of supply and demand, and their interaction in a market economy. Classical, Keynesian, and monetarist explanations of inflation and unemployment are presented and analyzed. Emphasis is placed on income determination, fiscal policy, monetary policy, and the issue of government efforts to improve economic performance.

Prerequisites: Qualifying math SAT/ACT score, qualifying score on the math placement test, or completion of MATH 102M or higher

ECON 202S Principles of Microeconomics (3 Credit Hours)

An examination of how individuals and businesses interact in a market economy. Emphasis is placed on consumer behavior, price and output decisions of firms, the economic efficiency of the resulting allocation of society's resources, and the gains from international trade and impact of trade barriers.

Prerequisites: Qualifying math SAT/ACT score, qualifying score on the math placement test, or completion of MATH 102M or higher

ECON 226S Honors: Principles of Macroeconomics (3 Credit Hours)

Open only to students in the Honors College. A special honors section of ECON 201S.

ECON 227S Honors: Principles of Microeconomics (3 Credit Hours)

Open only to students in the Honors College. A special honors section of ECON 202S.

ECON 301 Managerial Economics (3 Credit Hours)

Examines the application of economic theory and methodology to managerial decision making and strategy. Key topics are demand analysis, economic forecasting, production, cost analysis, the economics of organization, market structure and strategic behavior, pricing techniques, and government regulation and its implications for firm behavior. Emphasis is placed on the global context of managerial decisions.

Prerequisites: ECON 201S and ECON 202S and BNAL 206, in addition to a declared major at the University or permission of the Dean's Office

Pre- or corequisite: MATH 200 or equivalent

ECON 304 Intermediate Microeconomic Theory (3 Credit Hours)

Develops methods of microeconomic analysis beyond the principles level. Major emphasis is placed on consumer behavior and demand, production and cost, market organization, distribution theory, and welfare theory.

Prerequisites: MATH 200 or equivalent and a graded of C or better in ECON 202S, along with a declared major in the University or permission of the Dean's Office

ECON 305 Intermediate Macroeconomic Theory (3 Credit Hours)

Provides an overall 'big picture' of the economy, focusing on the central problems of unemployment, inflation, the business cycle, and economic growth. Important issues include national income accounting, fiscal policy, monetary policy, the money supply, the money market, interest rates, saving rates, labor markets, productivity, budget surpluses/deficits, trade deficits, and exchange rates.

Prerequisites: MATH 162M or equivalent, and a grade of C or better in ECON 201S and ECON 202S, along with a declared major at the University or permission of the Dean's Office

ECON 311 Analytical Tools for Economists (3 Credit Hours)

In this course, students will learn how to build statistical models and use data to answer real-world questions. Through hands-on work with modern statistical software, students will learn to visualize, estimate, interpret, evaluate, and articulate relationships in data. Students will obtain real, tangible skills such as experience with statistical software as well as develop their economic intuition.

Prerequisites: ECON 202S or equivalent

ECON 368 Internship (1-3 Credit Hours)

Supervised internship in economics. Approval for enrollment and allowable credits is determined by the department. Credit for internship and practicum in economics may not both be applied to meeting requirements for the major.

Prerequisites: ECON 304 and ECON 305, along with a declared major at the University or permission of the Dean's Office

ECON 369 Practicum in Economics (3 Credit Hours)

Application of economic theory and principles to a practical problem of interest to a sponsoring community organization. (Qualifies as a CAP experience.)

Prerequisites: ECON 304 and ECON 305; BNAL 206 and BNAL 306, along with a declared major at the University or permission of the Dean's Office

ECON 395 Topics in Economics (1-3 Credit Hours)

A study of selected topics, the title of which will appear in the course schedule.

Prerequisites: ECON 200S and ECON 201S or ECON 202S, along with a declared major at the University or permission of the Dean's Office

ECON 396 Topics in Economics (1-3 Credit Hours)

A study of selected topics, the title of which will appear in the course schedule.

Prerequisites: ECON 200S and ECON 201S or ECON 202S, along with a declared major at the University or permission of the Dean's Office

ECON 400 From Correlation to Causation: Applied Causal Inference (3 Credit Hours)

In this course, students will discover when correlation does in fact imply causation. Traditional statistical tools are used to estimate associative relationships, while the modern causal inference techniques taught in this course will allow students to make causal claims. In other words, students will be able to design statistical tests to answer the question 'what is the effect of X on Y?' This is imperative for researchers, analysts, managers, policy makers, etc. Topics include omitted variable bias, endogeneity, treatment effects, and research designs that identify causation under certain assumptions. Using modern statistical software, students will replicate published studies as well as carry out their own research.

Prerequisites: ECON 201S, ECON 202S, BNAL 206, BNAL 306, and ECON 311, along with a declared major at the University or permission of the Dean's Office

ECON 402/502 Transportation Economics (3 Credit Hours)

A survey of the transportation system in the United States including its development, pricing, and regulation. Special attention is given to railroads, highways, pipeline, water and air transportation; and the roles that these modes of transportation play in economic development.

Prerequisites: ECON 202S (or ECON 200S and permission of the instructor) along with a declared major at the University or permission of the Dean's Office

ECON 407W/507 Labor Market Economics (3 Credit Hours)

Economic analysis of various facets of labor markets. Emphasis is placed on the analysis of labor supply, labor demand, wage determination, earnings differentials and inequality, occupational choice, human capital investment, labor market discrimination, mobility and immigration, impact of unions, and unemployment. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, ECON 202S (or ECON 200S and permission of the instructor), along with a declared major at the University or permission of the Dean's Office

ECON 410/510 Economics for Managers (3 Credit Hours)

Managerial economics applies key economic principles to decision making in business organizations. This course provides insight into consumer and business behavior and allows an improved understanding of how the external business environment can shape how businesses operate. Economics is, at its core, a way of thinking about problems, courses of action, and the impact of decisions. Economics stresses the importance of incentives as determinants of consumer and business behavior and stresses the interaction between costs and benefits in the margin with respect to decision making.

Prerequisites: Instructor permission

ECON 421/521 Public Economics (3 Credit Hours)

This course examines the interaction between government and the economy, with particular emphasis on the role of the federal government. Topics that address the motivation for government involvement in the economy include market failure, income inequality, and redistribution of income. Specific programs studied include Medicare/Medicaid, welfare programs, and the social security system.

Prerequisites: ECON 201S and ECON 202S, along with a declared major at the University or permission of the Dean's Office

ECON 425 Introduction to Mathematical Economics (3 Credit Hours)

The course focus is on the use of differential and integral calculus, matrix algebra, difference equations and classical optimization theory in the presentation and development of economic theory.

Prerequisites: ECON 201S, ECON 202S, and MATH 200 or equivalent, along with a declared major at the University or permission of the Dean's Office

ECON 427/527 Industrial Organization and Public Policy (3 Credit Hours)

A study of market structures and the conduct and performance of business firms in different market structures. The emphasis is on the theory and measurement of industrial concentration and public policy responses to industrial concentration.

Prerequisites: MATH 200 or equivalent and ECON 202S (or ECON 200S and permission of the instructor), along with a declared major at the University or permission of the Dean's Office

ECON 431/531 Money and Banking (3 Credit Hours)

Examines the nature and functions of money and credit, the commercial banking system, the Federal Reserve System, the quantity theory of money, the theory of income determination, the balance of payments and exchange rates, and the history of monetary policy in the United States.

Prerequisites: ECON 201S and ECON 202S, along with a declared major at the University or permission of the Dean's Office

ECON 435/535 Health Economics: A Global Perspective (3 Credit Hours)

This course introduces the student to the economics of health care and the application of health economics to health care problems, the issues surrounding those problems, and the potential solutions to those problems. The course will emphasize institutional features of the health care industry, the market for health care, the political economy of health care, and government involvement in the delivery of health care. Further, the course will survey the delivery of health care in other countries and provide a global perspective on selected health care issues such as AIDS, water and air quality, and the aging of the population.

Prerequisites: ECON 202S and a declared major at the University or permission of the Dean's Office

ECON 436/536 Sports Economics (3 Credit Hours)

This course introduces the student to the economics of sports in America. The course will emphasize institutional features of the sport industry. Specific topics included are: sports franchises as profit-maximizing firms; monopoly and antitrust rules as applied to the sports industry; public finance of sports; costs and benefits of a sports franchise to a city; the labor economics of professional sports; discrimination in sports; and the economics of college sports. This course may not be applied toward the major in economics as an economics elective or toward the minor in economics or the M.A. in economics. (It could, however, be used as a non-economics elective for the major.)

Prerequisites: ECON 202S or equivalent and a declared major at the University or permission of the Dean's Office

ECON 445W/545 Urban Economics (3 Credit Hours)

An analysis of the economic factors which give rise to the formation of urban centers and which contribute to the following problems: urban poverty, housing conditions, traffic congestion, and the fiscal crisis faced by modern cities. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, ECON 202S (or ECON 200S and permission of the instructor), and a declared major at the University or permission of the Dean's Office

ECON 447W/547 Natural Resource and Environmental Economics (3 Credit Hours)

Topics discussed include conservation and scarcity, market failure, fishery management, benefit-cost analysis, water resource development, environmental quality, recreation, energy, and marine resources. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C; ECON 202S (or ECON 200S and permission of the instructor), and a declared major at the University or permission of the Dean's Office

ECON 450 International Economics (3 Credit Hours)

An analysis of the principles of trade theory and policy with an overall exposition of the principles of international finance. The main objective of the course is to provide knowledge of analytical tools used by economists in analyzing contemporary international economic problems.

Prerequisites: ECON 201S and ECON 202S, along with a declared major at the University or permission of the Dean's Office

ECON 451/551 History of Economic Thought (3 Credit Hours)

A study of the history of economic theory with attention to the economic ideas and philosophy of Adam Smith, David Ricardo, Karl Marx, J.M. Keynes and other major figures in the development of economics.

Prerequisites: ECON 201S (or ECON 200S) and ECON 202S, along with a declared major at the university or permission of the Dean's Office

ECON 454W/554 Economic Development (3 Credit Hours)

This course is intended to provide an introduction to the problems of economic development in the Third World, including the problems of economic growth, income distribution, poverty, urbanization, uneven development, agricultural policy, economic planning, industrial policy, trade policy, balance of payments, finance, and currency crises. To illustrate these issues we will examine the problems of certain individual countries, such as Brazil, Korea, Philippines, India, Mexico, Kenya, Indonesia, and Thailand. The course tries to strike a balance between economic theory and institutional economics. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C; ECON 201S and ECON 202S; junior standing or permission of the chief departmental advisor; and a declared major at the university or permission of the Dean's Office

ECON 455/555 Comparative Economic Systems (3 Credit Hours)

This course examines and compares different economies from around the world, including such economies as the UK, France, Germany, Sweden, Japan, India, Korea, Russia, and China. Students look at the economic growth, GDP per capita, unemployment, inflation, income distribution, economic efficiency, institutions, policies, industrial structure, legal infrastructure, and international trade of these economies. Students study the functioning of markets and the problems of market and government failure. The course addresses the question, what is the best way to organize society.

Prerequisites: ECON 201S, ECON 202S and a declared major at the university or permission of the Dean's Office

ECON 495/595 Selected Topics in Economics (1-3 Credit Hours)

Taught on an occasional basis. A study of selected topics, the title of which will appear in the course schedule.

Prerequisites: ECON 201S, ECON 202S, permission of instructor, and a declared major at the University or permission of the Dean's Office

ECON 499 Readings in Economics (3 Credit Hours)

Designed to provide the advanced student in economics an opportunity to do independent study under the guidance of a member of the faculty.

Prerequisites: ECON 201S, ECON 202S, ECON 304, ECON 305, senior standing, a declared major in Economics, and permission of the Chief Departmental Advisor

EET - Electrical Engineering Technology

EET 110 Electrical Circuits I (3 Credit Hours)

Fundamentals of electrical circuits including basic electrical parameters and variables, circuit laws and theorems, mesh analysis, node analysis, Thevenin's and Norton's Theorems, capacitance, inductance, magnetism, and elementary RC and RL transients.

Prerequisites: MATH 162M

EET 120 Fundamentals of Logic Circuits (3 Credit Hours)

An introduction to logic circuits, Boolean algebra, digital interface devices, combinational and sequential logic design, and microprocessor fundamentals.

EET 125 Logic Circuits Laboratory (1 Credit Hour)

Team-oriented experiments in basic combinational and sequential logic circuits and an introduction to fundamental microprocessors.

Pre- or corequisite: EET 120

EET 195 Topics (1-3 Credit Hours)

Study of selected topics.

EET 200 Electrical Circuits II (3 Credit Hours)

A continuation of EET 110 with emphasis on steady-state ac circuit analysis and applications. Topics include alternating current and voltage, phasors and complex numbers and their applications in circuit analysis, series and parallel resonance, complex power, and polyphase circuits.

Prerequisites: MATH 163 and a grade of C or better in EET 110

EET 205 Electrical Circuits Laboratory (1 Credit Hour)

Electrical laboratory instruction including test equipment, measurements, data analysis, verification of circuit laws, formal report preparation, and circuit implementation.

Pre- or corequisite: EET 200

EET 210 Electronic Circuits (3 Credit Hours)

Semiconductor properties and semiconductor devices including diodes, MOS field-effect transistors, junction field-effect transistors and bipolar junction transistors. The ideal operational amplifier and its applications. FET and BJT biasing, including constant current biasing, and amplifier circuits with emphasis on DC modeling and graphical analysis, including Multisim simulation of circuit biasing.

Prerequisites: EET 110

EET 225 Electronic Circuits Laboratory (1 Credit Hour)

Practical design, construction, testing and troubleshooting of electronic circuits, including single state and multistage amplifiers, power amplifiers, linear integrated circuits, and control devices.

Prerequisites: EET 125

Pre- or corequisite: EET 210

EET 261 Introduction to Microprocessors and Microcontrollers (3 Credit Hours)

Introduction of software and hardware that relates to PIC16FXXX 8 bit microprocessor and microcontroller architectures, interface circuitry, and system designs. Programming in controls of internal and external hardware/peripherals, communication protocols between the logic circuits, peripherals, and MCUs. The ASM programming and design is the focus and C coding will also be introduced.

Prerequisites: EET 120 and EET 125

EET 263 Introduction to Programmable Logic Controllers (PLCs) (3 Credit Hours)

An introduction to the design and programming of automatic machine controls. Topics include controls diagrams, programmable logic controllers, ladder logic programming, interfacing, sensors, transducers, encoders, analog I/O, PID, motor controls, codes and standards, controls programming languages, controls safety, and pneumatics. Lab assignments include ladder logic program simulations.

Prerequisites: EET 120 or EET 350

Pre- or corequisite: EET 210

EET 295 Topics (1-3 Credit Hours)

Study of selected topics.

EET 300 Advanced Circuit Analysis (3 Credit Hours)

General analysis of linear networks using classical methods, Laplace transforms and computer-aided methods. Topics include single element transients, first- and second-order circuits, transfer function analysis, Bode plots and waveform analysis. Circuit analysis software is used to support the analytical methods.

Prerequisites: MATH 211 and a grade of C or better in EET 200

EET 310 Digital Electronics (3 Credit Hours)

First course in an upper division sequence in digital electronics circuits and systems. Topics include a comprehensive treatment of Boolean algebra, computer arithmetic, and applications of digital integrated circuits.

Prerequisites: EET 120, EET 125, EET 205, and EET 210

EET 312 Principles of Communication Systems (4 Credit Hours)

Overview of communications systems, including both time and frequency domain analysis. Topics include spectrum analysis, analog modulation methods, digital modulation methods, receiver design, and multiplexing methods. Virtual laboratory projects utilize simulation software.

Prerequisites: EET 300 and ENGT 305

EET 315 Digital Electronics Laboratory (2 Credit Hours)

Application-oriented experiments and design problems in digital electronics. Multistage prototype construction requiring system design, module interface, and Engineering Design Journaling.

Prerequisites: junior standing

Pre- or corequisite: EET 310

EET 320 Microcontroller Applications (3 Credit Hours)

This is the second course in the digital electronics course sequence. The course will focus on software/hardware design of microprocessors and microcontrollers in C under ARM M4 and PIC microcontrollers, interface circuitry, simulation, and system designs in CAD circuit layout. The focus will be on application of microprocessor-based systems design.

Prerequisites: EET 120 and EET 125

EET 325 Microcontroller Applications Laboratory (2 Credit Hours)

Hands-on implementation of microprocessor and microcontroller systems and peripheral interfacing experiments. Emphasis is placed on the hardware and software design and firmware construction in embedded system applications.

Prerequisites: junior standing

Pre- or corequisite: EET 320

EET 330 Linear Electronics (3 Credit Hours)

General treatment of linear electronic circuits with emphasis on the operational amplifier and integrated circuits derived from it. Topics include various amplifier circuits and converters, integrators and differentiators, comparators, waveform generators, active filters, A/D and D/A converters, and regulators. Design of circuits to meet specifications. Circuit analysis software is used to validate some of the designs.

Prerequisites: EET 210 and EET 300

EET 335 Linear Electronics Laboratory (2 Credit Hours)

Design testing, and evaluation of 'linear' electronic circuits and subsystems with primary emphasis on circuit components and modules. Measurement techniques, instrumentation and error analysis. Simulation of circuit designs using Multisim including transient response and frequency response.

Prerequisites: junior standing

Pre- or corequisite: EET 330

EET 350 Fundamentals of Electrical Technology (3 Credit Hours)

A comprehensive course in electrical engineering technology for nonmajors. Major topics are basic electricity (AC and DC), circuit analysis, linear electronics and digital electronics. Not open to electrical engineering technology majors except as a substitute for EET 110 in special cases.

Prerequisites: junior standing

Pre- or corequisite: MATH 211

EET 355 Electrical Laboratory (1 Credit Hour)

Selected electrical laboratory topics for nonmajors including basic measurements, instrumentation, operational amplifiers, digital circuits, and rotating machines. Not open to electrical engineering technology majors.

Prerequisites: junior standing

Pre- or corequisite: EET 350

EET 360 Electrical Power and Machinery (3 Credit Hours)

A study of synchronous and asynchronous AC machinery, DC machinery, power distribution systems, and instrumentation.

Prerequisites: EET 200 or EET 350

EET 366 Electrical Power and Machinery Laboratory (2 Credit Hours)

A laboratory course dealing with electrical power and machinery as covered in EET 360.

Prerequisites: EET 205 or EET 355

Pre- or corequisite: EET 360

EET 367 Cooperative Education (1-3 Credit Hours)

Available for pass/fail grading only. Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures as formally determined by the department prior to the semester in which the work experience is to take place.

Prerequisites: Approval by department is required; Additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

EET 368 Internship (1-3 Credit Hours)

Available for pass/fail grading only. Academic requirements will be established by the department and will vary with the amount of credit desired. Allows students to gain short duration career-related experience.

Prerequisites: Approval by department is required; additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

EET 369 Practicum (1-3 Credit Hours)

Available for pass/fail grading only.

Prerequisites: Approval by department is required; Additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

EET 370 Energy and The Environment (3 Credit Hours)

A study of existing and new energy production methods, energy as a purchased/traded commodity, physics of energy, positive and negative implications for the environment, economics of energy alternatives, and resulting human/social impacts.

Prerequisites: PHYS 101N or PHYS 111N or PHYS 226N or PHYS 231N

EET 373 Instrumentation (3 Credit Hours)

Fundamental concepts of electromechanical devices used in mechatronics and automation control systems. The working principles, calibration, interfacing methods and control loops of analog and digital instrumentation devices in a process control system. The instrumentation devices, including sensors, actuators, signal conditioning circuits and data acquisition boards, will be used in class projects as basic feedback control blocks in practical simulation and PLC-based mechatronics systems. The simulation projects will use PLC hardware, MATLAB and/or LabView software.

Prerequisites: EET 210 and EET 263; or ENGT 270

EET 395 Topics (1-3 Credit Hours)

Study of selected topics.

Prerequisites: junior standing

EET 396 Topics (1-3 Credit Hours)

Study of selected topics.

Prerequisites: junior standing

EET 405 Data Communications and Computer Networks (3 Credit Hours)

The course provides an overview of the local area networks (LANs), wide-area networks (WANs), and backbone technologies. It combines the fundamental concepts of data communications and networking with practical applications and emphasizes the OSI reference model and its relationship to traditional and next-generation LAN/WAN technologies, as well as general topics such as network topology, network interface, client/server hardware, bridges and routers. Hands-on activities using Wireshark are included.

Prerequisites: ENGT 305

EET 412 Wireless Communication Systems (3 Credit Hours)

Topics include digital encoding techniques, signal-to-noise comparisons of different analog and digital modulation methods, link analysis, basic data transmission, cellular networks, wireless standards, basic computer networks framing and protocols, and satellite communication. System level simulations for determining subsystem design requirements and overall performance.

Prerequisites: ENGT 305

EET 420 Advanced Logic Design (3 Credit Hours)

Advanced digital logic design and circuit reduction. Topics include lattice structure, symmetry recognition and simplification, threshold logic, design-for-testing techniques, shortest path test planning, adaptive testing, and fuzzy logic. Computer assignments include design simulation and testing.

Prerequisites: ENGT 305 and EET 310

EET 430 Advanced Motion Control Systems (3 Credit Hours)

A study of modern control devices and applications including electrical, mechanical and pneumatic types. This course is a study of modern electro-mechanical devices and advanced PLCs as applied to modern automation process control systems. The course covers motion control mathematical modeling, design using advanced PLCs and motion control PLC module cards, closed loop control theory and simulations. The emphasis is on understanding the underlying principles that support the building blocks of industrial process control systems.

Prerequisites: ENGT 305 and EET 360

EET 470 Microcontrollers/Embedded-Based Designs (3 Credit Hours)

Advanced embedded system designs. Topics focus in ADC, DAC, EEPROM External Memories, temperature sensor, digital RF wireless communications, communications in synchronous and asynchronous serial forms of SCI, SPI, & I2C, and parallel communication in system integration and design. The 32 bit ARM M4 in C code designs will be used in the course.

Prerequisites: EET 310, EET 320, and EET 325

EET 483 Introduction to Smart Grids (3 Credit Hours)

The course introduces the fundamental principles and techniques in smart grids, with focus on information and communication technologies (ICT) deployed to modernize the electric energy infrastructure. It provides an overview on: the smart grid and its main components; smart devices at transmission, distribution and customer level; distributed energy resources (DER) and emerging technologies; customer systems, including demand response, home energy management and smart appliances; communications technologies and standards/protocols for the smart grid; and smart distribution and customer system projects from real-world smart grid projects.

Prerequisites: EET 360 and ENGT 305

EET 485 Electrical Power Systems (3 Credit Hours)

Fundamentals of electrical power transmission and distribution systems. Transformer operation/application, balanced/unbalanced loads, power factor correction, per-unit system system applications, fault calculations, power quality, over-current protection, relay construction/application, lighting system design, grounding, and introduction to the National Electric Code.

Prerequisites: EET 360 and ENGT 305

EET 495 Topics in Electrical Engineering Technology (1-3 Credit Hours)

Study of selected topics.

Prerequisites: junior standing

EET 496 Topics in Electrical Engineering Technology (1-3 Credit Hours)

Study of selected topics.

Prerequisites: junior standing

ELS - Educational Leadership and Services

ELS 496/596 Topics in Education (1-3 Credit Hours)

The College of Education offers selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly.

Prerequisites: permission of the instructor

ELS 497/597 Topics in Education (1-3 Credit Hours)

The College of Education offers selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly.

Prerequisites: permission of the instructor

ELS 498/598 Topics in Education (1-3 Credit Hours)

The College of Education offers selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly.

Prerequisites: permission of the instructor

ENGL - English

ENGL 101 Composition Studio (3 Credit Hours)

This course is an immersive study of writing, rhetoric, and composing concepts and strategies designed to extend the ENGL 110C curriculum. The course provides additional instruction, guided practice, and support as writers learn to successfully compose and revise in multiple genres for multiple purposes and audiences and navigate university literacy expectations.

Prerequisites: A score of 1 on the WSPT or an override from an academic advisor

Corequisites: ENGL 110C

ENGL 110C English Composition (3 Credit Hours)

The principal objective of the course is to prepare students to be effective writers of the kinds of compositions they will be called on to produce during their college careers. By the end of the course, students should be more mature in their understanding and use of language, should develop efficient writing processes, and should know and demonstrate the qualities of effective composition in a given rhetorical situation.

Prerequisites: A passing grade on the Writing Success Placement Tool (WSPT)

ENGL 112L Introduction to Literature (3 Credit Hours)

This course introduces students to a broad range of literary forms, including poetry, fiction and drama, exposing students to a diverse range of writers across race, gender, sexuality, nationality, and time periods. As students engage with the readings, they will develop skills in literary interpretation, analysis and critical evaluation.

ENGL 114L American Writers, American Experiences (3 Credit Hours)

This course introduces students to the diversity of American culture as depicted in American literature. Readings expose students to a diverse range of writers across race, gender, sexuality, and time periods. As students engage with the readings, they will develop skills in literary interpretation, analysis and critical evaluation.

ENGL 126C Honors: English Composition (3 Credit Hours)

Open only to students in the Honors College. A special honors section of ENGL 110C.

Prerequisites: A passing score on the Writing Success Placement Tool (WSPT)

ENGL 127L Honors: Introduction to Literature (3 Credit Hours)

Open only to students in the Honors College. A special honors section of ENGL 112L.

ENGL 200 Introduction to English Studies (1 Credit Hour)

A preview of the subject areas of an English major (literature, linguistics, creative writing, journalism, professional writing, rhetoric, teaching) with attention to the student's curricular and career planning. Required of English majors. Open to anyone interested in English.

ENGL 211C Writing, Rhetoric, and Research (3 Credit Hours)

To foster dynamic transfer into major-level writing courses, this course emphasizes academic literacy and the skills necessary to decode and understand the writing process, the fundamental rhetorical principles of writing, and the research process and how they adapt to shifting requirements of audience, subject matter, and context. It is recommended that students take this course in their sophomore year. A student with credit for ENGL 111C, ENGL 131C, ENGL 221C, ENGL 231C or any Honors equivalents cannot receive credit for ENGL 211C. A student also may not receive credit more than once for this course or its Honors equivalent under different titles.

Prerequisites: ENGL 110C with a grade of C or higher

ENGL 215L Deep Dive Literature (3 Credit Hours)

This course provides students the opportunity to take an in depth look into a specific literary topic of shared interest while developing their skills in literary interpretation, analysis and critical evaluation. Readings will represent a diverse set of voices and genres but also center a specific set of questions to explore.

Prerequisites: Completion of ENGL 110C or equivalent with C or higher

ENGL 226C Honors: Writing, Rhetoric, and Research (3 Credit Hours)

Open only to students in the Honors College. A special honors section of ENGL 211C. A student with credit for ENGL 111C, ENGL 211C, ENGL 221C, or ENGL 231C cannot receive credit for ENGL 226C. A student also may not receive credit more than once for this course or its equivalent under different titles.

Prerequisites: ENGL 110C or ENGL 126C with a grade of C or higher

ENGL 228C Honors: Writing, Rhetoric, and Research: Special Topics (3 Credit Hours)

Open only to students in the Honors College. A special honors section of ENGL 231C. A student with credit for ENGL 111C, ENGL 211C, ENGL 221C, or ENGL 231C cannot receive credit for ENGL 228C. A student also may not receive credit more than once for this course or its equivalent under different titles.

Prerequisites: ENGL 110C or ENGL 126C with a grade of C or higher

ENGL 231C Writing, Rhetoric, and Research: Special Topics (3 Credit Hours)

A special themed section of ENGL 211C that is recommended for specific populations of students according to discipline, workplace, or other shared purpose. This course emphasizes academic literacy and the skills necessary to decode and understand the writing process, fundamental rhetorical principles of writing, and research, with a focus on the expectations of specific audience/s and in response to emerging rhetorical situations, thus fostering dynamic transfer into future work. The themes of these sections will be more fully described in information distributed to academic advisors. It is recommended that students take this course in their sophomore year.

A student with credit for ENGL 111C, ENGL 131C, ENGL 211C, ENGL 221C, or any Honors equivalents cannot receive credit for ENGL 231C.

A student also may not receive credit more than once for this course or its Honors equivalent under different titles.

Prerequisites: A C or better in ENGL 110C

ENGL 295 Topics (1-3 Credit Hours)

A study of selected topics designed for nonmajors or for elective credit within a major.

Prerequisites: ENGL 110C with a grade of C or better

ENGL 300W Introduction to Creative Writing (3 Credit Hours)

A creative writing workshop course combining individual conferences with the instructor and class discussion of student writing. Students will work in fiction, non-fiction, poetry, and other genres. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C

ENGL 301 Introduction to British Literature I (3 Credit Hours)

A survey of British literature from the beginning of textual records until 1780, focusing on the development of different literary forms in their social and cultural contexts.

Prerequisites: Literature way of knowing requirement and 6-hour General Education composition requirement or permission of the instructor

ENGL 302 Introduction to British Literature II (3 Credit Hours)

A survey of British literature after 1780, focusing on the development of different literary forms in their social and cultural contexts.

Prerequisites: Literature way of knowing requirement and 6-hour General Education composition requirement or permission of the instructor

ENGL 303 Shakespeare's Histories and Comedies (3 Credit Hours)

An exploration of Shakespearean comedy and historical drama, through plays such as, A Midsummer Night's Dream, The Merchant of Venice, As You Like It, Measure for Measure, and The Tempest for the former; Richard II, Henry IV, and Richard III for the latter.

Prerequisites: Literature way of knowing requirement and 6-hour General Education composition requirement or permission of instructor

ENGL 304 Shakespeare's Tragedies and Poetry (3 Credit Hours)

A study of Shakespearean poetry and tragedy through the longer poems and the sonnets for the former, and through plays such as Romeo and Juliet, Hamlet, Othello, Macbeth, and Antony and Cleopatra for the latter.

Prerequisites: Literature way of knowing requirement, 6-hour General Education composition requirement, or permission of instructor

ENGL 307T Digital Writing (3 Credit Hours)

This course introduces students to issues of writing in various digital environments like web pages, email, blogs, wikis, and discussion boards. It also introduces fundamentals of hypertext authoring, digital and visual rhetoric, and image manipulation.

Prerequisites: ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C

ENGL 325 Introduction to Rhetorical Studies (3 Credit Hours)

Explores the nature and function of rhetoric and its contribution to the knowledge-making enterprises of English studies and other disciplines. Students will use that 'lens' to assess the effectiveness of their own language practices.

Prerequisites: 6-hour General Education composition requirement

ENGL 327W Advanced Composition (3 Credit Hours)

This course emphasizes development of a mature, professional style in expository writing by study of the stylistic and analytical principles underlying effective prose writing. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 110C and a grade of C or better in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 333 Introduction to Critical Theory (3 Credit Hours)

This course introduces students to theories about the nature and value of literature and gives them experience in applying such theories to specific literary texts.

Prerequisites: Lower-division General Education requirements in Literature (3 hours, under Ways of Knowing) and in Written Communication (6 hours), or permission of instructor

ENGL 334W Technical Writing (3 Credit Hours)

This course provides the student with a working knowledge of various types of technical communication, including the writing of proposals, instructions, and reports for both specialist and nonspecialist audiences. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C

ENGL 335 Editing and Document Design (3 Credit Hours)

This course provides practical experience in document design and copy editing and includes an analysis of technical formats used in journalism, business, industry, and government. It features hands-on lab work in document presentation, page layout, and design.

Prerequisites: A grade of C or better in ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C

ENGL 336 The Short Story (3 Credit Hours)

A genre course on the art of the short story. Students will explore how the writers' careful selection of detail creates meanings that emerge through the characters, plot, setting, diction, point of view, and other elements of fiction.

Prerequisites: Literature way of knowing requirement and 6-hour General Education composition requirement or permission of the instructor

ENGL 338 Writing for Games (3 Credit Hours)

A genre course on the aesthetic considerations of writing for games. Students will explore how games translate traditional elements of storytelling such as character, conflict, voice, and plot into effective gameplay. This course will provide students with an opportunity to experiment with composing narratives for a variety of genres of games and game-related productions. It also provide students with practical experience composing game design documents and other industry-specific forms of writing.

Prerequisites: six-hour General Education composition requirement or permission of instructor

ENGL 340 American Drama (3 Credit Hours)

A study of American drama from its beginnings to the present day. The course includes plays from the eighteenth and nineteenth centuries, with a generous selection from the twentieth and twenty-first centuries.

Prerequisites: Literature way of knowing requirement and 6-hour General Education composition requirement or permission of instructor

ENGL 342 Southern Literature (3 Credit Hours)

A survey of the literature of the American South from William Byrd to Ernest Gaines. Selected writings are studied not only for their literary value but also as expressions of evolving regional attitudes to be evaluated in terms of the mainstream of American culture.

Prerequisites: Literature way of knowing requirement and 6-hour General Education composition requirement or permission of the instructor

ENGL 345 American Literature to 1860 (3 Credit Hours)

The course presents a survey of American literature from the beginning to the Civil War. It will explore the many voices, genres, and textual encounters that contribute to the literary traditions we recognize as American, with attention paid to how notions of race, gender, class, and ethnicity are formulated in this period of settlement and early nationhood.

Prerequisites: Literature way of knowing requirement and 6-hour General Education composition requirement or permission of instructor

ENGL 346 American Literature Since 1860 (3 Credit Hours)

The course explores significant writers and literary movements, which might include naturalism, social realism, modernism, the Harlem Renaissance, post-war confessional poetry, the Civil Rights era, and postmodernism.

Prerequisites: Literature way of knowing requirement and 6-hour General Education composition requirement or permission of instructor

ENGL 349 The Contemporary American Novel (3 Credit Hours)

Reading and analysis of American novels published since 1945. Emphasis on contemporary themes and techniques.

Prerequisites: Literature way of knowing requirement and 6-hour General Education composition requirement or permission of the instructor

ENGL 350 Aspects of the English Language (3 Credit Hours)

An introduction to the grammar of mainstream English. Primary focus is on analyzing English sentences, including study of parts of speech, phrases, clauses, and sentence types.

Prerequisites: 6-hour general education composition requirement or permission of instructor

ENGL 351 Fiction Workshop (3 Credit Hours)

Students write, criticize, discuss, and revise works of fiction.

Prerequisites: ENGL 300W or permission of the instructor, based on writing samples submitted

ENGL 352 Poetry Workshop (3 Credit Hours)

Students write, criticize, discuss, and revise poetry.

Prerequisites: ENGL 300W or permission of the instructor, based on writing samples submitted

ENGL 354 Client-Based Research Writing (3 Credit Hours)

This is a client-based research course that aims to provide students with workplace research experience. The primary objective is to teach students the rhetorical nature of conducting and reporting research in professional contexts for multiple audiences. Research methods such as surveys, interviews, and observations will be covered.

Prerequisites: ENGL 110C and ENGL 211C

ENGL 355 Game Design and Rhetoric (3 Credit Hours)

Using a number of methodologies privileged by English studies, this course will study the representative and rhetorical strategies through which computer game designers make meaning via their rhetorical choices. Multi-perspective in nature, it will also examine the discursive struggles that determine how players construct themselves as subjects in and against computer games via their rhetorical choices. This course will attempt to come to terms with the larger question of how scholars, through various forms of critical play, construct, categorize, and produce computer games as a subject of academic study.

Prerequisites: Grade of C or better in ENGL 110C, and either ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 360 World Literature I (3 Credit Hours)

An introduction to selected major works in translation from the beginnings of world literature through the early seventeenth century. Works will be chosen that illustrate the relationship of literature to cultural tradition in different global regions.

Prerequisites: Literature way of knowing requirement, 6-hour General Education composition requirement, or permission of instructor

ENGL 363 World Literature II (3 Credit Hours)

An introduction to selected major works of literature in translation from the seventeenth century to the present day. Works from a variety of world cultures will be used to explore the interaction between literature and society in centuries of expanding global awareness.

Prerequisites: Literature way of knowing requirement, 6-hour General Education composition requirement, or permission of instructor

ENGL 367 Cooperative Education (1-3 Credit Hours)

Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures as formally determined by the department and the Cooperative Education program prior to the semester in which the work experience is to take place.

Prerequisites: Approval by department is required; Additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

ENGL 368 English Internship (1-3 Credit Hours)

A structured work experience involving skills cultivated and practiced in English classroom spaces. Reflective materials connecting educational and professional experiences are required, as well as satisfactory evaluations from the workplace supervisor.

Prerequisites: Sophomore status with a passing grade in at least one 300- or 400-level English course and approval by the Director of Student Internships prior to registration

ENGL 369 Research Practicum (3 Credit Hours)

This course enables students to combine traditional research and scholarship with real world applications. Can be repeated for credit.

Prerequisites: ENGL 327W or ENGL 335, plus 15 hours in the major (with sufficient coursework in an involved emphasis) and approval by faculty practicum advisor

ENGL 370 English Linguistics (3 Credit Hours)

A survey of topics in English linguistics. Topics include the sound system, the structure of words, the ways in which words and phrases form meaningful utterances, the structure of conversations, differences between spoken and written English, language acquisition by children, language variation, and language in its social context.

Prerequisites: 6-hour general education composition requirement or permission of instructor

ENGL 371W Language and Culture (3 Credit Hours)

An interdisciplinary examination of intercultural communication through film and readings in anthropology, linguistics, and world literature, this course will compare the values, beliefs, social structures and conventions of a number of cultures to those of the U.S. This course is part of the World Cultures interdisciplinary minor. This is a writing intensive course.

Prerequisites: 6-hour general education composition requirement or permission of instructor

ENGL 380 Introduction to Journalism (3 Credit Hours)

This class focuses on media literacy and on the role of media in society. Students learn and practice elements of news writing, including writing leads, organizing stories, reporting techniques, and interviewing. Story assignments come from handouts, press releases, press conferences, speeches, and public meetings. Some assignments are completed under simulated deadline pressure in the computer lab. This course is identical to the course previously named Reporting and News Writing I and satisfies that requirement.

Prerequisites: Six semester hours in English

ENGL 381 Public Relations (3 Credit Hours)

This course is designed to introduce the student to certain disciplines related to the public relations process. The emphasis is equally distributed between the handling of written materials and the dynamics of group relations, i.e., the publicist and the person or persons whom he or she is representing. The focus is distinguished from advertising by virtue of its emphasis upon public service, particularly the continued need for the free flow of information in the democratic process.

Prerequisites: Six semester hours in English

ENGL 382 Reporting News for Television and Digital Media (3 Credit Hours)

This course focuses on writing for television news and producing online news reports. Students strengthen their journalistic skills and learn the importance of writing clearly for a viewing audience while working under newsroom deadlines. By the end of the course, students should feel confident in producing accurate, detailed reports for both television news and online news sites.

Prerequisites: A grade of C or better in ENGL 110C and ENGL 211C

ENGL 383 Digital Journalism (3 Credit Hours)

Students will create a WordPress site and are expected to produce news stories on this site from events on campus and in the community. These news stories may include the use of audio, short video, hyperlinks, infographics, digital maps, and photo galleries. This is a hands-on practical course that will include news reporting and writing for on-line platforms, podcasts, blogs, video, and social media. Students will create a Twitter account and will be expected to Tweet from news events that they will cover. Additionally, in a group project, students will either produce a podcast or a video news story. By the end of the course, students will have marketable digital portfolio.

Prerequisites: Grade of C or better in ENGL 110C and either ENGL 211C, ENGL 221C or ENGL 231C

ENGL 384 Business and Science Journalism (3 Credit Hours)

This course is a combination of lecture and hands-on news reporting/analysis. The focus of this course is to familiarize students with the techniques of the traditional and 'new media' journalist engaged in addressing critical societal problems. Additionally, this course will emphasize techniques of journalistic research to create reporting that is thorough, fair, and well-supported.

Prerequisites: A grade of C or better in ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C

ENGL 385 The Press and Making of American Democracy (3 Credit Hours)

In this course, students will study the role journalism and a free press have played in American history from the Colonial period to the current digital age. Most significantly, students will understand the relationship between a free press and the development of American democracy. The way the press has framed the debate on political, cultural, economic and social issues over the course of U.S. history will be examined. Also examined will be how the changing practice of journalism – from print, to radio, television and today's social media - has impacted the relationship between the media, the government, and the citizen.

Prerequisites: A grade of C or better in ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C

ENGL 387 TV News Production (3 Credit Hours)

This course is designed to provide students with an introduction to the reporting, writing, and production aspects of a television news program. Students will learn how to create 15- and 30-minute news broadcasts by developing story ideas and news gathering. Students will also learn the intricacies of shooting and editing video along with the production process involved in recording a live news broadcast. Each student will spend time both in front of and behind the television studio cameras. The goal of this course is to produce weekly news programs worthy of broadcast on local television. Students will assume the roles of reporter, writer, producer, floor director, photojournalist, videographer, technician, and more. (Cross listed with COMM 387/THEA 387)

Prerequisites: COMM 271 or THEA 271 or DANC 271

Pre- or corequisite: COMM 382 or ENGL 382

ENGL 390 TESL Methods, Materials, & Assessment (3 Credit Hours)

This course is designed to provide students with the background and tools necessary for teaching English as a Second Language (ESL) at the K-12 or post-secondary level. The course covers the major theories of language learning, focusing primarily on current methods for language learning and teaching along with practical applications of teaching methods through a focus on designing activities and lesson plans, developing assessment tools, and teaching with technology.

Prerequisites: 6-hour general education composition requirement or permission of instructor

ENGL 395 Topics in English (1-3 Credit Hours)

A study of selected topics designed for nonmajors or for elective credit within a major. These courses will appear in the course schedule and will be more fully described in information distributed to academic advisors.

Prerequisites: Grade of C or better in ENGL 110C and either ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 396 Topics in English (1-3 Credit Hours)

A study of selected topics designed for nonmajors or for elective credit within a major. These courses will appear in the course schedule and will be more fully described in information distributed to academic advisors.

Prerequisites: Lower-division General Education requirements in Literature (3 hours, under Ways of Knowing) and in Written Communication (6 hours), or permission of instructor

ENGL 406/506 The Teaching of Literature (3 Credit Hours)

This course is designed to provide an intensive examination of issues, approaches, and methods utilized in the teaching of literature, particularly literature written for children and young adults.

Prerequisites: One 300-level literature course or permission of the instructor

ENGL 407/507 Chaucer's Canterbury Tales (3 Credit Hours)

A study of The Canterbury Tales with an introduction to Middle English language and culture.

Prerequisites: One 300-level English course or permission of instructor and a grade of C or better in in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 416/516 English Renaissance Drama (3 Credit Hours)

An extensive survey of the secular national dramas of Renaissance England that were written and performed by Shakespeare's contemporaries in London between 1576 and 1642. Students study the literary features, social contexts and ideological underpinning of representative works by Kyd, Marlowe, Jonson, Webster, Ford, and others.

Prerequisites: One 300-level English course or permission of instructor and a grade of C or better in in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 418W/518 Jewish Writers (3 Credit Hours)

This course introduces students to the Jewish literary traditions and the cultural trends shaping these traditions and the Jewish identity. It will examine the impact of such issues as immigration, family, marginality, the Holocaust, assimilation, cultural diversity, feminism, Israel, race and religion. Readings will include short stories, poems, essays, novels, and autobiographical writing. This is a writing intensive course.

Prerequisites: One 300-level English course or permission of instructor and a grade of C or better in ENGL 110C and a grade of C or better in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 419/519 The Harlem Renaissance (3 Credit Hours)

The class provides students with a solid grasp of the Harlem Renaissance: what it was, why it came to be, and how it continues to resonate in American culture. Students will gain a greater understanding of this period and the ways in which the artistic endeavors of the Harlem Renaissance--especially the literature--helped to transform that era and make possible the growing respect for diversity that we now enjoy.

Prerequisites: One 300-level English course or permission of instructor and a grade of C or better in in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 421/521 British Literature 1660-1800 (3 Credit Hours)

British literature from the Restoration of the monarchy after the Civil War and Puritan Commonwealth to the French Revolution, focusing on how cultural changes (legalized female actors, commercialized printing, colonialism, and growing market capitalism) interacted with the flowering of satire and scandalous theatrical comedy, and the emergence of modern literary forms (periodical journalism, 'picturesque' poetry, and the novel).

Prerequisites: One 300-level English course or permission of instructor and a grade of C or better in in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 423/523 The Romantic Movement in Britain (3 Credit Hours)

A study of the literature written in Britain between 1770-1830, focusing on how the literary experiments and innovations of poets like Blake, Wordsworth, Coleridge, Byron, Percy Shelley, Keats, Burns, and Barbauld, and of novelists like Mary Shelley, Radcliffe, and Scott interacted with cultural changes such as the Industrial Revolution, the French Revolution, and the emergence of feminism and working-class radicalism.

Prerequisites: One 300-level English course or permission of instructor and a grade of C or better in in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 427W/527 Writing in the Disciplines (3 Credit Hours)

This is a discussion/workshop course emphasizing contexts and strategies of text production in and across academic disciplines and professional settings. Students will produce a variety of texts designed to meet the needs of specific audiences. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C

ENGL 432/532 Origins and Early Development of the British Novel to 1800 (3 Credit Hours)

A study of early British novels and how the novel genre developed from and in relation to other traditions such as the epic, romance, criminal biography, periodical journalism, and travel narrative.

Prerequisites: One 300-level English course or permission of instructor and a grade of C or better in in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 433/533 Victorian Literature (3 Credit Hours)

A study of the chief writers and the cultural and philosophical backgrounds of the Victorian era, touching on the changes from the early to the later part of the period. Works analyzed include fiction, nonfiction prose, and poetry.

Prerequisites: One 300-level English course or permission of instructor and a grade of C or better in in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 435W/535 Management Writing (3 Credit Hours)

This course focuses on writing as a means of making and presenting management decisions. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, and six semester hours in English, to include ENGL 334W or permission of the instructor

ENGL 436/536 Writing for the Government (3 Credit Hours)

This course will focus on writing for a number of government agencies through the application of rhetorical theory. The course will apply theory to practice in the process of assessing audience, context, and genre, as well as ethical writing practices.

Prerequisites: A grade of C or better in ENGL 110C and a grade of C or better in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 438/538 The Twentieth-Century British Novel (3 Credit Hours)

Offered in specific sections of 1900-1945, 1945-present, 1900-present. Major British novels are studied.

Prerequisites: One 300-level English course or permission of instructor and a grade of C or better in in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 439/539 Writing in Digital Spaces (3 Credit Hours)

This course will teach students the rhetorically sound development of digital media for a range of audiences within a variety of possible digital contexts through discussion of accessibility and the application of fundamentals of usability studies.

Prerequisites: ENGL 307T or equivalent or permission of instructor

ENGL 440/540 General Linguistics (3 Credit Hours)

An introduction to linguistic analysis of world languages. Emphasis is on the analysis of sound systems (phonetics, phonology) and the structure of words and sentences (morphology and syntax).

Prerequisites: Junior standing or permission of instructor; previous 300- or 400-level coursework in phonetics or linguistics strongly recommended with ENGL 370 preferred

ENGL 441/541 American Travel Literature (3 Credit Hours)

This is a survey course that examines the American experience, American identity and American culture through travel 'texts' that include prose, poetry, art, and film. The course takes an interdisciplinary American Studies approach, using lenses such as race, gender, and class.

Prerequisites: ENGL 112L or ENGL 114L

ENGL 442/542 English Grammar (3 Credit Hours)

This course is a descriptive study of English grammar as it relates to the contexts in which it is used, with implications for grammar pedagogy and TESOL classrooms.

Prerequisites: ENGL 350 or permission of instructor

ENGL 443/543 Southern and African American English (3 Credit Hours)

This course focuses on the linguistic diversity of the American South, with an emphasis on different dialects and cultures throughout the region. In addition to consideration of the variation in the language system, it examines the social salience of stigmatized Southern varieties and dialect discrimination, directed towards Southern and African American speakers both inside and out of the South.

Prerequisites: 6-hour general education composition requirement or permission of instructor

ENGL 444/544 History of the English Language (3 Credit Hours)

A study of the origins and development of the English language. Focus is on the changes of sounds, words, and other language structures across time, with deep consideration of the social and cultural factors that shape the history of English.

Prerequisites: Junior standing or permission of instructor; previous 300- or 400-level coursework in phonetics or linguistics is strongly recommended with ENGL 370 preferred

ENGL 445/545 Forensic Linguistics (3 Credit Hours)

The course is an introduction to forensic linguistics—the application of linguistic analysis to language as used in legal contexts (e.g., federal, state, and local code, legal documents, government and the judicial process, etc.). Course topics include interaction in the legal process (interviews, interrogations, courtroom discourse), authorship analysis, speaker identification and profiling, multilingualism, trademarks and product warnings, language and sexual crimes, and terrorism. Students become familiar with debates in the forensic domain, theoretical issues, and tools of analysis that are suited to forensic work.

Prerequisites: 6-hour general education composition requirement or permission of instructor

ENGL 447/547 The American Novel to 1920 (3 Credit Hours)

Examination of the American novel from its origins in the late eighteenth century through World War I. The course will emphasize the novel as a genre, cultural trends during the period, and such relevant literary modes as romanticism, realism, and naturalism.

Prerequisites: One 300-level English course or permission of instructor and a grade of C or better in in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 448/548 The American Novel 1920 to Present (3 Credit Hours)

Examination of the American novel from the end of World War I to the present day. The course will emphasize formal issues related to the genre of the novel and relevant literary and cultural trends during the period including modernism and postmodernism.

Prerequisites: One 300-level English course or permission of instructor and a grade of C or better in in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 449/549 Craft of Literary Nonfiction (3 Credit Hours)

A detailed study of technique in literary nonfiction with an emphasis on the memoir, the essay, reportage, and travel narrative. Especially designed for, but not limited to, creative writing students; supplements the creative writing workshops.

Prerequisites: ENGL 300W, or three semester hours in literature and permission of the instructor

ENGL 450/550 American English (3 Credit Hours)

When people think of 'American English,' they usually have a standard form in mind. In this course, we focus on the variety of ways English is spoken in the U.S. and the social meaning of that variation. We also discuss language-based discrimination and strategies that can be used to confront it. Models for collecting, describing, and analyzing variation in American English are introduced and applied to real-life situations.

Prerequisites: 6-hour general education composition requirement or permission of instructor

ENGL 451/551 Advanced Fiction Workshop (3 Credit Hours)

This course, an expansion of the principles and techniques learned in ENGL 351, focuses on the writing and criticism of the short story, the novella, and the novel.

Prerequisites: ENGL 351; junior standing, or permission of the instructor, based on writing samples submitted

ENGL 452/552 Advanced Poetry Workshop (3 Credit Hours)

This course, an expansion of the principles and techniques learned in ENGL 352, focuses on the writing and criticism of poetry.

Prerequisites: ENGL 352 and junior standing or permission of the instructor, based on writing samples submitted

ENGL 454/554 Creative Nonfiction (3 Credit Hours)

A course in the techniques of writing nonfiction imaginatively within a factual context. Emphasis is placed on regard for reader psychology, selection of significant detail, and the development of a style at once lively and lucid. Assignments are made individually with regard to the student's field of interest—history, biography, science, politics, informal essay, etc. Advice is given on the marketing of promising manuscripts.

Prerequisites: ENGL 327W or ENGL 351 and junior standing or permission of the instructor, based on writing samples submitted

ENGL 455/555 The Teaching of Composition, Grades 6-12 (3 Credit Hours)

A study of the theory and practice of teaching writing. Special attention will be given to the ways effective teachers allow theories and experiences to inform their pedagogical strategies.

Prerequisites: ENGL 300W or ENGL 327W or permission of the instructor

ENGL 456/556 The Craft of Fiction (3 Credit Hours)

A detailed study of fictional technique in the novel and short story, with emphasis on character development, conflict, point of view, plot, setting, mood, tone, and diction. Especially designed for, but not limited to, creative writing students; supplements the creative writing workshops.

Prerequisites: Six semester hours in literature or ENGL 300W plus three semester hours in literature; junior standing or permission of the instructor

ENGL 457/557 The Craft of Poetry (3 Credit Hours)

A detailed study of technique in poetry, with emphasis on form, imagery, rhythm, and symbolism. Especially designed for, but not limited to, creative writing students; supplements the creative writing workshops.

Prerequisites: Six semester hours in literature or ENGL 300W plus three semester hours in literature; junior standing or permission of the instructor

ENGL 459W/559 New Literatures in English (3 Credit Hours)

A study of the diverse 'new' literatures in English, including those of the Caribbean and Central America, Africa, India, as well as of Canada and Australia, in their current historical and political contexts. This is a writing intensive course.

Prerequisites: One 300-level literature course or permission of instructor and a grade of C or better in ENGL 110C and a grade of C or better in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 461/561 American Poetry of the Early Twentieth Century (3 Credit Hours)

Works of important American poets from 1900-1945 are studied.

Prerequisites: One 300-level English course or permission of instructor and a grade of C or better in in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 463W/563 Women Writers (3 Credit Hours)

This course applies concepts developed through women's and gender studies scholarship using intersectional feminist frameworks that acknowledge the socially constructed nature of the word 'woman' to interpret and analyze works by writers who identify as women and speak from diverse perspectives. This is a writing intensive course.

Prerequisites: One 300-level course in English or permission of instructor and a grade of C or better in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 464W/564 Native American Literature (3 Credit Hours)

This class offers an investigation of Native American literature both past and present and seeks to foster an appreciation for indigenous cultures, traditions, and the ongoing concerns that inform so much of Native literary output. By privileging Native centered approaches to narrative and history-keeping, the course hopes to promote a greater understanding of the issues Native peoples faced in the colonial milieu and the continued implications of those histories for Native communities and indigenous identities today. This is a writing intensive course.

Prerequisites: One 300-level course in English or permission of instructor and a grade of C or better in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 465W/565 African American Literature (3 Credit Hours)

An investigation of how African American literature has innovated, influenced, and been influenced by literary movements, historical events, social transitions, and political upheavals. This is a writing intensive course.

Prerequisites: One 300-level course in English or permission of instructor and a grade of C or better in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 466W/566 Asian American Literature (3 Credit Hours)

The course introduces students to key texts in Asian American literature, supported by critical studies (and occasion films) to interrogate the theme of Asian American identities in their multiple forms. The course will examine sociopolitical histories that undercut the literature and the contributions of Asian American writers to the breadth and scope of American as well as global literature today. This is a writing intensive course.

Prerequisites: One 300-level course in English or permission of instructor and a grade of C or better in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 468 Advanced English Internship (1-3 Credit Hours)

A structured work experience involving skills cultivated in English classroom spaces. Reflective materials connecting educational and professional experiences are required, as well as satisfactory evaluations from the workplace supervisor.

Prerequisites: A passing grade in ENGL 368 and approval by the Director of Student Internships prior to registration

ENGL 473/573 Writing with Video (3 Credit Hours)

This course engages students in a comprehensive exploration of video as a rhetorical narrative medium, with emphasis on the actual production of video work. Writing is also integrated into the production process. From brainstorming to storyboarding and critique, writing is positioned as an integral part of the course.

Prerequisites: ENGL 307T

ENGL 477/577 Language, Gender and Power (3 Credit Hours)

This class explores social hierarchy through the lenses of language and power. Using the metaphor of the 'cultural food chain' for the social order (gender, race, class, sexual orientation, and other aspects of personhood), we examine how language is central to reproducing hierarchies as well as confronting and disrupting them.

Prerequisites: 6-hour general education composition requirement or permission of instructor

ENGL 482/582 Sports Journalism (3 Credit Hours)

This is primarily a sportswriting course in which students are introduced to various types and styles of sports stories that are representative of sports journalism as practiced in newspapers and magazines. The course also explores the role of sports in American society.

Prerequisites: A grade of C or better in ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C

ENGL 483W/583 Reporting and News Writing II (3 Credit Hours)

Designed to familiarize students with the fundamentals of beat reporting and its practice in the multi-media environment of 'converged' newsrooms. The course emphatically focuses on writing but also provides instruction on how the tools and techniques of multimedia platforms are used to enhance storytelling. Emphasis is also placed on accessing information through web-based resources and government documents. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 110C and ENGL 211C; ENGL 380 or permission of instructor

ENGL 484/584 Feature Story Writing (3 Credit Hours)

Course includes discussion and practice of writing a variety of newspaper and magazine feature stories. Students will write and critique stories on people, places, businesses, trends, and issues. Assistance is given in the marketing of manuscripts.

Prerequisites: Nine semester hours in English

ENGL 485W/585 Editorial and Persuasive Writing (3 Credit Hours)

A study of the practice and function of writing editorials, commentary, reviews and columns for newspapers and online media. Lectures will focus on the techniques of crafting a persuasive argument, content analyses of Pulitzer Prize-winning editorials and columns, and guest lectures by newspaper editorial writers. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C; ENGL 380

ENGL 486/586 Media Law and Ethics (3 Credit Hours)

Designed to introduce students to components of communication law that may affect the professional writer or broadcaster. Topics include defamation, constitutional constraints, freedom of information, privacy, copyright, and telecommunications law. Ethical issues relating to the mass media will also be examined.

Prerequisites: Junior standing or permission of the instructor

ENGL 487 Television News Production Workshop (3 Credit Hours)

This course is designed to introduce students to the reporting, writing, and production of a television news program. Students will learn how to create a 30-minute news program from the framing of story ideas and news gathering to shooting and editing video along with the production process involved in recording a live news broadcast. Each student will spend time both in front of and behind the video and television studio cameras. The goal of this course is to produce weekly news broadcasts. In doing so, students will alternately assume the roles of reporter, writer, producer, director, anchor, photojournalist, technician, and more. Using the campus and surrounding neighborhoods as our news universe, students will report news and feature stories that impact the University and its neighbors.

Prerequisites: ENGL 380 or ENGL 382 or COMM 271 or THEA 271

ENGL 490/590 Professionalization in English (1-3 Credit Hours)

Advanced study of career opportunities and industry trends across a variety of fields, with a focus on reflection, synthesis, and professional development. Students will prepare a major project—as well as materials for career or educational advancement—and will discuss the nature, purpose, and value of an English degree.

Prerequisites: Senior standing in English

ENGL 492/592 Modern World Drama (3 Credit Hours)

A comparative study of selected major dramatic works of the world, featuring texts drawn from a range of cultures from around the globe. The course will begin in the late nineteenth century and continue to the present. Works written in languages other than English will be read in translation.

Prerequisites: One 300-level English course or permission of instructor and a grade of C or better in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 493/593 Contemporary World Literature (3 Credit Hours)

Fiction, poetry, and plays written during the last fifty years in nations throughout the world. Most texts will have been written originally in languages other than English. The course will focus on a comparative study of works produced in a variety of cultural contexts, and will explore a range of approaches to defining or circumscribing world literature.

Prerequisites: One 300-level English course or permission of instructor and a grade of C or better in in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 494 Entrepreneurship in English Studies (3 Credit Hours)

This course will broach the theoretical and practical questions of how entrepreneurship intersects with English Studies. Conceived of as a studio course, it is designed to teach students a hands-on methodology through which they can translate disciplinary theory and knowledge into real-world outcomes. This course will teach students how academic knowledge can lead to transformations, innovations, and solutions to different types of problems.

Prerequisites: Grade of C or better ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C

ENGL 495/595 Topics in English (1-3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, because of their specialized nature, may not be offered regularly. These courses will appear in the course schedule and will be more fully described in information distributed to all academic advisors.

Prerequisites: One 300-level English course or permission of instructor and a grade of C or better in in one of the following: ENGL 211C, ENGL 221C, or ENGL 231C

ENGL 496/596 Topics in English (1-3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, because of their specialized nature, may not be offered regularly. These courses will appear in the course schedule and will be more fully described in information distributed to all academic advisors.

Prerequisites: Three semester hours in literature

ENGL 497 Tutorial Work in Special Topics in English (1-3 Credit Hours)

Independent study in literature, writing, or linguistics according to a program of reading and/or writing designed under the direction of an instructor.

Prerequisites: Senior standing and approval of the chair of the Department of English

ENGL 498 Tutorial Work in Special Topics in English (1-3 Credit Hours)

Independent study in literature, writing, or linguistics according to a program of reading and/or writing designed under the direction of an instructor.

Prerequisites: Senior standing and approval of the chair of the Department of English

ENGN - Engineering

ENGN 105 Engineering Orientation (1 Credit Hour)

Success skills for new engineering students. Introductory overview of the college's different majors leading into the profession of engineering.

Pre- or corequisite: ENGN 121 or ENGN 110 or instructor approval

ENGN 108 Exploring Engineering (3 Credit Hours)

Exploration of topics in the sciences and technologies of civil, mechanical, electrical, manufacturing and computer engineering. Course outcomes include study skills for engineering students and development of foundational skills including application of the Engineering Design Process to solve an engineering problem.

Pre- or corequisite: MATH 102M or MATH 103M; Intended Engineering major; or instructor approval

ENGN 121 Introduction to Engineering and Technology (4 Credit Hours)

This course introduces engineering and engineering technology disciplines, and develops problem-solving and teamwork skills required in the design and commissioning of an engineered product. Students will collaborate in hands-on, group projects to understand the engineering design process and explore roles and responsibilities in an engineering team. Students will develop technical skills, such as identifying, formulating, and solving engineering problems, prototype creation and testing, representation and analysis of data using software packages to form conclusions and solve problems. Students will also learn professional skills needed to become successful engineering students and engineers including, but not limited to teamwork, project management, communication (written, oral, and graphical), engineering ethics, information literacy, and critical reading skills.

Pre- or corequisite: MATH 162M or higher

ENGN 122 Computer Programming for Engineering (4 Credit Hours)

Introduction to engineering problem-solving through computer programming. Topics include computational thinking, program design, algorithm development, and testing. Programming language concepts will include variables, data types and expressions, assignment, control-flow statements, and functions. Laboratory exercises involve C++ and Matlab to solve engineering problems (information processing, simulation, data analysis).

Pre- or corequisite: MATH 163 or MATH 166 or higher

ENGN 195 Special Topics in Engineering I (3 Credit Hours)

Interdisciplinary or multidisciplinary topics for first year students enrolled in engineering or engineering technology majors.

ENGN 205 Engineering Career Readiness (1 Credit Hour)

Provides an introduction to career and employment preparation skills such as resume development, interviews, and internship and job seeking strategies for engineers.

Pre- or corequisite: ENGN 121 or ENGN 110 or instructor approval

ENGN 295 Special Topics in Engineering II (3 Credit Hours)

Interdisciplinary or multidisciplinary topics for second year students enrolled in engineering or engineering technology majors.

ENGN 401 Fundamentals of Engineering Review (1 Credit Hour)

This course prepares the engineering and engineering technology students for the Fundamentals of Engineering Examination.

Prerequisites: Senior standing

ENGN 485 Introduction to Uncrewed Aerial Systems (3 Credit Hours)

This course introduces Small Uncrewed Aircraft Systems (sUAS) types and platforms (such as multirotor, fixed wing, hybrids) and explores mission planning, applications, payloads, flight authorization processes, and crew resource management. Additionally, this course introduces operation of autonomous vehicles in the National Airspace System including Universal Traffic Management, radio frequency allocations, and airport usage, including knowledge of government and industry compliance standards. Attention will be paid to topics of system integration for operations efficiency, risk management, safety, and human factors and human / machine interface in autonomous systems. Includes case studies.

Prerequisites: PHYS 112N or equivalent

ENGN 486 Multirotor UAS Design and Construction (3 Credit Hours)

A look at engineering multi-rotor Uncrewed Aerial System (UAS) design. Course topics will include Stability and control of UAS, Electric propulsion and battery technology. Overview of sensors (lidar, sonar, vision etc.); autopilot design and automatic control; airframe structural design of UAS; Flight dynamics and simulation for UAS. Accompanying laboratory topics include motor/propeller testing, building small quadcopters, understanding system elements, PID tuning, programming UAS, and autonomous drone operations. Students will learn to specify all components including motors, propellers, power system, autopilot, GPS, power monitor, frame, etc. Additional topics will include autopilot setup, firmware configuration, telemetry configuration, ground station setup and sensor specifications and integration (lidar, sonar, radar, optical flow). Mission planning, and test flights will complete the course.

Prerequisites: PHYS 112N or equivalent

ENGN 487 Fixed Wing and VTOL UAS Design and Construction (3 Credit Hours)

This course covers fixed wing aerodynamics and aircraft performance, propeller performance; basic stability and automatic control of aircraft. Introduction to vertical takeoff and landing, hybrid UAS design including tail sitting and lift-to-cruise configurations. Electric propulsion: motor selection, prop matching and system integration. Basic airframe structural design methods. Instrumentation for autonomous flight. Accompanying laboratory topics include: building small fixed wing/VTOL aircraft; autopilot configuration; flight test, planning and operations.

Prerequisites: ENGN 486

ENGN 488 Autonomous Mission Platforms Systems Integration (3 Credit Hours)

This interdisciplinary class is a mission based, collaborative course with majors across the college working alongside industry partners and or mentors. Students will work in teams to research, design, build (or rebuild existing) Unmanned Vehicles and apply them toward ecologically, humanitarian or 'customer based' focused projects.

Prerequisites: ENGN 486

ENGN 495 Multidisciplinary Topics in Engineering and Technology (1-3 Credit Hours)

Special interdisciplinary or multidisciplinary topics of interest with emphasis on emerging areas in engineering.

Prerequisites: instructor permission

ENGT - Engineering Technology

ENGT 111 Engineering Technology Information Literacy/Research (2 Credit Hours)

Fundamental information literacy and research as applied to engineering technology. Course includes where and how to efficiently locate and critically evaluate technical information. Proper use of technical information and the associated ethical and legal issues will be examined.

Prerequisites: ENGN 110

ENGT 200 Statics (3 Credit Hours)

Scalar methods and free body diagrams are employed in the analysis of discrete and distributed force systems and their application to bodies in external equilibrium. Friction, moment of inertia, and center of gravity are also included.

Prerequisites: PHYS 111N

Pre- or corequisite: MATH 211

ENGT 220 Strength of Materials (3 Credit Hours)

Mechanical behavior of materials subjected to various external loads. Stress-strain relationships are utilized to design members subjected to shear, axial, bending, and torsional loads. Deformations are predicted and Mohr's circle is introduced.

Prerequisites: MATH 211 and a C or better in ENGT 200, CET 200, or MET 210

ENGT 230 Engineering Graphics and Computer Solid Modeling (3 Credit Hours)

Graphical communication for engineers studies the concept of 3D parametric modeling and its application in industry. In this course students will learn the fundamentals of sketching, basics of surface design, assembly modeling, and dynamic modeling of mechanisms using industry standard parametric modeling software. Emphasis on developing the skills needed for engineering design.

ENGT 270 Automation and Controls (3 Credit Hours)

A study of the design and analysis of feedback control system. Includes the fundamentals of programmable controllers as well as practical applications of interfacing mechanical, electrical, pneumatic and hydraulic feedback control circuits. Computer simulation software is used to model system responses.

Prerequisites: MATH 211

Pre- or corequisite: ENGT 286

ENGT 286 Automation and Controls Laboratory (1 Credit Hour)

Laboratory and computer simulation of control systems including programmable controllers as well as practical applications of interfacing mechanical, electrical and pneumatic control systems.

Prerequisites: MATH 211

Pre- or corequisite: ENGT 270

ENGT 305 Advanced Technical Analysis (3 Credit Hours)

Analytical and computational methods to support upper-division engineering technology courses. Topics include linear algebra, ordinary differential equations of engineering systems, elements of vector analysis, introductory statistical concepts, and software usage/development. MATLAB is used throughout the course to support all the topics. Presentation of various topics is adjusted for CET, EET or MET programs.

Prerequisites: a grade of C or better in MATH 211

ENGT 365 Geometric Dimensioning and Tolerancing (3 Credit Hours)

Methods and rules of dimensioning and tolerancing, calculation of fits, and geometrical tolerances using ANSI-Y14.5M, tolerances of form, orientation, and profile, including flatness, straightness, circularity, cylindricity, angularity, etc. Student work consists of designing and detailing various product drawings.

Prerequisites: MET 230 or ENGT 230

ENGT 375 Applied Machine Learning for Engineering Technology (3 Credit Hours)

This course introduces the fundamental principles and techniques of applied machine learning for data collection, processing, analysis, visualization, and data-driven decision-making. It provides a foundational understanding of data science and machine learning concepts, along with hands-on experience using industry-standard tools. Through projects and case studies, the course emphasizes practical applications designed specifically for engineering technology, providing skills to work with real-world datasets and solve relevant technical problems.

Prerequisites: ENGT 305

ENGT 434 Introduction to Senior Design Project (3 Credit Hours)

This course must be taken in the semester prior to the Senior Project course. A collection of career-related topics pertaining to engineering technology. Topics include engineering codes and standards, engineering ethics, technical report writing, job search and resume writing techniques, patents and property rights, and professional engineering licensure. The course concludes with the selection of the student's project topic for the subsequent Senior Project course.

Prerequisites: MET 300 and MET 310 and MET 330, or EET 310 or EET 312 or EET 320 or EET 360 or CET 301 or CET 330 or CET 361

ENGT 435W Senior Design Project (3 Credit Hours)

A capstone course utilizing upper-level coursework involving independent or group design projects under the direction of a sponsoring faculty member. Projects may involve analytical and/or experimental results. Formal written and oral reports will be required. This is a writing intensive course.

Prerequisites: ENGT 434; senior standing or faculty approval; grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C

ENMA - Engineering Management

ENMA 301 Introduction to Engineering Management (3 Credit Hours)

An introduction to principles of management and organizational behavior as they apply to the engineering profession. Special emphasis on team building, quality leadership and planning, handling personnel issues, and marketing technology. Group exercises, case studies, and extensive writing and speaking assignments.

Prerequisites: Junior standing

ENMA 302 Engineering Economics (3 Credit Hours)

Introduction to cost estimation, accounting and financial metrics. Valuation techniques, time value of money, and cash flow analysis. Economic analysis of engineering alternatives including depreciation effects, income taxes, inflation, engineering management capital budgeting of projects, portfolio and public sector projects.

Prerequisites: Junior standing

ENMA 401 Project Management (3 Credit Hours)

Foundations, principles, methods, and tools for effective design and management of projects in technology-based organizations. Project organization, life cycle, planning, scheduling, implementation, control, and evaluation. Special emphasis on project leadership, problem solving in team-based projects, project failure analysis, and advanced methods. Use of case studies and applications to reinforce course concepts. Students design and plan a project from concept through completion including proposal and post-project analysis.

Prerequisites: Junior standing

ENMA 410/510 Agile Project Management (3 Credit Hours)

This course focuses the management of projects using an agile approach to respond to the continuous changes that affect project capabilities and performance. Although any project can be managed using agile project management, projects with high degree of uncertainty obtain the most benefits from this approach (e.g., R&D projects). The course covers Scrum and expands it by articulating the human and business factors that make successful agile project management. Case studies and/or short-projects are required.

Prerequisites: ENMA 401 or equivalent preferred

ENMA 415/515 Introduction to Systems Engineering (3 Credit Hours)

Introduces the principles, concepts and process of systems engineering. Examination of problem formulation, analysis, and interpretation as they apply to the study of complex systems. Emphasizes the design nature of systems engineering problem solving, and includes case studies stressing realistic problems. Development of system requirements, system objectives, and the evaluation of system alternatives.

Prerequisites: Junior standing

ENMA 420 Statistical Concepts in Engineering Management (3 Credit Hours)

Introduction to concepts and techniques in probability and statistics, including descriptive and inferential statistics. Topics include fundamentals of probability, distributions, estimation, hypothesis testing, regression, process control, and reliability. Applications include engineering design and analysis, manufacturing, decision aids, and quality management problems.

Prerequisites: MATH 211 or equivalent

ENMA 421 Decision Techniques in Engineering (3 Credit Hours)

A systematic approach to the formulation of problems, the generation and evaluation of alternatives, and the selection and implementation of courses of action applied to engineering design, manufacturing, and management decisions. Topics include: goals and objectives; variables and relations; constraints and feasibility; uncertainty and risk; models and optimization; data and information; analysis and simulation. Case studies requiring oral presentations and written reports are used to emphasize concepts and systems analysis.

Prerequisites: Junior standing

ENMA 424 Risk Analysis in Engineering Management (3 Credit Hours)

The systematic approach to analysis of risk as applied to engineering management with emphasis on cyber systems. The objectives of this course are (1) to gain an appreciation of the strategic importance of risk analysis and its relationship to other enterprise and engineering functions and (2) to develop a working knowledge of the concepts and methods in risk analysis as they may apply to cyber systems.

Prerequisites: Junior standing

ENMA 480 Ethics and Philosophy in Engineering Applications (3 Credit Hours)

This course is designed to expose prospective engineering managers the theories and practices that are inherent in the ethical environment of modern organizations. Topics include definitions of ethical behavior and leadership, the history of ethical thought, moral decision-making, and the importance of values such as honesty, integrity, and trustworthiness. A full exploration of ethical autonomy, collaboration, communication and moral imagination will be conducted. A variety of methods will be used to facilitate learning, including a textbook, movie and videos, case studies, experiential activities and writing assignments. The successful student should gain a full appreciation for the value and practices of ethical leadership.

Prerequisites: Junior standing

ENMA 495/595 Topics in Engineering Management (1-6 Credit Hours)

Special topics with emphasis placed on the recent developments in engineering management.

Prerequisites: permission of the instructor

ENTR - Entrepreneurship

ENTR 100 Survey of Entrepreneurship and Innovation (1 Credit Hour)

This course represents an introduction to pertinent topics related to entrepreneurship and innovation. Students will be exposed to numerous topics through guest speakers supplemented by readings and class discussion. Topics include conceptualization, creativity, patents, capitalization, venture formation, commercialization, market assessment, project management, and launch. A multidisciplinary perspective is emphasized.

ENTR 201S Introduction to Entrepreneurship (3 Credit Hours)

This course will broaden students' views of careers and work in an increasingly global and diverse world. It provides students intellectual perspectives of entrepreneurship, and engages students in the search for knowledge regarding opportunity value and resource management. Basic analytical and critical thinking skills are developed for making reasoned judgments concerning organization creation.

ENTR 301 Fundamentals of Entrepreneurship (3 Credit Hours)

This course is designed for students interested in learning about entrepreneurship. It examines entrepreneurship from different perspectives, and engages students in opportunity recognition, value creation and resource management. Basic analytical and critical thinking skills are developed for making reasoned judgments concerning venture creation. Students will learn how to improve the likelihood of success of business start-ups. Course will also be valuable for students interested in consulting with small businesses or launching new divisions in large businesses.

Prerequisites: Junior standing

ENTR 368 Entrepreneurship Internship (1-3 Credit Hours)

Students complete an entrepreneurial project or assignment for a business, non-profit agency, or other organization. Students should work 50 hours for each credit and complete course assignments integrating coursework and entrepreneurial experiences.

Prerequisites: ENTR 201S and approval of the program coordinator and Strome Entrepreneurial Center director

ENTR 410 Small Business Management (3 Credit Hours)

This course investigates the challenges of small businesses to gain understanding for some of the common processes involved in operating new ventures. Students will be exposed to the tools needed to navigate important financial, legal, marketing, and managerial decisions when creating and growing a sustainable small business. Students learn to develop the skills that will give them a unique advantage in a hotly competitive environment.

Prerequisites: MGMT 325 or ENTR 301

ENTR 440 Digital Entrepreneurship: New Venture Creation (3 Credit Hours)

This course is an immersive and hands-on experience designed to guide students through starting and operating a functional online business. Through a combination of theoretical knowledge, practical exercises, and real-world application, students will actively apply entrepreneurial principles and strategies and navigate the various stages of launching and managing an online business, from conception to execution. They will be responsible for developing and executing a business plan, creating a user-friendly online presence, implementing effective digital marketing strategies, managing online transactions, and optimizing operations for growth and sustainability. By the end of the course, students will have developed a viable online business and gained valuable insights into the challenges and opportunities inherent in the digital marketplace and will leave the course with a tangible online business that can serve as a foundation for future entrepreneurial endeavors.

Prerequisites: ENTR 301, MKTG 311, MGMT 325, and senior standing

ENTR 450 Innovation Project (3 Credit Hours)

This course provides students with a unique cross-disciplinary, team-based course experience in the area of innovation. The focal point will be a real-life innovation problem sponsored by a company (or organization) on which students will provide presentations and a final report. The course is directed through ODU's Strome Center for Entrepreneurship and Innovation.

Prerequisites: junior or senior standing

ENTR 476/576 Social Entrepreneurship (3 Credit Hours)

The class draws students from all disciplines to collaborate with each other, faculty and community members as they co-design project-based solutions to pertinent social issues. Topics related to social entrepreneurship vary each year. Guided by distinguished faculty, students analyze their topic through in-depth classroom and field research, readings and off-campus trips.

Prerequisites: ENTR 201S or PAS 300

ENTR 477/577 Design Thinking (3 Credit Hours)

Design thinking is a human-centered approach to innovation that uses design methods and tools to integrate the needs of people and organizations, the opportunities of technology, and the requirements for personal, organizational, and business success. The design thinking course introduces students to a robust process for understanding problems, ideation, innovation, and entrepreneurship. This course is facilitated using workshops where students will work in project teams in a design thinking innovation challenge.

Prerequisites: ENTR 201S

ENTR 490 Entrepreneurship Capstone (3 Credit Hours)

The Entrepreneurship Capstone emphasizes practicing entrepreneurship through experiential learning, focusing on start-up activities. Drawing on a broad range of business disciplines, including Marketing, Management, Finance, and Accounting, students identify an opportunity and develop an industry analysis, marketing and finance plans, and a business pitch they present to investors and serial entrepreneurs.

Prerequisites: ENTR 301, MKTG 311, and Senior Standing

ENTR 494 Entrepreneurship Project in Management (3 Credit Hours)

This course is designed to help students enhance their personal and professional development through innovation guided by faculty members and professionals. It offers students an opportunity to integrate disciplinary theory and knowledge through developing a nonprofit program, product, business, or other initiative. The real-world experiences that entrepreneurs provide will help students understand how academic knowledge leads to transformations, innovations, and solutions to different types of problems. The course can be delivered either as an independent project for individual students or as group projects similar to those sometimes offered in topics courses.

Prerequisites: ENTR 201S or MGMT 426

ENTR 498 Tutorial Work in Special Topics in Entrepreneurship (3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. The study should lead to presentation of a paper at a conference or publication as appropriate.

Prerequisites: ENTR 201S and approval of the program coordinator

ENVH - Environmental Health

ENVH 301 Principles of Environmental Health Science (3 Credit Hours)

An introduction to the chemical, physical and biological factors affecting human health and well-being. The emphasis is on application of controls to prevent disease and maximize environmental quality.

Prerequisites: A grade of C or better in ENGL 110C

ENVH 395 Topics in Environmental Health (1-3 Credit Hours)

Advanced study of selected topics.

Prerequisites: permission of the instructor

ENVH 401/501 Occupational Health (3 Credit Hours)

An introduction to the industrial environment relative to health problems and the etiologically related agents.

Prerequisites: junior standing

ENVH 402W/502 Environmental and Occupational Health Administration and Law (3 Credit Hours)

A review of the concepts and practice of administering environmental and occupational health control programs within agencies at the federal, state and local levels. The principles of administration and leadership of programs in the private sector are also discussed. The constitutional, statutory and administrative law bases for organizing and conducting such programs and developing environmental and occupational policies as well as the legal implications of enforcement will be addressed. A review of all major statutes and their agencies that enforce them will be addressed. This is a writing intensive course.

Prerequisites: junior standing and a grade of C or better in ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C

ENVH 403 Environmental and Occupational Health Internship I (3 Credit Hours)

Includes placement in a health-related facility or industrial setting, prearranged with faculty instructor.

Prerequisites: ENVH 301, a minimum of 12 semester hours of ENVH courses, and permission of program director

ENVH 404 Environmental Health Internship II (3 Credit Hours)

Includes placement in a health-related facility or industrial setting, prearranged with faculty instructor.

Prerequisites: ENVH 301, a minimum of 12 semester hours of ENVH courses, and permission of program director

ENVH 405 Environmental Health Internship III (6 Credit Hours)

Includes placement in a health-related facility or industrial setting, prearranged with faculty instructor.

Prerequisites: ENVH 301, a minimum of 12 semester hours of ENVH courses, and permission of program director

ENVH 406/506 Principles of Occupational Safety and Health (3 Credit Hours)

A broad overview of the field of safety. A study of the factors influencing the occurrence of accidents and incidents is set in the context of safety legislation, current issues in the practice of safety and the ethical and professional responsibilities of the safety practitioner. The course also includes discussions of product safety, fire prevention and protection systems safety and human elements in loss prevention.

Prerequisites: junior standing

ENVH 407/507 Occupational Safety Standards, Laws and Regulations (3 Credit Hours)

A review of the important Occupational Safety and Health Standards and Codes with particular emphasis on application of these codes to typical work situations. Governmental enforcement methodologies are also discussed.

Prerequisites: junior standing

ENVH 420/520 Communicable Diseases (3 Credit Hours)

An in-depth study of the communicable disease processes as they pertain to environmental sources. A detailed discussion of specific communicable diseases that are manifested by various environmental etiologic agents. Various environmental control measures to prevent the incidence of communicable diseases are presented.

Prerequisites: BIOL 110N or BIOL 121N, BIOL 117N or BIOL 123N, BIOL 150, or permission of the instructor

ENVH 421/521 Food Safety (3 Credit Hours)

A comprehensive study of food and milk production, processing and preservation and controls exercised for the prevention of foodborne illnesses and spoilage.

Prerequisites: BIOL 110N or BIOL 121N, BIOL 117N or BIOL 123N, BIOL 150, or permission of instructor

ENVH 422/522 Water and Wastewater Technology (3 Credit Hours)

Introduction to water quality management and wastewater treatment technology. Topics include the effect of organic, inorganic and thermal pollutants in water quality streams, waterborne diseases, monitoring concepts, methods of water quality management, regulatory considerations, theory and application of wastewater treatment concepts, wastewater characterization, and treatment methods and disposal methods.

Prerequisites: BIOL 150 or permission of instructor

ENVH 423/523 Vector-Borne Diseases and Their Control (3 Credit Hours)

Vector-borne diseases affect the health and well-being of humans and other animals in a wide variety of ways. Arthropod vectors (e.g., mosquitoes, filth flies, ticks and related groups) transmit numerous debilitating infectious diseases that oftentimes impose significant burden on healthcare systems. This course provides insight on the ways in which arthropods impact global health and economic growth through the diseases they transmit.

Prerequisites: BIOL 110N or BIOL 121N, BIOL 117N or BIOL 123N, BIOL 150, or permission of instructor

ENVH 424/524 Residential and Institutional Environments (3 Credit Hours)

A study of the physical aspects of housing and institutions as they relate to human health and well-being. Coverage is also given to infection control in health-care facilities.

Prerequisites: junior standing

ENVH 425/525 Occupational Safety and Health Program Management (3 Credit Hours)

The establishment, implementation and maintenance of occupational safety and health programs. Paradigms of safety, techniques for safety training and creation of value for safety among business managers and employees are emphasized.

Prerequisites: ENVH 406 or permission of instructor

ENVH 426/526 Physical Hazards and Their Control (3 Credit Hours)

An in-depth examination of the varied types of physical hazards in the work environment and the methods of prevention, recognition and control.

Prerequisites: junior standing

ENVH 438/538 Environmental Emergencies and Disasters (3 Credit Hours)

This course uses a multi-disciplinary approach and draws on theory, case studies, research, and field experience to examine the global problem of environmental emergencies and disasters. Particular attention is devoted to the public health challenges posed by chemical and radiological contamination situations. Students discuss contemporary issues and controversies, and spend time working in teams to craft solutions to key emergency preparedness problems.

Prerequisites: Junior standing

ENVH 440/540 Principles of Ergonomics (3 Credit Hours)

An introduction to the terminology, concepts and applications of physiology, anthropometry, biomechanics and engineering to workplace and work methods design. Emphasis will be given to workplace design and work methods for job safety and health.

Prerequisites: junior standing

ENVH 441/541 Industrial Hygiene (3 Credit Hours)

An in-depth study of the chemical and physical agents responsible for occupational illness and the methods used for their measurement, evaluation and control.

Prerequisites: CHEM 121N, CHEM 123N, CHEM 211, BIOL 240 or BIOL 250, or permission of instructor

ENVH 442/542 Industrial Hygiene Sampling Methods (3 Credit Hours)

An introduction to the detection and sampling alternatives used for estimating worker exposure to hazardous chemical, physical and biological agents in the occupational environment. Field and class activities are intended to simulate select occupational exposure situations and provide a basis for selection of the best evaluation techniques. Emphasis is on quantitative and qualitative methods typically used when estimating employee exposure to hazardous agents and the subjective decision making process.

Prerequisites: Junior standing

Pre- or corequisite: ENVH 441 or permission of instructor

ENVH 443 Principles of Toxicology (3 Credit Hours)

An introduction to the fundamentals of toxicology with emphasis on the interaction of environmental and industrial chemicals with humans are studied. Exposure, dose response, kinetics and distribution of toxicants, metabolism of toxic agents, factors that affect toxicity and introductory chemical carcinogenesis are discussed.

Prerequisites: BIOL 110N or BIOL 121N, BIOL 117N or BIOL 123N, BIOL 240 or BIOL 250, CHEM 121N, CHEM 123N, or permission of the instructor

ENVH 445/545 Air Pollution and Its Control (3 Credit Hours)

The study of air pollution in relation to air quality criteria, pollutant production, atmospheric evolution, measurement and control techniques.

Prerequisites: PHYS 101N or PHYS 111N, CHEM 121N, CHEM 123N, MATH 162M, or permission of instructor

ENVH 446/546 Physical Hazards Laboratory (2 Credit Hours)

Use and application of sampling methods and equipment for measurement of physical hazards in the work environment. Includes aspects such as ergonomics, noise, vibration and radiation.

Prerequisites: Junior standing

Pre- or corequisite: ENVH 426 or permission of instructor

ENVH 448/548 Epidemiology and Biostatistics (3 Credit Hours)

An introductory course in the principles and practices of epidemiology and the application of statistical and mathematical design and analysis of health research studies for the understanding and control of population health and disease with emphasis on environmental applications.

Prerequisites: STAT 130M, MATH 162M or permission of instructor

ENVH 461/561 Hazardous Waste Management (3 Credit Hours)

Description of the hazardous waste problem, the fundamentals of the chemistry involved with hazardous waste transport, methods of identification, assessment, control, and disposal of toxic and hazardous waste are discussed. In addition the relevant legal statutes, risk assessment emergency response and case studies are presented. Introduction to the toxicological effects of exposure to hazardous waste is discussed.

Prerequisites: junior standing

ENVH 465/565 Hazardous Materials Management (3 Credit Hours)

The management of hazardous materials includes a wide array of interlocking regulations addressing use, manufacturing, exposure, storage, shipping and disposal. A life cycle review of hazardous materials highlighting best practices and legislation is presented. Useful in preparation for CHMM examination.

Prerequisites: junior standing

ENVH 466 Environmental and Occupational Risk Assessment and Decision Analysis (3 Credit Hours)

The principles of quantitative health risk assessment of toxicants are presented. Qualitative and quantitative skills necessary to evaluate the probability of injury, disease, or death in the general population from exposure to environmental and occupational contaminants are discussed. Hazardous identification, exposure assessment, dose-response evaluation and risk characterization are emphasized. Risk management group projects assessing some real environmental risks are an important segment of the class.

Prerequisites: junior standing

ENVH 470/570 Industrial Environmental Management (3 Credit Hours)

Course addresses day-to-day technical and management aspects of environmental compliance, as well as regulatory issues faced in industrial applications. Includes audits and inspections, air and water pollution and hazardous waste.

Prerequisites: junior standing

ENVH 495/595 Topics in Environmental Health (1-3 Credit Hours)

Advanced study of selected topics.

Prerequisites: junior standing

ENVH 498/598 Independent Study in Environmental Health (1-3 Credit Hours)

An opportunity is afforded students to undertake independent study under the direction of a faculty member.

Prerequisites: permission of the Program Director

ENVH 499 Environmental and Occupational Health Senior Seminar (1 Credit Hour)

Advanced seminar.

Prerequisites: second semester senior standing and permission of the program director

EXSC - Exercise Science

EXSC 225 Introduction to Exercise Science (3 Credit Hours)

Broad overview of exercise science including the history of the discipline and introduction to the following: Healthy People 2010 goals and objectives related to physical activity and nutrition; basic principles of nutrition, body composition, applied physiology, functional anatomy, and exercise prescription/programming for healthy individuals and those who are high risk/diseased; career opportunities in various allied-health fields such as physical therapy, physician assistant, personal training, community/corporate/hospital-based wellness programs, cardiac rehabilitation; and research areas in exercise science.

Prerequisites: open only to students with Exercise Science as a concentration or major or minor

EXSC 240 Prevention and Care of Injuries Related to Physical Activity (3 Credit Hours)

Practice in the skills of injury recognition and evaluation and training in cardiopulmonary resuscitation. Principles and uses of therapeutic modalities are also discussed.

Prerequisites: BIOL 240 or BIOL 250 AND MATH 102M or higher with a C or better

EXSC 250 Strength and Conditioning Leadership (3 Credit Hours)

This course will provide the student with skills in exercise leadership.

The student will learn how to lead resistance training, flexibility training, cardiovascular training involving a variety of exercise modes, and group exercise, such as step aerobics.

Prerequisites: BIOL 240 or BIOL 250 AND MATH 102M or higher with a C or better

EXSC 295 Special Topics in Exercise Science (1-3 Credit Hours)

The study of special topics in exercise science.

Prerequisites: Permission of the instructor

EXSC 309 Fundamentals of Exercise Physiology (3 Credit Hours)

This course is intended for non-exercise science majors. The course will investigate the metabolic adaptations, neuromuscular, endocrinological, cardiovascular and respiratory responses to acute and chronic exercise. Implications for health and physical performance will be integrated through applied exercise physiology. Specifically, the effects of different training modes, environmental factors, aging, disease states, nutrition, and ergogenic aids.

Prerequisites: BIOL 240 or BIOL 250

EXSC 322 Anatomical Kinesiology (3 Credit Hours)

Anatomical and mechanical analysis of human musculoskeletal function including skeletal, muscular, and neuromuscular control aspects necessary for movement.

Prerequisites: BIOL 240 or BIOL 250 AND MATH 102M or higher with a C or better

EXSC 326 Exercise Physiology I (3 Credit Hours)

An investigation into the metabolic adaptations, neuromuscular, endocrinological, and respiratory responses to acute and chronic exercise endeavors. Implications for enhanced health and physical performance are integrated.

Prerequisites: BIOL 240 or BIOL 250 with a C or better and MATH 102M or higher with a C or better

Pre- or corequisite: BIOL 241 or BIOL 251 with a C- or better and CHEM 121N and CHEM 122N with a C- or better

EXSC 327 Exercise Physiology II (3 Credit Hours)

Focuses on cardiovascular responses to exercise and applied exercise physiology, specifically the effects of different training modes, environmental factors, aging, disease states, nutrition, and ergogenic aids.

Prerequisites: BIOL 240 or BIOL 250 AND MATH 102M or higher with a C or better; EXSC 326

EXSC 366 Exercise Science Seminar (1 Credit Hour)

Seminar will include resume and cover letter writing skills, internship requirements, agency placement referrals, interviewing techniques, and certification options.

Prerequisites: BIOL 240 or BIOL 250 AND MATH 102M or higher with a C or better; EXSC 326

EXSC 368 Internship (12 Credit Hours)

Final field placement required for all students with an emphasis in exercise science. Students will be placed in an agency to gain experience in methodologies, administration techniques, and programs specific to their area of emphasis. Minimum of 400 clock hours. (qualifies as a CAP experience)

Prerequisites: senior standing, permission of the instructor, and completion of all required courses in appropriate emphasis areas

EXSC 369 Practicum in Exercise Science (3-6 Credit Hours)

Field-based experience in a fitness or allied-health setting. Minimum of 200 clock hours.

Prerequisites: EXSC 225

EXSC 397 Independent Study (1-3 Credit Hours)

Independent study of special topics under supervision of faculty.

Prerequisites: Junior standing and permission of the instructor

EXSC 403 Lifetime Fitness and Wellness (3 Credit Hours)

The focus of this course is on a positive healthy lifestyle designed to enhance the current and future quality of life. Topics include: proper exercise programs, healthful nutrition, stress management techniques, and avoidance of high-risk health behaviors in order to reduce disease risk and promote healthful aging. Various laboratory assessments are used to identify health status and recommend remedial approaches.

Prerequisites: Junior standing

EXSC 408/508 Nutrition for Fitness and Sport (3 Credit Hours)

Emphasizes the role of nutrition as a means to enhance health and performance in sport. Topics covered include energy metabolism and nutrients, regulation of metabolism by vitamins and minerals, and weight control.

Prerequisites: BIOL 240 or BIOL 250 with a C or better and MATH 102M or higher with a C or better

Pre- or corequisite: BIOL 241 or BIOL 251 with a C- or better and CHEM 121N and CHEM 122N with a C- or better

EXSC 415/515 Exercise Testing for Normal and Special Populations (4 Credit Hours)

The application of different methodologies in the measurement of physiologic responses to exercise. Emphasis is placed on understanding American College of Sports Medicine guidelines, appropriate experimental techniques, and equipment necessary to evaluate changes in body composition and various metabolic, cardiovascular, and respiratory adjustments during exercise.

Prerequisites: BIOL 240 or BIOL 250 AND MATH 102M or higher with a C or better; EXSC 326

EXSC 417/517 Biomechanics (4 Credit Hours)

Application of physical laws and mechanical principles to the human musculoskeletal system.

Prerequisites: BIOL 240 or BIOL 250 and MATH 102M or higher with a C or better; PHYS 111N with a C- or better; EXSC 322

EXSC 420 Research Methods in Exercise Science (3 Credit Hours)

Introduction to the scientific method applied to exercise science research including bioethics, review of the literature, research design, data collection, appropriate statistical analysis, research writing, and peer review.

Prerequisites: BIOL 240 or BIOL 250 and MATH 102M or higher with a C or better; STAT 130M

EXSC 421/521 Strength and Conditioning Applications (3 Credit Hours)

A study of the principles and techniques utilized in optimizing physical performance and reducing injury through proper and effective strength and conditioning programs. Special emphasis will be placed on current research findings, breakthrough techniques, advanced weight training techniques, and popular conditioning practices.

Prerequisites: EXSC 250 and EXSC 322

EXSC 428/528 Exercise Prescription for Chronic Disease (3 Credit Hours)

A study of pathophysiology of common diseases with concentration in the design, implementation and administration of exercise prescription for a variety of chronic diseases.

Prerequisites: BIOL 240 or BIOL 250 AND MATH 102M or higher with a C or better; EXSC 326

EXSC 431W/531 Wellness Programming and Administration (3 Credit Hours)

This course provides an introduction to the principles of administration and implementation of fitness and wellness programs to individuals, groups, centers, and corporate settings. This is a writing intensive course.

Prerequisites: BIOL 240 or BIOL 250, MATH 102M or MATH 103M or MATH 162M, and ENGL 211C or ENGL 221C or ENGL 231C with a C or better

EXSC 480/580 Exercise Psychology (3 Credit Hours)

Exercise Psychology examines the dynamic influences that psychological factors, environmental factors, and exercise behaviors exert upon one another. The field of exercise psychology actively promotes evidence-based interventions guided by theory and behavior change techniques. Utilization of the scientist-practitioner model involves the ability to consume and appropriately apply contemporary theory and scientific findings to the practice of applied exercise psychology. The content and assignments emphasize the theoretical and applied perspectives on the science and practice of exercise psychology.

Prerequisites: BIOL 240 or BIOL 250; and BIOL 241 or BIOL 251

EXSC 495 Special Topics In Exercise Science (1-3 Credit Hours)

The study of special topics in exercise science.

Prerequisites: Permission of the instructor

EXSC 498 Directed Research in Exercise Science (1-6 Credit Hours)

Supervised research on a specific problem in exercise science. Regular meetings with faculty and a written/oral report are required.

Prerequisites: Permission of the instructor

FAST - Filipino-American Studies

FAST 395 Topics in Filipino American Studies (3 Credit Hours)

A study of selected topics designed for non-majors, or for elective credit within a major. These courses will appear in the course schedule booklet, and will be more fully described in a booklet distributed to all academic advisors.

Prerequisites: appropriate survey or introductory course or permission of the instructor

FAST 396 Topics in Filipino American Studies (3 Credit Hours)

A study of selected topics designed for non-majors, or for elective credit within a major. These courses will appear in the course schedule booklet, and will be more fully described in a booklet distributed to all academic advisors.

Prerequisites: appropriate survey or introductory course or permission of the instructor

FIN - Finance

FIN 195 Topics (3 Credit Hours)

Study of selected topics.

FIN 210S Personal Financial Literacy (3 Credit Hours)

This course provides basic financial information an informed individual should understand in order to successfully reach their personal goals. Topics include budgeting, goal setting, the process of accumulating and protecting wealth, use of credit, the car and housing decisions, and risk management. Emphasis is on understanding how our behaviors affect successfully reaching these goals and how to improve decision making.

Prerequisites: MATH 101M or higher

FIN 220 Bloomberg Data System/Wall Street 101 (3 Credit Hours)

This course is designed to provide students with basic knowledge of Wall Street while learning how to utilize Bloomberg Terminals to gain practical knowledge and experience. The Bloomberg Lab and Trading Room provides students with access to the comprehensive data system used by major national and international companies, financial organizations, and government agencies. Students are required to complete Bloomberg Market Concepts program and earn a Bloomberg Certification, of value to many employers. Students will utilize an interactive trading game to experience the role of Wall Street traders and market makers.

FIN 323 Introductory Financial Management (3 Credit Hours)

Financial analysis, planning, and control in the business enterprise. An introduction to budgeting, problems in long- and short-term financing, sources of capital and financial markets.

Prerequisites: ACCT 201 or ACCT 226, ACCT 202 or ACCT 227, and ECON 202S or ECON 227S; a declared major in the University or an intended major in the Strome College of Business or permission of the Dean's Office of the Strome College; AND Junior Standing

FIN 331 Legal Environment of Business (3 Credit Hours)

Introduction to the legal environment of business, providing the student with an understanding of the nature of public law and the regulation of business and of the basic principles that control business practices.

Prerequisites: A declared major in the University or permission of the Dean's Office

FIN 333 The Legal Environment of Electronic Commerce (3 Credit Hours)

This course will focus on the identification and management of legal issues and problems that confront businesses taking part in the rapidly growing internet economy. Issues will include the establishment and protection of an online identity, electronic contracting, libel, product and firm disparagement, and unfair consumer practices.

Prerequisites: FIN 331, and a declared major in the University or permission of the Dean's Office

FIN 367 Cooperative Education (1-6 Credit Hours)

Available for pass/fail grading only. May be repeated for credit up to a maximum of 6 credits.

Prerequisites: Approval by department is required; additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment; declared major in the University or permission of the Dean's Office

FIN 368 Finance Internship (1-3 Credit Hours)

Student participation in a professional work experience. Approval for enrollment and allowable credits is determined by the Finance department chair in the semester prior to enrollment. A transfer student must have completed one semester at Old Dominion University.

Prerequisites: a declared major in the University or permission of the Dean's Office

FIN 387 Honors: Introductory Financial Management (3 Credit Hours)

A special honors section of FIN 323. Open only to students in the Honors Program in Business Administration.

Prerequisites: ACCT 201 or ACCT 226, ACCT 202 or ACCT 227, and ECON 202S and a declared major in the University or permission of the Dean's Office

FIN 388 Honors: Legal Environment of Business (3 Credit Hours)

A special honors section of FIN 331. Open only to students in the Honors Program in Business Administration.

Prerequisites: a declared major in the University or permission of the Dean's Office

FIN 414 Estate Planning (3 Credit Hours)

This course is designed to provide students with a background in the field of estate planning. Topics will include wills and trusts, the probate system, estate and gift taxation, and fiduciary income taxation.

Prerequisites: ACCT 421 (or permission of instructor) and a declared major in the University or permission of the Dean's Office

FIN 415 Capstone in Financial Plan Development (3 Credit Hours)

This course is designed to provide students majoring in personal financial planning with the ability to integrate technical material from previous coursework and prepare a comprehensive financial plan. Emphasis will be on integrating knowledge, preparing a financial plan, and effectively communicating with a client. Case studies will be emphasized.

Prerequisites: FIN 210S, FIN 431, RMI 317, RMI 411, and ACCT 425; and a declared major in the University or permission of the Dean's Office
Corequisites: FIN 414

FIN 431 Investments (3 Credit Hours)

This course develops the financial tools and knowledge needed to select among alternative financial assets. The emphasis is on the individual investor. Real world experience includes stock analysis, portfolio simulations and interactions with professionals in the securities industry.

Prerequisites: FIN 323 with a grade of C or better and a declared major in the University or permission of the Dean's Office

FIN 432 Intermediate Financial Management (3 Credit Hours)

Theoretical framework relevant to decision making in financial management; capital budgeting, capital structure, cost of capital, and working capital management.

Prerequisites: FIN 323 with a grade of C or better and junior standing

FIN 433 Introduction to Futures and Options (3 Credit Hours)

An introduction to the understanding of futures and options. Basic features and trading mechanisms; valuation of financial derivatives; methods of managing financial risk; arbitrage techniques; and speculation strategies.

Prerequisites: FIN 323 with a grade of C or better and FIN 431 and a declared major in the University or permission of the Dean's Office

FIN 434 Management of Financial Institutions (3 Credit Hours)

An examination of the objectives, functions, policies, organizational practices, and government regulations of financial institutions.

Prerequisites: FIN 323 with a grade of C or better and a declared major in the University or permission of the Dean's Office

FIN 435 International Financial Management (3 Credit Hours)

Financial decision making involving flow and funds across national boundaries.

Prerequisites: FIN 323 with a grade of C or better and a declared major in the University or permission of the Dean's Office

FIN 439 Financial Decision Making (3 Credit Hours)

Application of financial theory and techniques to the analysis and solution of actual financial problems. Case analysis.

Prerequisites: FIN 432 with a grade of C or better and a declared major in the University or permission of the Dean's Office

FIN 441 Student Managed Investment Fund (3 Credit Hours)

This course is designed to provide students with experience managing an investment fund. The students will apply the theoretical knowledge of finance to manage a real portfolio.

Prerequisites: FIN 431

FIN 497 Selected Topics in Finance (3 Credit Hours)

For advanced students in financial management.

Prerequisites: permission of the department chair

FOUN - Foundations of Education

FOUN 101S Learning to Learn (3 Credit Hours)

Learning is essential to human development and is a primary goal of formal schooling. Further, the nature of work is ever changing and the need to adapt to changing environments by learning new skills in new domains is essential for future success. In this educational psychology course, students will focus on the theoretical and empirical study of the science of learning. Students will gain insights into learning processes and achieve a deeper understanding of their own learning, including how to enhance their learning in various contexts.

FOUN 301 Learning and Development (3 Credit Hours)

This course focuses on educational psychology theory and research related to student learning and development. There will be an emphasis on how to incorporate research based principles in designing instruction, motivating students, and promoting a positive classroom climate based on how students learn and develop.

Prerequisites: ENGL 110C

FOUN 302 Assessment of Learning (3 Credit Hours)

This course focuses on exploring and implementing ethical assessment principles in a K-12 setting in order to ensure equity amongst a diverse population of students. Students will discuss and develop assessments for formative and summative purposes. They will analyze and interpret assessment data to measure and promote student success. State assessment programs will be discussed including social justice implications. The purpose of this course is to prepare future educators to analyze instructional situations, identify instructional targets, and determine appropriate assessment tools to monitor and support student learning.

Prerequisites: FOUN 301

FR - French

FR 101F Beginning French I (3 Credit Hours)

Aural comprehension, oral drill and discussion of grammar principles, written exercises, and reading assignments.

FR 102F Beginning French II (3 Credit Hours)

Aural comprehension, oral drill and discussion of grammar principles, written exercises, and reading assignments.

Prerequisites: FR 101F or satisfactory score on the placement exam

FR 195 Topics in French (1-3 Credit Hours)

A study of selected topics designed as electives for non-majors. These courses will appear in the course schedule.

FR 196 Topics in French (1-3 Credit Hours)

A study of selected topics designed as electives for non-majors. These courses will appear in the course schedule.

FR 201 Intermediate French I (3 Credit Hours)

Graded readings with grammar review. Emphasis on civilization and culture, also on speaking and listening competency.

Prerequisites: FR 102F or satisfactory score on the placement exam

FR 202 Intermediate French II (3 Credit Hours)

Graded readings with grammar review. Emphasis on civilization and culture and also speaking and listening.

Prerequisites: FR 201 or satisfactory score on the placement exam

FR 295 Topics in French (1-3 Credit Hours)

A study of selected topics designed as electives for nonmajors. These courses will appear in the course schedule.

FR 296 Topics in French (1-3 Credit Hours)

A study of selected topics designed as electives for nonmajors. These courses will appear in the course schedule.

FR 311 Global Conversations (3 Credit Hours)

This course is primarily a conversation course to develop linguistic and cultural proficiency in verbal communication. Task-oriented communication strategies in cross-cultural training will be practiced by presenting students with models that demonstrate appropriate linguistic and cultural competencies. Students will practice these skills by role-playing, giving presentations, enriching self-awareness with practiced in-group discussions on various topics (such as, prejudice, racism, values, and customs) that dispel stereotypes and foster more in-depth social-cultural understanding, and with participation in guided cultural encounters. Students will improve their listening and comprehension skills and deepen cultural proficiency by learning how to communicate and collaborate with other people and cultures in a global age. (This is an oral skills course.)

Prerequisites: A grade of C or better in FR 202 or advanced placement or permission of the instructor

FR 312W Writing Around the World (3 Credit Hours)

This is a writing intensive course designed with writing assignments that examine various cultural contexts that enable students to understand cultural content, style, audience and organization. The main objective of the course is increased awareness of and sensitivity to appropriate word choice, and syntax in the language. Students will engage in writing for different cultural audiences and in varied contexts such as literary, artistic and media expressions around the world. Special emphasis is placed on the methodology of close reading as students hone the analytics skills and vocabulary necessary to interpret idioms, regionalism, cultural expressions and overall intercultural skills observed in various genres and cultures. Students will analyze compelling global issues and the diverse cultural perspectives that inform them.

Prerequisites: a grade of C or better in ENGL 211C, ENGL 221C, or ENGL 231C and a grade of C or better in FR 202 or advanced placement

FR 323 World Cultures and Contexts (3 Credit Hours)

This course introduces students to social, political, economic, intellectual and artistic manifestations of France and the French-speaking world today. Students learn to analyze socio-cultural trends as well as innovations in industry as they unfold and develop by reading French and Francophone newspapers and magazines, watching news broadcasts, and exploring online content such as blogs, advertising, and social media.

Prerequisites: FR 202 or advanced placement

FR 331 French Literary Forms: Prose (3 Credit Hours)

Students will be introduced to a selection of French/Francophone short stories, which will give them a general sampling of a variety of different styles and periods from the 18th to the 20th century, contextualized in historical, social, political, and cultural milieux. Students will learn different ways of approaching the French short story (historical, stylistic, philosophical), what to look for in a given story (ideas, language, plot) and how to write about French prose critically and creatively.

Prerequisites: FR 202 or advanced placement

FR 332 French Literary Forms: Theatre (3 Credit Hours)

Students will be introduced to a selection of French plays, which will give them a general sampling of a variety of different dramaturgical styles and periods from the Middle Ages to the 20th century, contextualized in the historical, social, political, and cultural milieu. Students will learn different ways of approaching French theater (historical, stylistic, philosophical), what to look for in a given play (ideas, poetry, plot) and how to write about French theater critically and creatively.

Prerequisites: FR 202 or advanced placement

FR 333 French Literary Forms: Poetry (3 Credit Hours)

Survey of French-language literary movements and an introduction to the genre of poetry from the Middle Ages to the present day. Poems and poets are contextualized in the historical, social, political, and cultural milieux. Course aims: allow students to gain an understanding of literary developments in the French language; introduce methods of literary analysis primarily through close reading of texts; give an experience of the creative process that goes into writing fixed-form poetry; practice recitation; allow students to reflect on recurrent themes in French-language poetry; and assess the pertinence of a literary form in the creative imagination of a nation.

Prerequisites: FR 202 or advanced placement

FR 366 Business French: Language and Culture (3 Credit Hours)

Students are introduced to the culture, politics, economics and commerce of modern France as they relate to the French business world, providing a background for all students regardless of specific career goals. They will learn to write and speak in a professional context and learn to apply what they have learned through the study of business documents and training in commercial correspondence. This class will also be useful preparation for those interested in internships abroad or in the U.S.

Prerequisites: FR 202 or advanced placement

FR 369 Practicum (1-3 Credit Hours)

Internships in private, public and business organizations that deal with foreign nationals, foreign products or are involved in teaching French.

Prerequisites: nine credit hours at the 300 or 400 level

FR 395 Topics in French (1-3 Credit Hours)

A study of selected topics designed for non-majors, or for elective credit within a major. These courses will appear in the course schedule and will be more fully described by academic advisors.

Prerequisites: FR 202 or advanced placement test

FR 396 Topics in French (1-3 Credit Hours)

A study of selected topics designed for non-majors, or for elective credit within a major. These courses will appear in the course schedule and will be more fully described by academic advisors.

Prerequisites: FR 202 or advanced placement test

FR 407/507 Advanced Grammar and Syntax (3 Credit Hours)

This class is designed to solidify and refine students' working knowledge of written skills in the language, with an emphasis on increasing their written sophistication. Focus is on analysis of vocabulary, grammar, and cultural nuances in the syntax to examine how language reflects the ways of life and beliefs of its speakers, contrasted with the extent of language's influence on culture. Students will refine their skills in written inter-cultural communication, paying attention to idioms and the fine points of 'cultural grammar,' communicative competence and specialized discourse to develop excellent communication skills. This course is intended to prepare students for using their knowledge of language and culture in professional settings.

Prerequisites: FR 312W or permission of the instructor

FR 410/510 Berlin and Paris: Crucibles of European Ideas (3 Credit Hours)

This course explores the cultural movements that have characterized the German-French commonalities and differences from the early 1900s through the 1990s in cross-disciplinary discourses such as film, literature, art, politics, and economics. Cross-listed with WCS 410/WCS 510.

Prerequisites: German and French students must read and write in the target language

Pre- or corequisite: FR 312W

FR 415/515 Applied Phonetics (3 Credit Hours)

This class is a skills-based, laboratory class on French phonetics designed to develop students' mastery of spoken French. Students will acquire a more native-like French accent and see clear correspondences between orthography and pronunciation. By using oral texts with social and cultural themes students acquire knowledge of French pronunciation in a culturally relevant way. Students additionally investigate non-standard accents from Quebec, the south of France, and Belgium.

Prerequisites: FR 311 or permission of the instructor

FR 420/520 Francophone Civilization (3 Credit Hours)

This seminar traces the historical narratives of French colonialism up until contemporary times, examining the roots of unrest in the Maghreb and other ex-French colonies through representative political, literary, and cinematic texts relating to today's political flashpoints in the Maghreb and West Africa as well as other former French colonies. It also approaches different aspects of France's colonial and post-colonial legacy through a historical lens as students explore texts from such revolutionary leaders as Césaire, Senghor, Memmi and others. Examination of both the revolutionary movements that propelled France's ex-colonies towards independence and France's shifting perspectives from ex-colonizer to Francophone ally.

Prerequisites: FR 312W or the instructor's permission

FR 427/527 Studies in Seventeenth-Century French Literature (3 Credit Hours)

Following a preparatory period, the political stability of the French monarchy ushers in the golden age of classicism. Representative works from comic and dramatic theater, philosophy, poetry and the evolving novel.

Prerequisites: FR 312W or permission of the instructor

FR 428/528 Studies in Eighteenth-Century French Literature (3 Credit Hours)

A study of the two main currents of ideas of the Age of Reason or Enlightenment; the rationalistic drive to question established authority, exemplified by the 'Encyclopédie' and leading to the Revolution of 1789; and the Rousseauistic return to nature and emotivity. Representative readings.

Prerequisites: FR 312W or permission of the instructor

FR 437/537 Studies in Nineteenth-Century French Literature (3 Credit Hours)

A study of the post-Revolutionary (1789) literary movements: Romanticism, Realism, Naturalism, Symbolism, which opened new horizons of modern science and culture in France. Representative works.

Prerequisites: FR 312W or permission of the instructor

FR 438/538 Studies in Twentieth-Century French Literature (3 Credit Hours)

A survey of representative works and movements in 20th century French and Francophone literature.

Prerequisites: FR 312W or permission of the instructor

FR 469/569 A History of French Cinema (3 Credit Hours)

This course will function as a survey of French film classics from the birth of cinema through contemporary times, and also shed light on various French cultural and literary movements as they are represented in film (Surrealism, WWII, Nouvelle Vague, decolonization).

Prerequisites: FR 312W or permission of instructor

FR 495/595 Topics in French (1-3 Credit Hours)

The advanced study of the selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule and will be more fully described in information distributed to all academic advisors.

Prerequisites: FR 311, FR 312W, FR 320 or permission of the instructor

FR 496/596 Topics in French (1-3 Credit Hours)

The advanced study of the selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule and will be more fully described by academic advisors.

Prerequisites: FR 311, FR 312W, FR 320 or permission of the instructor

FR 497 Tutorial Work in Special Topics in French (1-3 Credit Hours)

Independent reading and study on topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: senior standing and approval of department chair

FR 498 Tutorial Work in Special Topics in French (1-3 Credit Hours)

Independent reading and study on topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: senior standing and approval of department chair

GAME - Gaming

GAME 111 Introduction to Game Programming (3 Credit Hours)

This course is designed to introduce fundamentals of computer programming and C# to the students of all majors. Students will learn how programming languages are used to talk to the machines. Students will create console applications primarily focused on games using C# and be introduced to how to represent data, write functions, develop logic, organize code in object-oriented format, store, and process data from collections, etc.

GAME 201T Introduction to Game Studies (3 Credit Hours)

An introduction to the core concepts and methodologies that inform game design, development, and criticism. This course will provide students with a critical overview of each of these content areas and will demonstrate how their specific concerns intersect in the design, production, and reception of contemporary games. It will also teach students hands-on methodologies through which to translate these concepts into creative and critical praxis.

GAME 214 Visual Design Fundamentals for Game Design (3 Credit Hours)

This course is designed to introduce Game Design majors to basic art elements and design principles fundamental to visual asset creation for games and game-based applications. It will cover color theory, drawing fundamentals, spatial relationships, and other aspects of 2D composition. It will discuss how to apply these principles to effective User Interface (UI) design, as well as how to transform 2D assets into 3D objects. This course will also discuss architectural principles as they apply to level design, environmental design, and other subjects related to the visual design of games.

GAME 222 Technologies for Game Design and Development (3 Credit Hours)

This course is designed to introduce Game Design and Development majors to technologies and technological methodologies that are frequently employed by the industry. These technologies include but are not limited to 2D and 3D art, animation, and design software, game engines, music composition and sound design software, software development tools, and version control and collaboration software. This course will also discuss the challenges involved in designing and developing games for a variety of different platforms.

GAME 240 Game Criticism (3 Credit Hours)

This course is designed to introduce students to the major theoretical approaches and debates that comprise game studies as an academic discipline. It will teach students how to research, evaluate, analyze, and construct persuasive arguments about games and game-related artifacts.

GAME 333 Game Balance, Rules, and Mechanics (3 Credit Hours)

This course focuses on the complex question of how game designers produce balance through rules, mechanics, aesthetics, and other formal and informal gameplay elements. This course will provide students with an analytical framework to better understand how these elements are not only manifested in specific games, but how they work to simultaneously distinguish genres of games. More significantly, it will provide students with a practical methodology that will help them understand how to apply the insights gained through this analysis to their own games.

Prerequisites: GAME 201T

GAME 340 Visual Design and Digital Graphics for Games (3 Credit Hours)

This course focuses on visual design and digital graphics for game-based applications. Designed to help students make the transition from traditional 2D drawing and illustration techniques to the types of 2D and 3D digital asset creation privileged by games and game-based applications, it provides students with hands-on experience with using industry standard software to generate sprites, UI components, textures, and other common 2D elements. It also introduces students to 3D modeling and texturing techniques, including but limited to optimization, texture mapping, and basic rigging and animation techniques.

Prerequisites: GAME 201T

GAME 355 Game Design and Rhetoric (3 Credit Hours)

This course will study the representative and rhetorical strategies through which computer game designers make meaning via their rhetorical choices. Multi-perspective in nature, it will also examine the discursive struggles that determine how players construct themselves as subjects in and against computer games via their rhetorical choices. This course will attempt to come to terms with the larger question of how scholars, through various forms of critical play, construct, categorize, and produce computer games as a subject of academic study.

Prerequisites: GAME 201T or permission of instructor

GAME 360 Development with Game Engines (3 Credit Hours)

This course will provide introduction to game engines including Unity, Unreal, Godot, & Stride. We will be using a wide range of software standards to explore and take advantage of well known game-engine programming patterns, concepts of software versioning, creating and maintaining changelogs, taking advantage of version control systems like git, and importantly using distributed version control systems like GitHub/GitLab. The class will focus on one core project that students will continue to iterate on across the length of the class.

Prerequisites: GAME 201T

GAME 395 Topics in Game Studies (3 Credit Hours)

A study of selected topics designed for nonmajors or for elective credit within a major.

Prerequisites: GAME 201T

GAME 440 Advanced Visual Design and Digital Graphics for Games (3 Credit Hours)

This course focuses on advanced visual design and digital graphics for game-based applications, including but not limited to topics such as 3D modeling, texturing, texture mapping, animation, optimization, shaders, and particle systems. Conceived as a studio course, it provides students with hands-on experience working with a variety of digital software applications to create and optimize graphical assets for games and similar applications.

Prerequisites: GAME 201T

GAME 450 Game Development and Design Workshop (3 Credit Hours)

This workshop affords upper-division students the opportunity to tackle a wide variety of advanced projects on their own recognizance. It provides students working in game design and development with practical, individualized guidance in crucial aspects of the design and development process, including ideation, research, prototyping, implementation, documentation, and playtesting. Likewise, it provides students working in game criticism with instruction in the scholarly process of identifying, researching, drafting, and revising critical arguments about games and game-related issues.

Prerequisites: GAME 201T and senior status

GAME 460 Advanced Development with Game Engines (3 Credit Hours)

This class will take an advanced Systems Engineering approach to using Game Engines to prototype, compile, and develop functioning software across major hardware and operating systems. It will focus on industry standard game engines and use the experience to produce games and game-like content to facilitate in-depth exploration into how game engines implement similar systems. This course will cover a range of advanced topics relevant to content creation and implementation with game engines including agile development, game engine programming patterns, networking, mobile development, procedural content generation, render-pipelines, and VR development. It will also explore how to publish and deploy games and game-related projects across a variety of digital platforms.

Prerequisites: GAME 360 or permission of instructor

GAME 465 Narrative World Building (3 Credit Hours)

An examination of world building as ludic, narrative, and spatial praxis. This course will examine how games and game-related texts create playable realities through a critical examination of historical and contemporary examples of world building across a variety of media. It will provide students practical experience with how to translate these theoretical examples into effective gameplay across a variety of genres of games.

Prerequisites: GAME 201T and junior or senior status

GAME 466 Graphical World Building (3 Credit Hours)

An examination of world building as spatial and architectural praxis. This course will examine how to use advanced 3D art and animation techniques to create believable, playable realities. It will provide students with hands-on experience using industry-standard graphics software to create compelling game environments for a variety of games and game-genres.

Prerequisites: GAME 201T and junior or senior status

GAME 494 Entrepreneurship in Game Studies, Development, and Design (3 Credit Hours)

Although traditionally associated with commercial ventures, entrepreneurship encompasses a wide variety of approaches that are also relevant to the creative and critical performances that intersect in the design, production, and study of games. This course will broach the theoretical and practical questions of how entrepreneurship intersects with and is implicated in the production of game and game-based endeavors. Conceived as a studio course, it is designed to teach students a hands-on methodology through which they can translate entrepreneurial approaches into real-world outcomes.

Prerequisites: GAME 201T

GAME 495 Topics in Game Studies (3 Credit Hours)

A study of selected topics designed for nonmajors or for elective credit within a major.

Prerequisites: GAME 201T

GDES - Graphic Design

GDES 280 Introduction to Graphic Design (3 Credit Hours)

This course includes intensive study of the basic principles, theories and methods of graphic design, and the creation of visual communication. Topics of study include the characteristics and compositional principles applied to symbol, image, and letterform, as well as the history and practice of graphic design. Emphasis will be placed on creative process, developing visual concepts, formal values, use of materials, and craft. (Offered fall only)

Pre- or corequisite: ARTS 279 with a grade of C or higher

GDES 315 Artificial Intelligence in Content Creation (3 Credit Hours)

This course explores the intersection of marketing and digital design, focusing on how to effectively integrate AI tools into modern content creation workflows. Students will utilize AI tools while developing content for a specific brand. By the end of the course, you will be equipped to harness AI in ideation, design, and distribution, empowering you to streamline and elevate your marketing content creation process.

Prerequisites: Permission of instructor

GDES 365 Basic Typography (3 Credit Hours)

This course includes intensive study of the history, terminology, theory, and application of typography, and the creation of visual communication with particular emphasis on typographic content. Topics of study include typographic form and meaning, hierarchy, legibility and readability, structure and composition, and the management of written content within the design process. Specialized technical instruction includes software applications for document construction, layout, and letterform manipulation, building upon the experiences of ARTS 279. (Offered spring only)

Prerequisites: Graphic design major and GDES 280 with a grade of C or higher

GDES 368 Design Internship (3 Credit Hours)

This advanced course is an individualized internship that focuses on the student's emphasis within the graphic design industry. It is normally taken during the last semester. Students participate on-site with professionals and are evaluated by predetermined curriculum objectives that have been agreed upon by the employer, instructor and student. This course provides the student with valuable on-the-job experience, interaction with industry professionals, and preparation for job entry. Students must interview for and acquire their internship site. It is recommended that the student seek out instructor expertise for possible recommendation.

Prerequisites: Approval of the instructor and department is required; additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

GDES 371 Design Concepts (3 Credit Hours)

The course includes intensive study of the development of creative and effective ideation for application to graphic design problems from selected aspects of the field. Topics of study include project research, content development, messaging, and individual and collaborative creative processes. Emphasis will be placed on critical skills, articulation, productivity, and response to clients, audiences and contexts. (Offered fall only)

Prerequisites: GDES 280 with a grade of C or higher

GDES 372 Advanced Typography (3 Credit Hours)

This is an elective course restricted to students admitted to the graphic design program. It continues the development of typographic practice, exploring issues pertaining to meaning, concept, and expression. The course will also include investigation of typographic history. Topics of study include advanced issues in typographic composition, denotative and connotative aspects of type use, typeface selection, and typesetting.

Prerequisites: GDES 365 with a grade of C or higher

GDES 374 Web Design (3 Credit Hours)

This advanced course is an introduction to the basic methods and techniques used to design for web-based delivery. Topics of study include; site management and organization, navigation, grid structures, hierarchy and inventory of content, appropriate use of type and graphics, and format. Emphasis will be placed on process and research, appropriateness, accessibility, dynamic user interface experiences.

Prerequisites: GDES 371 with a grade of C or higher and GDES 372 with a grade of C or higher or permission of the instructor

GDES 378 Brand Identity (3 Credit Hours)

This course is devoted to the study and design of coordinated systems of visual communication elements used to identify a company or cause. Projects will address project research, creative brief development, messaging, and effective ideation for application across coordinated graphic design campaigns for print and digital delivery.

Prerequisites: GDES 280 with a grade of C or higher

GDES 381 Interactive Design (3 Credit Hours)

This advanced course is devoted to creating dynamic design solutions for interactive devices, systems, and services. Students will learn to apply observational techniques to understand interactions in context, develop conceptual models and representations to assess the perspectives of prospective users, and develop interactions that are understandable and useful. Students will be introduced to the fundamental digital design process, and will experiment with a variety of interactive and dynamic design applications.

Prerequisites: GDES 371 with a grade of C or higher and GDES 372 with a grade of C or higher or permission of the instructor

GDES 382 UI (User Interface) Design (3 Credit Hours)

UI (User Interface) designers focus on developing the aesthetics, or the point of contact, of interactive experiences. This course is intended to provide students with the skills needed to utilize traditional design principles to create interactive experiences for a range of platforms. Students will explore key topics such as Principles of User Interface Design, Responsive Design, Design Systems, Wireframing, and Prototyping, gaining a comprehensive skill set to shape the visual and interactive landscapes of digital interfaces.

Prerequisites: GDES 280, GDES 365, GDES 371, and GDES 378, all with a grade of C or higher

GDES 383 UX (User Experience) Design (3 Credit Hours)

UX (User Experience) designers ensure that digital experiences are relevant to users. This course is intended to provide students with the skills to create experiences focused on user needs and built on research and data. Students will explore key topics such as User Research Methods, User Journeys, and Usability Testing.

Prerequisites: GDES 280, GDES 365, GDES 371, and GDES 378, all with a grade of C or higher

GDES 385 Advanced Graphic Design (3 Credit Hours)

Building on concepts introduced in GDES 280, the course will consider and engage the collaborative, complex, and interrelated nature of design practice, in public and private manifestations, and through form and concept. The personal dimensions of design practice will also be explored through a self-determined project.

Prerequisites: GDES 280, GDES 365, GDES 371, and GDES 378, all with a grade of C or higher

GDES 386 Socially Conscious Design (3 Credit Hours)

This course delves into the realm of visual communication as a powerful tool for advocating social, environmental, and justice issues. Students will explore the transformative potential of graphic design in fostering positive change within society. As the world faces pressing challenges, this course empowers artists to leverage their creative skills and voices to contribute meaningfully to the betterment of our global community. Key topics covered include ethical design principles and the responsibility of designers in shaping inclusive narratives. Through practical exercises, projects, and case studies, students will develop the skills to navigate the delicate balance between aesthetics and advocacy, ensuring that their designs not only captivate but also inspire positive action.

Prerequisites: GDES 280, GDES 365, GDES 371, and GDES 378, all with a grade of C or higher

GDES 395 Topics in Graphic Design (3 Credit Hours)

Selected topics designed for elective credit within the graphic design program.

Prerequisites: Permission of the instructor

GDES 470 Design Services (3 Credit Hours)

Design services acts as an independent design agency. Students will gain experience working directly with clients on a design project; discover the aspects of developing commissioned design projects; and consider the legal, practical and ethical considerations of working as an independent (freelance) designer.

Prerequisites: GDES 280, GDES 365, GDES 371, and GDES 378, all with a grade of C or higher

GDES 474 Motion Graphics (3 Credit Hours)

This advanced course is an introduction to the basics of motion graphic design processes, and focuses on the creative and technical processes of creating motion graphics (predominantly 2D) for a variety of mediums including film, broadcast, DVD, and web. Students will gain practical experience in the development of an animated broadcast graphics package. Motion graphics in the context of interactive interfaces is also explored.

Prerequisites: GDES 371 with a grade of C or higher and GDES 372 with a grade of C or higher or permission of the instructor

GDES 480 Advanced New Media (3 Credit Hours)

Modern graphic design often includes the creation of multi-faceted experimental experiences. This course is intended to provide students with an advanced studio experience, where they will utilize a wide range of software to create experiences that push what each individual student thinks is possible. This course may cover topics such as 3D Modeling, Motion Graphics, Augmented Reality, Installation Art, and more.

Prerequisites: GDES 280, GDES 365, GDES 371, and GDES 378, all with a grade of C or higher

GDES 490 Design Seminar (3 Credit Hours)

This course is restricted to students admitted to the graphic design program, and is the seventh course in the graphic design sequence. This course introduces students to the broader opportunities and directions present in contemporary design. Through readings, discussion, and self-directed and self-determined projects, students will explore personal directions and sensibilities in their design practice. (Offered fall only)

Prerequisites: GDES 373 with a grade of C or higher

GDES 491 Design Capstone (3 Credit Hours)

This is the concluding course in the graphic design major. Students will prepare for transition to design practice/appreciation or graduate study through the completion of a thesis project appropriate to personal and career goals. Course topics will include creating a portfolio of design work, career options, self-promotion, resume preparation, graduate study, and interview skills. All students are required to present their work at the Graphic Design Gala. Additional review may be required by syllabus. (Offered spring only)

Prerequisites: GDES 490 with a grade of C or higher

Pre- or corequisite: 12 hours of Graphic Design elective coursework

GDES 497 Tutorial Work in Graphic Design (3 Credit Hours)

An independent investigation of a subject selected and conducted under the advisement of a graphic design instructor.

Prerequisites: Senior standing and permission of instructor and the chief departmental advisor

GEOG - Geography

GEOG 100S Human Geography (3 Credit Hours)

This course provides a basic topical introduction to human and cultural geography. It focuses on the diversity of human societies, their distribution, characteristics, and cultural impact on the landscape. Topics include the geography of population, migration, language, religion, economic development, urbanization, resources, and the political landscape.

GEOG 101S Environmental Geography (3 Credit Hours)

A geographical study of the diverse characteristics of the Earth's physical landscape, spatial distribution of environmental characteristics, the impacts of these on human populations and human populations' impact on the natural environment. Topics include climate and climate change, mass movements and natural hazards, biogeography and environmental problems such as desertification and deforestation, and the use and abuse of water resources.

GEOG 102T Digital Earth: Geospatial Technology and Society (3 Credit Hours)

This course provides an overview and exploration of: 1) the digital representation of the Earth and 2) geospatial science and technology. The course investigates geospatial technological innovations affecting the environment, resources, and society, including satellite global positioning systems, geographic information systems, and earth observations. Students develop hands-on skills as well as critical-thinking skills concerning the role of increasingly ubiquitous geospatial technology and their influences on social, economic, and human-environment interactions.

GEOG 126S Honors: Cultural Geography (3 Credit Hours)

Open only to students in the Honors College. A special honors section of GEOG 100S.

GEOG 250 World Regional Geography (3 Credit Hours)

A study of the physical and cultural characteristics of the major geographical regions of the world. The course focuses upon significant problems within each of the world's major regions and examines the relevance of the geographical background to these problems.

GEOG 295 Topics in Geography (3 Credit Hours)

A study of selective topics in Geography.

GEOG 296 Topics in Geography (3 Credit Hours)

A study of selective topics in Geography.

GEOG 300 Maps and Geographic Information (3 Credit Hours)

An investigation of different representations of the Earth: physical and cognitive maps, atlases, spatial databases, aerial photographs, and remote sensing imagery, with an emphasis on the use of geographic tools for communicating and analyzing information.

Prerequisites: GEOG 100S or GEOG 101S

GEOG 305 World Resources (3 Credit Hours)

A geographical analysis of the distribution and accessibility of the world's resources including population, agricultural land, biodiversity, water, renewable and nonrenewable materials, and energy sources.

Prerequisites: GEOG 100S or GEOG 101S, or permission of the instructor

GEOG 306T Hazards: Natural and Technological (3 Credit Hours)

An exploration of human perceptions of and responses to extreme geophysical and technological threats, including nuclear bombs and accidents, hurricanes, tornadoes, earthquakes, and volcanoes.

Prerequisites: junior standing and six credits in the social sciences or permission of the instructor

GEOG 308 Research Design (3 Credit Hours)

Covers the design and implementation of quantitative and qualitative methods of inquiry in social sciences.

Prerequisites: GEOG 100S or GEOG 101S

GEOG 310 Geography of the City (3 Credit Hours)

An analysis of the structure, growth, and development of cities. Topics include the use of urban land, location of public services, structure of the urban economy, social problems of urban populations, and decay and revitalization.

Prerequisites: Completion of General Education human behavior requirement

GEOG 320 Political Geography (3 Credit Hours)

A study of the relationship between geographical and political factors; the nation state and its subdivisions; interaction among states; and the political geography of everyday life.

Prerequisites: Completion of General Education human behavior requirement

GEOG 321 World Economic Geography (3 Credit Hours)

An analysis of differences in spatial patterns on the economic landscape at national and international levels, and the processes which create such differences. Introduces basic concepts, theories, and models in economic geography at the global scale.

Prerequisites: GEOG 100S or GEOG 101S, or permission of the instructor

GEOG 325 Ethnic Minorities (3 Credit Hours)

A study of ethnic minorities worldwide with emphasis on geographical dimensions of ethnic identity and relationships between ethnicity and territory, regionalism, politics, and cultural expression.

Prerequisites: Sophomore standing or permission of the instructor

GEOG 330 Field Methods (3 Credit Hours)

A review of selected techniques for generating data in a field situation. Lectures deal with the description and evaluation of techniques such as sampling methods, observation, interviewing, questionnaires, human relations skills and ethical considerations. The project component involves the definition of field problems and the application of appropriate techniques.

Prerequisites: Sophomore standing or permission of the instructor

GEOG 350 Geography of the United States and Canada (3 Credit Hours)

The human and physical geography of the United States and Canada with special emphasis on the distribution of population and natural resources, migration patterns, location of major economic activities, and the variety of regional identities within the U.S. and Canada.

Prerequisites: Junior standing and six credits in human behavior, or permission of the instructor

GEOG 355 Topics in Regional Geography (3 Credit Hours)

A study of selected regions or selected problems within a particular region of the world.

Prerequisites: Junior standing or permission of the instructor

GEOG 367 Cooperative Education (1-3 Credit Hours)

Student participation for credit based on the academic relevance of the work experience, criteria and evaluative procedures as formally determined by the department prior to the semester in which the work experience is to take place.

Prerequisites: Approval by the department

GEOG 368 Internship in Geography (1-12 Credit Hours)

Individualized practical experience in the area of applied geography. The credits will be commensurate with the level of the student's involvement.

Prerequisites: Twelve hours in geography

GEOG 370 Introduction to Emergency Management (3 Credit Hours)

Disasters in the U.S and abroad are examined to study the evolution of emergency practices. Factors contributing to the hazardousness of place and community vulnerability are explored. Emergency phases are practiced through interactive simulations.

Prerequisites: GEOG 100S or GEOG 101S, or permission of the instructor

GEOG 395 Topics in Geography (1-4 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major. These courses will appear in the course schedule and will be more fully described in information distributed to all academic advisors.

Prerequisites: Junior standing or permission of the instructor

GEOG 396 Topics in Geography (1-4 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major. These courses will appear in the course schedule and will be more fully described in information distributed to all academic advisors.

Prerequisites: Junior standing or permission of the instructor

GEOG 398 Tutorial Work in Geography (1-3 Credit Hours)

Independent study under the direction of an instructor.

Prerequisites: Permission of the instructor

GEOG 400W/500 Seminar in Geography (3 Credit Hours)

Advanced study of a specialized topic in geography. The choice of the topic may vary according to the availability of faculty expertise and student interest. This is a writing intensive course. This course may be repeated once provided it is a different topic and with permission of the instructor.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C; GEOG 100S or GEOG 101S, or permission of the instructor

GEOG 401/501 Global Environmental Policy (3 Credit Hours)

This course analyzes the causes, severity, potential consequences, and proposed solutions regarding global ecological issues with special attention to the scientific debate and the political and policy process. It examines environmental policies of national governments, regional/international organizations, and global conferences.

Prerequisites: GEOG 100S or GEOG 101S or GEOG 102T or POLS 100S or POLS 101S or POLS 102S or permission of the instructor

GEOG 402/502 Geographic Information Systems (3 Credit Hours)

A study of the conceptual basis of GIS as a tool for manipulating spatial information. The course focuses on how geographic information can be input and organized within the framework of a GIS. Students will work on a computer-based GIS to gain a greater understanding of spatial database structures and analytical operations.

Prerequisites: Junior standing, GEOG 102T, or permission of instructor

GEOG 404/504 Digital Techniques for Remote Sensing (3 Credit Hours)

Study of the theory and application of remote sensing, emphasizing environmental applications and aerial and satellite imagery. Covers the fundamentals of multispectral digital image processing, including sensors pre-processing, enhancement, classification, accuracy assessment, and GIS data integration.

Prerequisites: Junior standing, GEOG 102T, or permission of instructor

GEOG 405/505 Seminar in International Resource Management (3 Credit Hours)

Discussion of the ecological and management principles underlying international resource management and the goal of attaining a sustainable, ecologically balanced world.

Prerequisites: GEOG 100S or GEOG 101S; GEOG 305 recommended

GEOG 408/508 Cartography (3 Credit Hours)

Computer-assisted methods and techniques employed in the design, construction, and use of maps and other graphics as tools for data analysis and communication.

Prerequisites: GEOG 300 or GEOG 402

GEOG 409/509 Drone Applications Proseminar (3 Credit Hours)

Survey of the state-of-the-art geospatial applications of small Uncrewed Autonomous Systems (sUAS) mapping, surveying, and modeling. Course combines seminars spanning application sectors of research and professional practice; lectures on mission planning, operations, analysis and regulations; and hands-on practical exercises incorporating risk management, safety, ethics, and legal issues.

Prerequisites: GEOG 402 or permission of instructor

GEOG 410/510 Seminar in Urban Geography (3 Credit Hours)

Discussion of specific urban and metropolitan problems based on outside readings and individually selected research topics.

Prerequisites: GEOG 100S or GEOG 101S, or permission of the instructor

GEOG 411/511 Urban and Regional Planning (3 Credit Hours)

A study of planning concepts and principles used to guide contemporary metropolitan growth and development. Emphasis is on the application of planning tools and methods that guide the planning process from conception to execution.

Prerequisites: GEOG 100S or GEOG 101S, or permission of the instructor

GEOG 412/512 Cities of the World (3 Credit Hours)

An examination of cities of the world's major cultural realms with an emphasis on the urban landscape as it varies between developed and developing countries.

Prerequisites: Junior standing or permission of the instructor

GEOG 417/517 GIS for Planning and Public Policy (3 Credit Hours)

Geographic Information Systems (GIS) and science are an essential tool for urban planners and policy makers who have special interests in places and who need this kind of knowledge for decision making. The purpose of this course is to teach students the foundations of GIS and how it is applied in urban planning and other related disciplines. The course combines lectures, discussion of readings, and hands-on exercises in the computer lab.

Prerequisites: GEOG 402 or permission of the instructor

GEOG 418 Quantitative Methods (3 Credit Hours)

A survey of and practicum in the basic techniques of quantitative research, including the logic of empirical research, the identification of data sources, and the use of appropriate statistical techniques.

Prerequisites: GEOG 100S or GEOG 101S, GEOG 308 with a grade of C- or better

Pre- or corequisite: STAT 130M with a grade of C- or better

GEOG 419/519 Spatial Analysis of Coastal Environments (3 Credit Hours)

The course integrates remotely sensed and field techniques for scientific investigation and practical management of coastal environmental systems. Spatial modeling of coastal processes and management tools using Geographic Information System (GIS).

Prerequisites: GEOG 300, GEOG 402 or GEOG 502, or permission of instructor

GEOG 420/520 Marine Geography (3 Credit Hours)

An analysis of the environmental geography and resources of the ocean, with particular emphasis on geospatial analysis of the seafloor, hydrography, climate change, fisheries, ocean pollution, maritime activity spaces and management.

Prerequisites: GEOG 300 or GEOG 402 or permission of the instructor

GEOG 422W/522 Coastal Geography (3 Credit Hours)

An examination of the physical and human geography of the coastal zone. Considers problems of managing coastal resources with an emphasis on North America. Lectures focus on coastal patterns, processes, and problems at the global, national, and local scales. Students investigate a section of the local coastline and write a report on the physical and human geography on the basis of field study, library, and internet research. This is a writing intensive course.

Prerequisites: GEOG 100S or GEOG 101S, a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, or permission of the instructor

GEOG 424/524 Weather, Climate and Society (3 Credit Hours)

Weather and climate play a pivotal role in nearly every aspect of life. How does temperature relate to health outcomes? What impact does El Niño have on Peruvian farmers? How is the issue of climate change reflected in national security policy? Why? Topics also include the energy balance equation, remote sensing techniques, and climatological data acquisition and analysis. Beyond an understanding of the complex processes that dictate the flow of the atmosphere, the course analyzes the socioeconomic, political, and cultural perspectives of climate and weather. The course also provides a framework for stewardship and responsibility to the future.

Prerequisites: GEOG 100S, GEOG 101S, or permission of the instructor

GEOG 425/525 Internet Geographic Information Systems (3 Credit Hours)

Theoretical and practical exploration of methods, standards, and policies related to the development and utilization of geographic information systems on the Internet. Students will create and utilize distributed geospatial data and analytical systems using the WWW and the Internet to address geographical problems.

Prerequisites: GEOG 402

GEOG 432/532 Advanced GIS (3 Credit Hours)

The study of a series of advanced topics in the field of geographic information systems/science. Focus is placed on the development of projects/models and a survey of several advanced techniques. Students will work on a computer based GIS to implement topics from lectures.

Prerequisites: GEOG 402

GEOG 446/546 Geography, Gender, and Sexuality (3 Credit Hours)

This course examines gender identity and sexuality in all of their diverse forms through a lens of human geography, such as metaphors of space and place, the cultural landscape, and 'mapping territory.' Topics explored include global gender identities; 'queer space;' 'locating' gender and sexuality within the arts and tourism; the gendered citizen and the nation; and political economies of gender and sexuality.

Prerequisites: Junior standing, GEOG 100S or GEOG 101S, a grade of C or better in ENGL 211C, ENGL 221C, or ENGL 231C, or permission of the instructor

GEOG 451/551 Europe (3 Credit Hours)

A geographical analysis of the interrelationships among physical, cultural, economic, and political factors in Europe.

Prerequisites: Junior standing and GEOG 100S or GEOG 101S, or permission of the instructor

GEOG 452/552 Africa (3 Credit Hours)

A geographical analysis of the interrelationships among physical, cultural, economic, and political factors in Africa.

Prerequisites: Junior standing and GEOG 100S or GEOG 101S, or permission of the instructor

GEOG 453/553 Asia (3 Credit Hours)

A geographical analysis of the interrelationships among physical, cultural, economic, and political factors in Asia excluding the Middle East and the former USSR.

Prerequisites: Junior standing and GEOG 100S or GEOG 101S, or permission of the instructor

GEOG 454W/554 Latin America (3 Credit Hours)

A geographical analysis of the interrelationships among physical, cultural, economic, and political factors in Latin America. This is a writing intensive course.

Prerequisites: Junior standing, GEOG 100S or GEOG 101S, a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, or permission of the instructor

GEOG 455/555 The Middle East (3 Credit Hours)

A geographical analysis of the interrelationships among physical, cultural, economic, and political factors in the Middle East.

Prerequisites: Junior standing and GEOG 100S or GEOG 101S, or permission of the instructor

GEOG 458/558 Geography of Virginia (3 Credit Hours)

An analysis of Virginia's population, resources, and regional landscapes as they have been influenced by physical, cultural, historical, and economic factors.

Prerequisites: GEOG 100S or GEOG 101S

GEOG 460/560 Medical Geography (3 Credit Hours)

The course covers a range of topics in medical and health geography, including spatial behaviors of infectious disease and health care access. The focus of the course is on the geographical patterns of health and disease from the population rather than individual scale. In addition to seminar style lectures and discussions, the course enables students to further investigate by learning how to conduct medical/health geography research.

Prerequisites: Successful completion of the University's lower-division General Education requirement in Human Behavior, or permission of the instructor

GEOG 462/562 Advanced Spatial Analysis (3 Credit Hours)

This course introduces the essential theoretical concepts and analytical tools for analyzing spatial process, spatial autocorrelation, spatial patterns, techniques for spatial interpolation, network connectivity, big data, and landscape patterns. The course culminates with students carrying out their own spatial analysis projects. This course assumes that students understand the basic concepts in GIS with some experience in software operation of ArcGIS.

Prerequisites: GEOG 402 or permission of the instructor

GEOG 463/563 GIS Programming (3 Credit Hours)

This course develops students' GIS programming skills. Focus is placed on Python programming in ArcGIS and JavaScript in Web GIS development.

Prerequisites: GEOG 402

GEOG 464/564 Advanced Environmental Geography Seminar (3 Credit Hours)

The objective of the course is to provide students with a deeper understanding of the current concepts and debates in environmental geography. By exploring the ethical and philosophical foundations of the field, the course considers the environment's opportunities and constraints. While topics may include climate change, agricultural security, and renewable energy, the course will be driven by student-led discussions and participation. Critically thinking about complex phenomenon, the seminar will include various weekly readings, discussions, and writing assignments.

Prerequisites: GEOG 100S or GEOG 101S or permission of the instructor

GEOG 473/573 Geographic Information Systems for Emergency Management (3 Credit Hours)

Students will demonstrate advanced skills and techniques using spatial data to prevent, mitigate, respond to, and recover from intentional, natural, and accidental homeland security threats and emergencies. This course demonstrates the importance of rapidly disseminating spatial information towards the prevention and response of various organizations to homeland security events. This course will provide students with the tools and experience required to collect, prepare and manage spatial data and enable students to be prepared to map and analyze the data to quickly and effectively create a coordinated response to real homeland security events.
Prerequisites: GEOG 100S, GEOG 101S, GEOG 102T, or permission of the instructor

GEOG 475/575 Urban Resiliency (3 Credit Hours)

This course examines the multifaceted interface of built and natural environments and their impacts on land use management at spatial and temporal scales. It evaluates the impact of population pressure on sustainability through a survey of urban areas and analyzes urban planning and management capacities to maintain resilience despite environmental and technological hazards.

Prerequisites: GEOG 100S or GEOG 101S or permission of the instructor

GEOG 480W Senior Seminar in International Studies (3 Credit Hours)

Interdisciplinary research and the preparation of a senior thesis in international studies. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, senior standing in the BAIS degree program or permission of the instructor

GEOG 481 Geographic Inquiry and Professional Development (3 Credit Hours)

This course is designed to allow students to synthesize Geography concepts, theories, and knowledge and apply them to: 1) understand their positionality within the paradigms of the discipline, 2) explore future career paths, discover job possibilities, and graduate school opportunities in Geography, and 3) prepare materials (such as resumes and e-portfolios) to be used to apply for such positions.

Prerequisites: GEOG 100S OR GEOG 101S OR GEOG 102T

GEOG 490/590 Applied Cartography/GIS (1-3 Credit Hours)

Practical experience in applying the principles of cartography and geographical information systems to the design and construction of maps and other graphics.

Prerequisites: Junior standing or permission of the instructor

GEOG 495/595 Topics in Geography (1-4 Credit Hours)

The advanced study of selected topics which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule, and will be more fully described in information distributed to all academic advisors.

Prerequisites: Appropriate survey course or permission of the instructor

GEOG 496/596 Topics in Geography (1-4 Credit Hours)

The advanced study of selected topics which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule, and will be more fully described in information distributed to all academic advisors.

Prerequisites: Appropriate survey course or permission of the instructor

GEOG 497/597 Independent Research in Geography (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of the instructor. Conferences and papers as appropriate.

Prerequisites: Senior standing and approval of the director of geography

GEOG 498/598 Tutorial Work in Geography (1-3 Credit Hours)

Independent study under the direction of an instructor.

Prerequisites: Permission of instructor

GEOG 499 Senior Thesis (3 Credit Hours)

Completion of a research paper supervised by a faculty member from the Geography program. Research topic to be selected in concert with the faculty supervisor and a final written report required.

Prerequisites: GEOG 308 and senior standing in Geography

GER - German

GER 101F Beginning German I (3 Credit Hours)

This is the first part of a two-semester introductory German language and culture course. Through the study of German culture, such as German geography, etiquette, customs, holidays as well as university, family, and work life, students learn basic grammatical concepts and vocabulary. The communicative cultural approach, interactive in-class and homework assignments, and the inclusion of multimedia (online resources, Youtube videos, songs, texts, films, etc.) enhance the acquisition of the basic skills of listening comprehension, speaking, reading, writing, and cultural competency.

GER 102F Beginning German II (3 Credit Hours)

This is the second part of a two-semester introductory German language and culture course. Through the study of German culture, such as food and leisure culture, the German health system, and traveling in Germany, students continue to learn basic vocabulary and grammatical concepts. The communicative cultural approach, interactive in-class and homework assignments, and inclusion of multimedia (online resources, Youtube videos, songs, texts, films, etc.) enhance the acquisition of the basic skills of listening comprehension, speaking, reading, writing, and cultural competency.

Prerequisites: GER 101F

GER 195 Topics in German (1-3 Credit Hours)

A study of selected topics designed as electives for non-majors. These courses will appear in the course schedule.

GER 196 Topics in German (1-3 Credit Hours)

A study of selected topics designed as electives for non-majors. These courses will appear in the course schedule.

GER 201 Intermediate German I (3 Credit Hours)

This is the first part of a two-semester intermediate German language and culture course. Through the study of German culture, students continue to learn basic vocabulary and grammatical concepts and deepen their understanding of German culture. The communicative cultural approach, interactive in-class and homework assignments, and inclusion of multimedia (German websites, Youtube videos, songs, texts, films, etc.) enhance the acquisition of the basic skills of listening comprehension, speaking, reading, writing, and cultural competency.

Prerequisites: GER 102F or satisfactory score on the placement test

GER 202 Intermediate German II (3 Credit Hours)

This is the second part of a two-semester intermediate German language and culture course. Through the study of German culture, students continue to learn basic vocabulary and grammatical concepts and deepen their understanding of German culture. The communicative approach, interactive in-class and homework assignments, and inclusion of multimedia (online resources, Youtube videos, songs, texts, films, etc.) enhance the acquisition of the basic skills of listening comprehension, speaking, reading, writing, and cultural competency.

Prerequisites: GER 102F or satisfactory score on the placement test

GER 295 Topics in German (1-3 Credit Hours)

A study of selected topics designed as electives for non-majors. These courses will appear in the course schedule.

GER 296 Topics in German (1-3 Credit Hours)

A study of selected topics designed as electives for non-majors. These courses will appear in the course schedule.

GER 311 Global Conversations (3 Credit Hours)

This course is primarily a conversation course to develop linguistic and cultural proficiency in verbal communication. Task-oriented communication strategies in cross-cultural training will be practiced by presenting students with models that demonstrate appropriate linguistic and cultural competencies. Students will practice these skills by role-playing, giving presentations, enriching self-awareness with practiced in-group discussions on various topics (such as, prejudice, racism, values, and customs) that dispel stereotypes and foster more in-depth social-cultural understanding, and with participation in guided cultural encounters. Students will improve their listening and comprehension skills and deepen cultural proficiency by learning how to communicate and collaborate with other people and cultures in a global age. (This is an oral skills course.)

Prerequisites: A grade of C or better in GER 202 or advanced placement or permission of the instructor

GER 312W Writing Around the World (3 Credit Hours)

This is a writing intensive course designed with writing assignments that examine various cultural contexts that enable students to understand cultural content, style, audience and organization. The main objective of the course is increased awareness of and sensitivity to appropriate word choice, and syntax in the language. Students will engage in writing for different cultural audiences and in varied contexts such as literary, artistic and media expressions around the world. Special emphasis is placed on the methodology of close reading as students hone the analytics skills and vocabulary necessary to interpret idioms, regionalism, cultural expressions and overall intercultural skills observed in various genres and cultures. Students will analyze compelling global issues and the diverse cultural perspectives that inform them.

Prerequisites: A grade of C or better in ENGL 211C, ENGL 221C or ENGL 231C and a grade of C or better in GER 202, advanced placement or permission of the instructor

GER 323 World Cultures and Contexts (3 Credit Hours)

Over the centuries, German culture and history have exerted a tremendous influence on Western Civilization. This course will trace Germany's historical and cultural development from Emperor Barbarossa's Holy Roman Empire of the German Nation to World War I. Readings will include segments from various chapters of *Die Deutschen* reflecting central aspects of the major cultural epochs of Western Civilization including the Middle Ages, the Age of Reformation and the Nordic Renaissance, Baroque, The Age of Enlightenment, German Classicism and Romanticism, Young Germany during the revolutionary period of 1848 and up to German Expressionism and World War I. The central themes will be complemented by a variety of other samples drawn from poetry, philosophy, music and the visual arts.

Prerequisites: GER 311 or GER 312W

GER 350 Modern Swiss German Literature: A Multicultural Model (3 Credit Hours)

Readings and discussions of selected master works by Frisch and Durrenmatt, the two literary giants of modern Swiss literature. Topics include the multicultural aspects of modern Switzerland, the concepts 'Heimat,' provincialism versus globalism, Old World versus New World, the dialectics of myth and modernity, the mixed blessings of technology, as well as the discourse of gender ideology and matriarchal mythography. The course is complemented by a film screening and slide presentations. Readings and discussions are in German.

Prerequisites: GER 311 or GER 312W or permission of the instructor

GER 355 The City as Cultural Focus (3 Credit Hours)

This course will focus on a particular German city such as Berlin, Vienna, or Munich in light of historical and cultural shifts and continuities. Students will read literary and historical texts, poetry and newspaper articles and screen films.

Prerequisites: GER 311 or GER 312W or permission of the instructor

GER 366 Business German: Language and Culture (3 Credit Hours)

This is an advanced intermediate German language and culture course that prepares students for using German in professional settings. Since the course focuses on German language usage in personal, business, and employment situations, the vocabulary is geared toward living and working abroad. Students gain a deep knowledge about German business culture and social etiquette, engage in situational role-playing, create an application portfolio in German geared towards the German job market, and prepare for job interviews. The workshop format of the course, the inclusion of online resources and authentic materials provide students with hands-on immersion in German business culture. This course offers some grammar review and practice.

Prerequisites: GER 311 or GER 312W or permission of the instructor

GER 378 Extracurricular Studies (1-3 Credit Hours)

An extracurricular activity approved for credit based on objectives, criteria, and evaluative procedures as formally determined by the department and the student prior to the semester in which the activity is to take place. Such credit is subject to review by the provost.

Prerequisites: approval of the department chair

GER 380 German Literature from Sturm und Drang to Jugendstil (3 Credit Hours)

Readings and critical interpretations of exemplary literary works and historical documents that reflect the various representative periods of German and European culture and history from the second half of the 18th century to the beginning of the 20th century. In addition to understanding and appreciating these texts for their own artistic and historical value, students will also interpret them as first intellectual articulations of issues that will become central for the social and cultural history of (post-) modernity. They include the topics of religious relativism, issues of gender and sexual politics, aesthetics, social justice and multicultural diversity. The course will be complemented with video clips, films, and samples from musical history and the visual arts. Readings and discussions in German.

Prerequisites: GER 311 or GER 312W

GER 395 Topics in German (1-3 Credit Hours)

A study of selected topics designed for non-majors, or for elective credit within a major. These courses will appear in the course schedule.

Prerequisites: GER 202 or the equivalent

GER 396 Topics in German (1-3 Credit Hours)

A study of selected topics designed for non-majors, or for elective credit within a major. These courses will appear in the course schedule.

Prerequisites: GER 202 or the equivalent

GER 407/507 Advanced Grammar and Syntax (3 Credit Hours)

This class is designed to solidify and refine students' working knowledge of written skills in the language, with an emphasis on increasing their written sophistication. Focus is on analysis of vocabulary, grammar, and cultural nuances in the syntax to examine how language reflects the ways of life and beliefs of its speakers, contrasted with the extent of language's influence on culture. Students will refine their skills in written inter-cultural communication, paying attention to idioms and the fine points of 'cultural grammar' communicative competence and specialized discourse to develop excellent communication skills. This course is intended to prepare students for using their knowledge of language and culture in professional settings.

Prerequisites: GER 311 and GER 312W, or permission of the instructor

GER 408/508 Conversation and Composition (3 Credit Hours)

This course is designed to further develop the mastery of spoken and written German, review grammar, build vocabulary and fine-tune the student's stylistic proficiency in German. The textbook *Anders gedacht* is an intermediate/advanced reader that covers a wide variety of historical, political and cultural events and developments in contemporary German speaking countries. The *Übungsbuch* accompanies the grammatical and thematic features of the textbook and provides further exercises. The course will be complemented by several video screenings and multi-media presentations covering a variety of aspects in contemporary German speaking culture.

Prerequisites: GER 311 and GER 312W, or permission of the department chair

GER 410/510 Berlin and Paris: Crucibles of European Ideas (3 Credit Hours)

This course explores the cultural movements that have characterized the German-French commonalities and differences from the early 1900s through the 1990s in cross-disciplinary discourses such as film, literature, art, politics, and economics. Cross-listed with WCS 410/WCS 510.

Prerequisites: German and French students must read and write in the target language

GER 420/520 Masterpieces of German Poetry (3 Credit Hours)

This course will delineate 800 years of German poetry, analyzing exemplary works within their cultural and historical context such as the courtly love tradition of the Middle Ages, the spirituality of the German Reformation, the (meta-)physical passions of the Baroque, the humanist ideals of Weimar Classicism, the profound longings and ultimate ironies of German Romanticism, fin de siècle symbolism and European decadence, the avant-garde of Weimar culture, the legacy of the Third Reich, and the poetics and politics of East/West Germany up to the fall of the Berlin Wall and the unification of Germany. The close readings will be complemented by videos, film clips, slides and musical samples. Readings and discussions in German.

Prerequisites: GER 311 and GER 312W, or permission of instructor

GER 445/545 German Cinema I (3 Credit Hours)

The first half of the 20th century was the most creative and destructive period in German and European history. Its rich cultural achievements included Viennese psychoanalytical theory of the turn of the century, Art Nouveau, German Expressionism, and the avant garde aesthetics of the Weimar Republic. Conversely, World War I and II exposed the cultural agony and human depravity of modern civilization. This course will trace these various aspects and developments in a variety of exemplary genres. Readings and discussions in German. (Cross-listed with WCS 445/WCS 545 and COMM 444/COMM 544)

Prerequisites: GER 311 or GER 312W or permission of instructor

GER 446/546 German Cinema II (3 Credit Hours)

This course will focus on the German cinema from perspectives such as fascism and its legacy, film as historical critique, or Weimar cinema. This survey course covers major German movies in film history from the 1970's to the present. (Cross-listed with WCS 445/WCS 545 and COMM 444/COMM 544)

Prerequisites: GER 311 or GER 312W or permission of instructor

GER 450/550 German Satires and Parodies (3 Credit Hours)

A study of comical and satirical features in exemplary literary and visual texts ranging from late medieval broad sheets and moralistic narratives to postmodern parodies in literature, music, film and graphic design. Students will study a wide variety of texts and analyze them as critical reflections of their social and cultural contexts, which include the spiritual conflicts and religious challenges of the Age of Renaissance and Reformation, anti-Nazi collages, and the permanent quest for pleasure and entertainment in our present-day multi-media Spassgesellschaft (fun society). Readings and discussions in German.

Prerequisites: GER 311 and GER 312W, or permission of instructor

GER 455/555 Germany 1900-1945: From High Culture to Holocaust (3 Credit Hours)

The first half of the 20th century was the most creative and destructive period in German and European history. Its rich culture achievements included Viennese psychoanalytical theory of the turn of the century, Art Nouveau, German Expressionism in painting and poetry, and the avant garde aesthetics of the Weimar Republic (film, dance, cabaret, architecture etc). They played a central part in the evolution of a modern and postmodern sensibility. Conversely, World War I and World War II exposed the cultural agony and human depravity of modern Civilization. This course will trace these various aspects and developments in a variety of exemplary verbal and visual texts, including the genres of poetry, novella, drama, painting and film. Readings and discussions in German.

Prerequisites: GER 311 and GER 312W

GER 470/570 Post World War II Germany (3 Credit Hours)

The course will cover representative literary texts and cultural events of divided and united Germany, including Heinrich Boll, Gunter Grass, Max Frisch, Christa Wolf, Doris Dorrie et al, as well as film, painting, popular music, the culture of memory and German Jewish relations after the Shoah.

Prerequisites: GER 311 or GER 312W

GER 476/576 German-Jewish Literature and Culture (3 Credit Hours)

A survey of seminal texts by German-Jewish philosophers and writers from the Enlightenment to the present day, including Marx, Kafka, Freud, Schnitzler and Arendt. (cross-listed with WCS 476/WCS 576).

Prerequisites: junior standing

GER 478/578 German Drama (3 Credit Hours)

This course provides a survey of representative examples from 200 years of German drama. Texts include plays from Weimar Classicism, Young Germany, Naturalism and Symbolism, fin de siècle Vienna, German Expressionism, Weimar Modernism, Exile Literature, "Vergangenheitsbewältigung" (texts of coming to terms with the past), and post-modern experimentalism. The course will focus on issues such as mythology, psychopathology, sexual morality, epic theater, Marxist ideology, fascism and guilt, and feminist politics and aesthetics. The readings will be complemented by screenings of various film adaptations. All readings and discussions are in German.

Prerequisites: GER 311 and GER 312W

GER 495/595 Topics in German (1-3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule.

Prerequisites: appropriate survey course or permission of the instructor

GER 496/596 Topics in German (1-3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule.

Prerequisites: appropriate survey course or permission of the instructor

GER 497 Tutorial Work in Special Topics in German (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: senior standing and approval of the department chair

GER 498 Tutorial Work in Special Topics in German (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: senior standing and approval of the department chair

HEBR - Hebrew

HEBR 111F Beginning Hebrew I (6 Credit Hours)

Aural comprehension, oral drill and discussion of grammar principles, written exercises and reading assignments.

HEBR 212 Intermediate Hebrew (6 Credit Hours)

Oral drill and discussion of grammar principles, written exercises and reading assignments.

Prerequisites: HEBR 111F or permission of the instructor

HIST - History

HIST 100H Interpreting the World Past Since 1500 (3 Credit Hours)

The course offers students a critical approach to interpreting World history. A fast-paced survey of World history from 1500 to the present, it focuses on the major intellectual, religious, social, cultural, political, environmental and scientific developments that have influenced the course of World history. It looks at cross-cultural relations in the form of economic exchange, technology transfer, war and conquest, and international organizations.

HIST 101H Interpreting the Asian Past (3 Credit Hours)

The course is a fast-paced survey of Asian civilization in a global context from the emergence of Indian and Chinese civilizations to the events unfolding today. It follows the courses of political, social, cultural, religious, and economic development in East, South, and Southeast Asia.

HIST 102H Interpreting the European Past (3 Credit Hours)

The course is a fast-paced survey of European civilization. It focuses on the major intellectual, religious, social, cultural, political, environmental, and scientific developments that have influenced the course of European history.

HIST 103H Interpreting the Latin America Past (3 Credit Hours)

This fast-paced survey covers the last 600 years in the political, social, economic, and cultural histories of Latin America. Special attention will be paid to the global context of this multi-ethnic and multi-lingual region.

HIST 104H Interpreting the American Past (3 Credit Hours)

This course offers students a critical approach to interpreting the history of the United States. A fast-paced survey of American history from the era of colonization to the present, it focuses on the major intellectual, religious, social, cultural, political, environmental, and scientific developments that have influenced the development of the United States.

HIST 105H Interpreting the African Past (3 Credit Hours)

This course offers students a critical approach to interpreting the history of Africa. A fast-paced survey of African history, it affords students a grounding in the major themes of African history. The course focuses on the major economic, social, and political institutions of Africa, past and present, and explores how historical developments assist comprehension of present-day Africa.

HIST 126H Honors: Interpreting the American Past (3 Credit Hours)

The course is open only to students in the Honors College. Special honors section of HIST 104H.

HIST 127H Honors: Interpreting the European Past (3 Credit Hours)

The course is open only to students in the Honors College. Special honors section of HIST 102H.

HIST 201 Introduction to Historical Methods (3 Credit Hours)

Required of all history and secondary education social studies majors. Recommended prior to upper-division course work. Examines methods of historical research and primary and secondary source analysis, inclusive of internet usage. Explores historiography and historical writing. Introduces students to issues in the philosophy of history.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 205H Heroes & Hoplites: History of Ancient Greece (3 Credit Hours)

This course explores the history and material culture of the ancient Greek world, from the Bronze Age Minoans to the end of the Peloponnesian War between Athens and Sparta. Key ideas will include Greek religion, hoplite warfare, the conflict with Persia and the development of Athenian democracy.

HIST 302 People, Technology & Belief: the World to 1500 (3 Credit Hours)

The course gives students a critical perspective on world civilizations from prehistory to 1500. It focuses on the major cultural, intellectual, scientific, geographic/environmental and religious developments of the world. The course emphasizes the critical assessment of primary documents and artifacts and the utilization of that material in the classroom.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 304T History of Medicine, Disease, and Health Technology (3 Credit Hours)

Examines the history of medicine and epidemiology from ancient times through the twenty-first century. The course takes a comparative look at medical practices in Europe and around the globe and focuses heavily on the complex relationship between human societies and disease. The development of medical technologies and their impact are examined.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 309 The Crusades (3 Credit Hours)

This course examines the series of conflicts between Western Europe and the Middle East from the 11th to the 14th century. It investigates the motives, process and outcomes of the invasion of the Middle East by European armies. It also addresses how this phenomenon has been understood in the past.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 310 Renaissance Europe (3 Credit Hours)

This is an examination of the Renaissance in both Italy and Northern Europe from the 14th to the 16th centuries emphasizing the new learning, humanism and the place of the individual as well as the political and artistic new achievements of the age.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H

HIST 311 Early Modern Europe (3 Credit Hours)

The course covers the period between the late Middle Ages and the beginning of the modern era, roughly 1350-1715, exploring the Renaissance, the Reformation, and the Age of Exploration. There is emphasis on the culture of the period as contemporaries coped with depression, plague, religious change, and cultural encounters outside Europe.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H

HIST 312 The Rise of Rome: The Roman Republic (3 Credit Hours)

The course explores the history and material culture of the Roman Republic from its foundation in the sixth century BCE through the civil wars of the first century BCE. This class will emphasize the political institutions of the Republic and its conquests throughout the Mediterranean world. It will also study the social and religious institutions that influenced Rome.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 313 Bread and Circuses: The Roman Empire (3 Credit Hours)

This course explores the history and material culture of the Roman Empire as it emerged from the ashes of the Roman Republic, through its transformation in later antiquity under the Christian emperors. It studies the emperor's ability to maintain peace and explores the ways in which religion, family, and entertainment shaped the daily life of the empire's inhabitants.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 315 Into the Arena: Christians in the Ancient World (3 Credit Hours)

How did Christians go from being a tiny sect to the religion of the Roman Empire? Why did some Romans persecute Christians? Could someone be both a Jew and a Christian at the same time? This class explores the history and material culture of early Christianity from its origins in Jewish Palestine to its ascendancy as an imperial religion.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 316 Cold War in History (3 Credit Hours)

The course explores changes in the international system which arose in the wake of World War II and focuses on conflict and cooperation in selected regions of the developed and developing world.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 320 Ancient Greece Study Abroad: Temples, Treasures and Transformations (3 Credit Hours)

This study-abroad course is an on-site immersion in history, archaeology, and art of Greece from the heroes of the Bronze Age to the military might of the Spartans, the architectural achievements of the Athenians, the transformations of the Romans and Byzantines, and ultimately the birth of modern Greece.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H; instructor approval is required

HIST 321 Promised Land, Holy Land: From Ancient Israel to the Muslim Conquest (3 Credit Hours)

This course examines the history and archeology of the region that is today the modern state of Israel, a contested region from antiquity to today. It considers identity formation among ancient Israelites and Samaritans, along with the way that Jews, Christians, Muslims and the empires that ruled them, conceptualized the land.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H or HIST 205H; instructor approval required

HIST 322 Ancient and Medieval England (3 Credit Hours)

This course explores the social and political history of early England, with an emphasis on the fall of the Romans, the Anglo-Saxon and Norman invasions, medieval social and cultural life, the evolution of feudal relationships, and the development of the English monarchy.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 323 Britain and the World (3 Credit Hours)

This course explores the development of Britain in the 18th, 19th and 20th centuries. Key themes include the evolution of English democracy, the rise and decline of the British empire, Britain's role in international affairs, and England's tenuous relationship with Ireland, Scotland, and Wales.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 324 Europe in the Twentieth Century (3 Credit Hours)

This course explores the evolution and development of European states, institutions and cultures over the course of the twentieth century. Relations among European states--large and small--and their peoples are examined.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 325 Rise and Fall of Empires (3 Credit Hours)

This course examines the expansion of European empires from the 15th through the 20th century. It explores the dynamics of imperialism and colonialism, including ideologies of conquest, trade and commerce, labor and slavery, cultural encounters, and racism and exploitation. It concludes with a review of decolonization and its consequences for our world.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 327 Russia: Culture and Civilization (3 Credit Hours)

The course is a survey of Russian history from the ninth to the end of the nineteenth century stressing the distinctiveness of Russian culture and institutions, the influence of the West, the multi-national character of the Empire, and the decline of the old regime.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 328 Russia from Stalin to Putin (3 Credit Hours)

The course is a survey of the formation and development of the USSR from the fall of the Russian monarchy and the revolutions of 1917 to the emergence of the Russian Federation after 1991.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 330 Modern South Asia, c. 1700 to Present (3 Credit Hours)

This course examines the history of the area comprising the modern nation-states of India, Pakistan, Bangladesh, and Afghanistan from the early eighteenth century to the present day. Topics will include: precolonial states and societies, colonial rule and its impact, anticolonial nationalist and regional separatist movements; movements for gender and sexual equality; globalization and the environment.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 336 The Emergence of New China (3 Credit Hours)

The course is the history of China covering late Imperial China, the impact of Western imperialism, the Republican Period, and the establishment of the People's Republic.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 338 Japan's Era of Transformation (3 Credit Hours)

This is the history of Japan since 1800. It covers the decline of the Tokugawa Shogunate, modern nation building in the Meiji period, domestic conflicts and war in the twentieth century, and the roots of Japan's economic prominence today.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 345 Native American History (3 Credit Hours)

The course examines the history and culture of Native American peoples from early contact with Europeans to present day. There is particular focus on ways that cultural interactions affected and transformed native peoples - their beliefs, societies, and political structures.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 346 Colonial and Revolutionary America (3 Credit Hours)

The course examines social, cultural, economic and political developments in North America from 1492 to the ratification of the Constitution of 1787. Course explores the role of class, gender, and race in the creation of an American culture.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 348 The Early American Republic, 1787-1850 (3 Credit Hours)

The course explores America's transformation from a republic to a democracy by examining the political, economic, social and intellectual history of the United States' first half century.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 349 American Naval History (3 Credit Hours)

This course examines American naval history and American naval theory from the colonial period to the present day. It analyzes the importance of American naval conflicts, developments in naval technology, and the social and political changes that shaped the U.S. Navy.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 350 History of the Old South (3 Credit Hours)

The course is a study of the Old South civilization from the colonial era to the Civil War, with particular emphasis on the frontier, slavery, the cotton kingdom, and southern cultural contributions.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 351 The Civil War and Reconstruction (3 Credit Hours)

The course is a study of the origins of the idea of secession and of the war, of the military, political, and economic contest between the Confederate and Federal governments, and finally of the long-range effects of the war as revealed in the failure of Reconstruction.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 352 The Immigrant Experience in U.S. History (3 Credit Hours)

This class examines the history of U.S. immigration during the 19th and 20th centuries. The course strives to complicate the 'Melting Pot' metaphor in U.S. history by exploring the transnational quality of immigrants' lives, the way class, race, gender, and nationality have shaped the immigrant experience, and the role nation-states have played in managing immigration.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 353 Robber Barons, Reformers, and Radicals: The US Gilded Age and Progressive Era (3 Credit Hours)

This course covers the Gilded Age and Progressive Era of U.S. history (1870s-1920s), a dynamic period characterized by industrialization, imperialism, international and internal migration, World War I, and a variety of social and political movements. This course explores these and other topics from an international perspective to consider how global processes influenced the U.S., and how the U.S. influenced the rest of the world in the late 19th and early 20th century.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 354 From the Jazz Age to the Atomic Age: US, 1920-1945 (3 Credit Hours)

The course covers the domestic and international history of the U.S. during the Roaring Twenties, The Great Depression, World War II.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 355 The United States, 1945-1991 (3 Credit Hours)

The course is the history of the United States from the end of World War II to the end of the Cold War. The course focuses on domestic politics, social change, economic developments and international relations.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 356 Virginia History (3 Credit Hours)

The course is an examination of Virginia's past from Jamestown to the present. The course emphasizes the colonial experience, Virginia's role in the new nation, the post-Civil War era and Virginia in the twentieth century.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 357 The United States in the 1960s (3 Credit Hours)

The course examines the political, social and cultural revolutions which occurred in the United States from 1960 to 1974. Topics include the reforms of JFK and LBJ; the rise of conservatism; the impact of the baby boom generation; the civil rights, anti-war, and women's movements; the war in Indochina; and Watergate and the fall of Richard Nixon.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 358 The U.S. in the Second World War (3 Credit Hours)

The course is designed to familiarize students with important concepts in the history of America's involvement in the Second World War. It surveys the significant events, personalities, and changes that occurred between 1941 and 1945, heavily focusing on America's three 'fronts': the European, the Pacific and the home front.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 359 American Maritime History (3 Credit Hours)

The course explores the various maritime influences in American history. Topics discussed include ocean exploration, navies and maritime conflicts, shipping and shipbuilding, marine resource extraction, rivers and canal transportation, maritime migration, water use, and other issues in maritime history from exploration to the present.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 360 American Military History (3 Credit Hours)

The course is a study of American military policy, 1763 to the present, in relation to its political, economic, and social implications.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 361 African-American History to 1865 (3 Credit Hours)

The course examines African-American history from the African background through the Civil War. Emphasis is placed on an analysis of African-Americans' role in the political, economic, social and cultural life of the United States.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 362 African-American History Since 1865 (3 Credit Hours)

This course examines African-American history from Reconstruction to the present. Emphasis is placed on the analysis of African-Americans' role in the political, economic, social and cultural life of the United States.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 363 Women in U.S. History (3 Credit Hours)

The course examines the experiences of women in U.S. history from 1607 to the present, paying particular attention to influences of race, class, ethnicity and changing conceptions of gender.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 365 Reform in U.S. History (3 Credit Hours)

This course explores the role of reform in shaping American history from the colonial era to the late 20th century. Topics addressed include rebellion as reform, the eras of reform, reform in modern America, and the role of conformity versus individualism.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 368 Internship (3 Credit Hours)

The content varies according to the internship. Qualifies as a CAP experience.

Prerequisites: Permission of the department and one or more Interpreting the Past courses

HIST 369 Practicum (3 Credit Hours)

The content varies according to practicum.

Prerequisites: Permission of the department and one or more Interpreting the Past courses

HIST 370 Africa and the Atlantic Slave Trade (3 Credit Hours)

This course examines political, commercial and cultural developments in the Atlantic world from 1400 to 1900 in the context of the Atlantic slave trade. It provides students an understanding of the historical slave trade, including the roles of Europeans, Americans and Africans within the trade, the slave trade's impact on African economies and societies, the experiences of enslaved people, and the making of an African Diaspora.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 371 Modern Mexico (3 Credit Hours)

This survey of Mexico's history since independence highlights the social, cultural and economic changes that accompanied four turning points in the political history of Mexico: the independence movement, the wars of the reform, the Revolution of 1910, and the trend toward democratization that began in the 1980s. Attention will be paid to the changing scope of Mexico's relations with the United States, and to comparisons of Mexico's experience with that of other Latin American countries.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 372 Central America and the Caribbean Since 1800 (3 Credit Hours)

This course surveys socio-economic and political change after about 1800 in the Caribbean Basin (Central America and the insular Caribbean), a region whose diverse colonial, ethnic, labor and migratory experiences will provide rich opportunities for comparative study. Plantation slavery and its legacies, independence movements, export-led economic growth, nationalism, social movements, revolution and great-power rivalries will be the major themes.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 373 U.S.-Latin American Relations (3 Credit Hours)

This survey of Latin America's relations with the United States since the early nineteenth century will seek to identify and account for changing patterns in what has been a highly asymmetrical power relationship. The emphasis will be on the outcomes of U.S. policy in the region, combining the study of broad trends (especially in economic and security policy since the 1890s) with a close analysis of three cases: Mexico, Cuba and Central America. The influence of the larger international environment on those relations will be considered.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 374 Spain in America: The Rise of the Hispanic World (3 Credit Hours)

Beginning with Spain's leading role in European expansion in the 15th and 16th centuries, this course explores the formation of the 300-year Spanish empire in America, the impact in both America and Europe of its encounter with native Americans, and the myriad colonial-era institutions that would shape the future of the Hispanic world.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 381 Africa in the 20th Century (3 Credit Hours)

This course surveys the political, social and cultural history of colonial and post-independent Africa. Major themes include colonization and resistance, anti-colonial movements, social and cultural transformations, urbanization and popular culture and post colonial challenges.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 382 African Civilizations (3 Credit Hours)

This course explores the history of African states, societies, and cultures from the earliest civilizations to the nineteenth century. Major themes include: trade, technology and state formation, power and authority in ancient and medieval Africa, women and gender, religious transformations, including the spread of Christianity and Islam, and cross-cultural encounters.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 386T The Evolution of Modern Science (3 Credit Hours)

The course traces the development of modern science from the ancient Greeks to the 21st Century.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 388T Discovering Earth's History (3 Credit Hours)

Geology and paleontology as technological systems during the industrial revolution of the nineteenth century, including global & local exploration, competing interpretations of empirical data, and the discovery that the earth itself had a history whose sources were inscribed in the very ground on which they walked. Readings include Darwin, Lyell, Humboldt, and others.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 389T Technology and Civilization (3 Credit Hours)

This course examines the role of technology and relevant science. Students examine the interaction between society and technology and investigate why technology is both a reflection of, and a shaping influence upon, "modern" culture and beyond.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 391 Paris/Auschwitz Study Abroad (3 Credit Hours)

This course explores the history of the Holocaust in France and Poland by taking students to key sites tied to the Holocaust in Europe. Students visit Paris and explore the history of pre-war Jewry and sites of deportation. Students travel to Poland and juxtapose the French and Polish experience and denial of the Holocaust. Public history in the museum setting is explored.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 392 The Holocaust and Vichy France (3 Credit Hours)

This course surveys French history during World War II, focusing on the fall of France, the German occupation, and the establishment of the Vichy collaborationist government. It explores the fate of French and foreign-born Jews under Vichy, deportation and resistance, and the issues of post-war memory and denial.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 393 Studies in Jewish History (3 Credit Hours)

This course examines specific topics, eras, and themes of Jewish history. Specific titles will be listed in the on-line course schedule.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 394 Independent Study in Political and Social History (3 Credit Hours)**HIST 396 Topics in History (1-3 Credit Hours)**

The course is a study of selected topics. These courses are open to both majors and nonmajors. History majors may take these courses to satisfy history concentration requirements. These courses will appear in the course schedule, and will be more fully described in information distributed to academic advisors.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 402W Senior Seminar in History (3 Credit Hours)

The course is an advanced study of selected topics leading to production of a research paper. It is required of all history and secondary education social studies majors. This is a writing intensive course.

Prerequisites: HIST 201 and a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C

HIST 408 War and American Society in the Twentieth Century (3 Credit Hours)

The course is an exploration of the content and meaning of wartime experiences within American society between 1898 and 1975. Emphasis is on comparing the levels of national, institutional and personal experiences of war as they affected people at home and in battle, and on considering the relationships between war-making and social development at particular times.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 409 History of US-Mexico Borderlands (3 Credit Hours)

The course examines the history of the region straddling the U.S. - Mexico border from the Spanish Conquest to the present day, focusing on issues of immigration, economic and political integration and the complicated nature of state-building in a transnational environment.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 414 Freedom, Rights and Revolution: Evolution of the State System 1648-1815 (3 Credit Hours)

The course examines the social, cultural, political, legal and diplomatic history of Old Regime Europe, the rise of the territorial state, and challenges to its authority. In addition to events and sources contemporary to that age, students will be introduced to the most important interpretive theories that have emerged in the past generation on the Continent as well as in Britain and America.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 415 Empire, Nations, and Industrialization: Evolution of the State System, 1815-1914 (3 Credit Hours)

The course focuses on the evolution of international politics, diplomacy, and social, cultural and economic structures in the development of empires, nations and industrialization in the evolution of the modern state system from 1815 to 1914. Explores the relationship among European powers and their relations with smaller states in Europe and spheres of influence throughout the world.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 416 States, Territories and International Organization: Evolution of the State System Since 1914 (3 Credit Hours)

The course focuses on the evolution of international politics, diplomacy and social, cultural and economic structures in states territories, and international organizations since 1914. Emphasis on shifting European alignments since 1914, the two World Wars, the development of the bi-polar world and the development and evolution of international organizations.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 417 World War I: The Great World War on All Fronts (3 Credit Hours)

This course will examine "The Great War" from its origins in the late nineteenth century to the Paris Peace Conference and from a variety of perspectives from battlefields and trenches to the home-front. It will also consider the impact of the war on society and its relevance to the contemporary world.

Prerequisites: Hist 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 450 American Revolution and Historical Memory (3 Credit Hours)

This seminar style course will introduce the principal writings and interpretations of the era of the American Revolution from the mid-eighteenth century to the ratification of the federal constitution of 1787. Besides exploring the relationship between the British Empire and its colonies, the course will look at the role of historical memory in understanding of the past.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126, HIST 127H, or HIST 205H

HIST 451 The Atlantic World and Early America (3 Credit Hours)

During the early modern period, global processes of imperial, economic, and demographic expansion drew British North America into transnational networks that spanned the Atlantic Ocean and brought Europeans, Africans, and Americans together. This course will explore the Atlantic World as a place, a process, and a new field of historical inquiry.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 455 African-American Historiography (3 Credit Hours)

The course is an examination of the ways historians have addressed specific issues in African-American history.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 456 Research in Local History (3 Credit Hours)

The course explores the history of Hampton Roads through student use of research materials.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 470 Struggle for Democracy and Development in Latin America (3 Credit Hours)

This course analyzes, from a historical perspective, two core problems in Latin America's modern (since c. 1880) history: political authoritarianism and economic underdevelopment. The temporal and spatial dimensions of change are highlighted in discussions of patron-client political systems, military autonomy and impunity, social movements and revolution, export-oriented economic growth, industrialization, and the roles of national, ethnic and gender identities.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 471 Revolution in Latin America (3 Credit Hours)

No world region matches Latin America in the frequency or extensive impacts of social revolution and social revolutionary movements from the 19th century to the present. A comparative approach to causation, process and outcome will govern the course, with special attention to the role of violence, ideology, international relations and socioeconomic structure.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 475 Global Africa (3 Credit Hours)

The course is designed to enrich students' understanding of the political, economic, social and cultural forces that shaped Africa and continue to affect the lives of peoples throughout the continent. It will focus on the contributions of African people, ideas and materials to global history and the impacts of imperialism, decolonization and globalization in Africa.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 480W Senior Seminar in International Studies (3 Credit Hours)

This writing-intensive course for advanced undergraduates explores the international dimensions of historical problems selected by the instructor. It fulfills the Senior Seminar requirement for International Studies majors, who are expected to have senior standing.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, senior standing in the BAIS degree program or permission of the instructor and the director of the BAIS program

HIST 481 Museums and Museology (3 Credit Hours)

The course examines the history of the public museum. It introduces museology, the profession of museum organization and management, focusing on design, outreach, artifact acquisition and preservation, and international museum standards. Museums as sites of historical research and teaching will receive special attention.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 482 Global History of Sport (3 Credit Hours)

This course examines imperialism, globalization, cultural diffusion, modernization, and social movements through the aperture of global sport. It pays attention to how sports act as embodiments of cultural performance and enable culture and political influence, as well as resistance, from the ancient Greeks through the twentieth century.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 483 Oral History (3 Credit Hours)

This course introduces students to the theories and methods of oral history. Topics include the history and applications of history, memory and history, project design and collection, and how to interpret and present interviews. Students will also learn about the technologies and digital formats of oral history and apply them during final projects.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H or HIST 205H

HIST 493 Holocaust and Film: Representing the Unimaginable in the Visual Turn (3 Credit Hours)

The course explores the history of the Holocaust through the medium of film as document, testimony, propaganda, artifact, artistic representation and projection of collective memory. Special attention is given to considering the medium of film from the viewpoint of the historian.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, HIST 127H, or HIST 205H

HIST 495/595 Topics in History (1-3 Credit Hours)

The course is an advanced study of selected topics designed for small groups of qualified students to work on subjects of mutual interest which may not be offered regularly. These courses appear in the course schedule, and will be more fully described in information distributed to academic advisors.

Prerequisites: HIST 100H or HIST 101H or HIST 102H or HIST 103H or HIST 104H or HIST 105H or HIST 126H or HIST 127H or HIST 205H

HIST 497 Tutorial Work in Special Topics in History (3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: HIST 201 and HIST 100H, or HIST 101H, or HIST 102H, or HIST 103H, or HIST 104H, or HIST 105H, or HIST 126H, or HIST 127H, or HIST 205H, senior standing, and approval of the department chair

HIST 498 Tutorial Work in Special Topics in History (3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: Senior standing and approval of the department chair

HLSC - Health Sciences

HLSC 318 Principles of Nutrition (3 Credit Hours)

This course is designed especially for those entering the health education or health care field, covering the physiology of each of the major body systems as a basis for understanding those aspects of its function that reflect the importance of various nutrients.

Prerequisites: CHEM 105N-CHEM 106N or CHEM 121N-CHEM 122N and CHEM 123N-CHEM 124N; BIOL 240, BIOL 241, BIOL 250 or BIOL 251, or permission of the instructor

HLSC 320 Health Equity and Disability Culture (3 Credit Hours)

This course will explore the history of health equity and disability and how prejudice and discrimination against people with disabilities impact health. Students will learn how to apply health equity frameworks, theories, and research to address disability-specific models of health disparities and to achieve health equity in populations with disabilities.

Prerequisites: RT 261 with a grade of C- or higher or PUBH 200 with a grade of C or higher or HLTH 120G with a grade of C or higher

HLSC 335 Population Health (3 Credit Hours)

This course provides a population-based approach to professional work in disease management, chronic care management and politics, in addition to students studying public health, health policy, quality and patient safety, health care administration, medicine, nursing, pharmacy, social work and other related clinical professions.

Prerequisites: RT 261 with a grade of C- or higher or PUBH 200 with a grade of C or higher or HLTH 120G with a grade of C or higher

HLSC 390 The U.S. Healthcare Delivery System (3 Credit Hours)

The uniqueness of the U.S. healthcare delivery system will be explored in terms of a systems framework and its complexity. The basic characteristics that differentiate the U.S. healthcare delivery system from that of other countries will be presented.

Prerequisites: RT 261 with a grade of C- or higher or PUBH 200 with a grade of C or higher or HLTH 120G with a grade of C or higher

HLSC 395 Topics in Health (1-3 Credit Hours)

Study of selected topics.

Prerequisites: Permission of the instructor

HLSC 405 Interprofessional Study Abroad on Global Health (1-3 Credit Hours)

This study abroad service learning course will introduce the student to the political, social, cultural, and ethical issues involved in prevention and health promotion globally. Students will travel to another country and learn the incidence/prevalence, morbidity/mortality, and identified public health problems in specific regions and countries.

Prerequisites: ENGL 110C

HLSC 425/525 Health Aspects of Aging (3 Credit Hours)

Identifies major issues and problems in meeting health care needs of the aged. Emphasis on role of social assets and supports in determining effects of life changes on the aging process.

Prerequisites: PUBH 200

HLSC 430W/530 Community Health Resources and Health Promotion (3 Credit Hours)

Designed to provide information about community health resources and health promotion theory. This is a writing intensive course.

Prerequisites: ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C with a grade of C or better, and a major in Health Sciences-Health Services Administration or a minor in Community Health

HLSC 440/540 Finance and Budgeting in Healthcare (3 Credit Hours)

This course covers financial management functions in healthcare organizations including operating and capital budgeting processes along with budgeting and financial controls.

Prerequisites: Junior standing and a declared major in the BSHS Health Services Administration program

HLSC 445/545 Health Sciences Research Methods (3 Credit Hours)

This course focuses on the principles and statistical procedures used in health sciences research and its application in health care settings.

Prerequisites: STAT 130M with a C or higher grade

HLSC 450/550 Public and Community Health Administration (3 Credit Hours)

A review of the principles and practice of administering public and community health organizations and programs at federal, state, and local levels. Constitutional, statutory and administrative bases for organizing and conducting public/community health programs will be discussed.

Prerequisites: A major in the BSHS Health Services Administration program, BS in Public Health program, or minor in Community Health

HLSC 461/561 Managerial Epidemiology (3 Credit Hours)

This course will blend theory and application of epidemiology. This course will also provide a comprehensive introduction to epidemiology and explain how to use epidemiological concepts and tools to improve decisions about the management of health services.

Prerequisites: STAT 130M and a declared major in the BSHS Health Services Administration program or approval of the program director

HLSC 465/565 Policy and Politics of Health (3 Credit Hours)

This course will explore both health policy and the politics of health. Students will develop an understanding of the systematic and analytical framework for developing health and health care policy issues.

Prerequisites: A major in the BSHS Health Services Administration program or minor in Community Health

HLSC 468 Internship (1-3 Credit Hours)

The internship will allow a student new to the Bachelor of Science in Health Science degree program to complete a capstone internship to gain entry skills for a beginning career pathway in the profession. The course is intended to provide clinical field experience and assimilation of the theoretical aspects learned in the coursework in a practical/work setting. A minimum of 120 hours is required for the 3-credit internship.

Prerequisites: Major in BSHS and senior standing

HLSC 475/575 Healthcare Marketing (3 Credit Hours)

This course provides a basic understanding of marketing in a health care setting. It will cover the following: the history of marketing in a health care setting, health care markets, marketing techniques, and leadership skills in managing and supporting the marketing efforts.

Prerequisites: A major in BSHS Health Services Administration or BS in Public Health

HLSC 480/580 Health Ethics and the Law (3 Credit Hours)

This course provides the students with a basic knowledge of health law and examines legal issues confronting health services administrators in various health care environments.

Prerequisites: A declared major in the BSHS Health Services Administration program

HLSC 483/583 Artificial Intelligence Applications in Health (3 Credit Hours)

This course offers an exploration of how artificial intelligence (AI) is transforming healthcare delivery and improving patient outcomes. Building on foundational knowledge from AI Ethics and Policy and AI Methods and Models, students will dive deeper into the integration of AI in clinical and operational contexts. Key topics include the role of AI in diagnostics and personalized medicine and other AI implementations in healthcare.

Prerequisites: Permission of instructor

HLSC 485/585 Health Informatics (3 Credit Hours)

This course focuses on healthcare informatics (information systems) and applications in health care organizations. It provides an overview of health information system concepts, management, and integration of technology in healthcare organizations as applicable to the majors in Health Sciences.

Prerequisites: Declared BSHS major

HLSC 495/595 Topics in Public/Community Health Administration (1-3 Credit Hours)

This course provides the opportunity for the study of selected topics in public/community health under the supervision of a faculty member.

Prerequisites: Permission of the instructor

HLSC 498 Directed Research in Health Services Administration (1-6 Credit Hours)

Supervised research on a specific problem in health services administration. Regular meetings with faculty and a written/oral report are required.

Prerequisites: Permission of the instructor

HLTH - Health

HLTH 101 Introduction to the Health Professions (1 Credit Hour)

Explores careers in the health professions. Assists students in making informed choices regarding careers and programs of study and prepares students to apply for acceptance into health-related majors. Activities are included to help freshmen transition to college work.

HLTH 102 Health Professions in the United States (1 Credit Hour)

This course examines the health care system in the U.S. and identifies the role played by selected health professions in the delivery of care. Designed for students preparing themselves for entry into health related majors.

Prerequisites: HLTH 101 or permission of instructor

HLTH 120G Information Literacy for Health Professions (3 Credit Hours)

This course introduces students to information literacy and research in health disciplines in the context of future careers. Students will develop skills in searching, evaluating, and citing information required for health research projects. The course examines the methods and tools of health analysis and explores the mechanics of research presentation and writing to help student pursuing health related majors and careers prepare for successful completion of upper-division requirements. The class provides a brief introduction to ethical issues related to health research and writing.

HLTH 130 Computer Technology Skills for the Health Professions (2 Credit Hours)

This course is designed to help students in the health professions gain the computer and technological skills needed to succeed in their academic careers and in today's workplace. Students will develop personal competency in practical applications such as Google Docs, spreadsheets and presentation graphics, note taking applications, document revisions, computer hardware, information retrieval and ethics in health information.

HLTH 397 Independent Study (3 Credit Hours)**HLTH 425 Leadership and Management for Health Professionals (3 Credit Hours)**

A review of the administration, management, policies, and practices governed by scopes of practice in a variety of health care settings. Topics covered include communication, planning and decision making, leadership and conflict management, and legal and ethical issues of concern to specific health professions.

Prerequisites: junior standing

HLTH 495/595 Topics in Health (1-3 Credit Hours)

HMS - Human Movement Sciences

HMS 200S Personal Health and Wellness (3 Credit Hours)

This course will take a holistic approach to discuss and apply the dimensions of wellness as related to personal health. Dimensions of wellness covered will include physical, emotional, social, financial, intellectual, environmental, spiritual, and occupational. Students will evaluate how lifestyle, environment, and heredity impact each dimension of wellness. Emphasis will be placed on identifying how health behaviors impact each dimension of wellness and overall quality of life. In addition, the course will allow students to explore their own personal health and learn how to develop and implement behavioral and environmental strategies to improve their wellness.

HMSV - Human Services

HMSV 339 Interpersonal Relations (3 Credit Hours)

Students will learn concepts and theories of interpersonal relationships. Development of skills necessary for effective communication will be stressed.

Prerequisites: ENGL 211C or ENGL 221C or ENGL 231C

HMSV 341 Introduction to Human Services (3 Credit Hours)

Students will learn about human services, the helping process, and the role and function of the human service worker. Students will be exposed to local and state human services facilities.

Prerequisites: ENGL 211C or ENGL 221C or ENGL 231C OR acceptance to the certificate in Addiction Prevention and Treatment and a test code of APTW

HMSV 343 Human Services Methods (3 Credit Hours)

Presents theories and techniques used by human services workers in a variety of settings.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C OR acceptance to the certificate in Addiction Prevention and Treatment and a test code of APTW

Pre- or corequisite: HMSV 341 with a grade of C or better

HMSV 344 Career Development and Appraisal (3 Credit Hours)

Focuses on career development throughout the life span with emphasis on vocational theories, interventions, assessments, and socioeconomic factors.

Prerequisites: Junior standing

Pre- or corequisite: HMSV 341 with a grade of C or higher

HMSV 346 Diversity Issues in Human Services (3 Credit Hours)

This course serves as an introduction to multicultural helping. The influence of socio-identities (e.g., race, ethnicity, religion, gender, socioeconomic status, sexual orientation) on individuals' functioning, concerns, and the helping process will be explored.

Prerequisites: Junior standing

Pre- or corequisite: HMSV 341 with a grade of C or higher

HMSV 368 Case Management & Crisis Techniques through Field Observation (3 Credit Hours)

Students will visit and examine human services systems such as mental health, substance abuse, criminal justice, education, rehabilitation, and professional associations to facilitate decision-making in selecting an internship and to gain a complex understanding of the roles of the human services professional.

Prerequisites: HMSV 341 with a grade a C or higher and HMSV 343 with a grade of C or higher OR acceptance to the certificate in Addiction Prevention and Treatment and a test code of APTW

HMSV 397 Independent Study (3-6 Credit Hours)

Individual study under the supervision of an undergraduate faculty member.

Prerequisites: Approval of Human Services Program Director and Counseling and Human Services Department Chair

HMSV 440W Program Development, Implementation, and Funding (3 Credit Hours)

This course presents models and practices in evaluating, monitoring, and implementing human services programs. The course includes an overview of funding, creating budgets and monitoring expenditures for programs. This is an upper-level writing intensive class. A grade of C or better is required.

Prerequisites: HMSV 341 with a C or better, HMSV 343 with a C or better, and ENGL 211C or ENGL 221C or ENGL 231C with a C or better

HMSV 444 Psycho-educational Groups (3 Credit Hours)

This course combines lectures and experiential learning about psycho-educational groups. Principles and practices for developing and leading psycho-educational groups are emphasized.

Prerequisites: HMSV 341 with a grade of C or higher and HMSV 343 with a grade of C or higher

HMSV 447 Introduction to Substance Abuse (3 Credit Hours)

This course develops the professional identity of the student as a practitioner of substance abuse services while introducing the student to the signs and symptoms of substance abuse, the recovery process and relapse prevention methods.

Prerequisites: HMSV 341 with a grade of C or better and HMSV 343 with a grade of C or better OR acceptance to the certificate in Addiction Prevention and Treatment and a test code of APTW

HMSV 448 Interventions and Advocacy with Children (3 Credit Hours)

This course provides an overview of how human service workers assist children in a variety of settings. Emphasis will be placed upon advocacy, supportive work, and short term crisis intervention.

Prerequisites: HMSV 341 with a grade of C or higher and HMSV 343 with a grade of C or higher

HMSV 449 Crisis Intervention, Prevention and Ethics (3 Credit Hours)

This course explores effective crisis intervention, examines prevention strategies, and develops students' ethical decision making within human service practice.

Prerequisites: HMSV 341 with a grade of C or higher and HMSV 343 with a grade of C or higher OR acceptance to the certificate in Addiction Prevention and Treatment and a test code of APTW

HMSV 452 Substance Abuse Treatment and Research (3 Credit Hours)

This course explores effective substance abuse treatment planning and intervention strategies through lectures and experiential learning and examines research trends in the substance abuse field.

Prerequisites: HMSV 341 with a grade of C or better, HMSV 343 with a grade of C or better and HMSV 447 with a grade of C or better OR acceptance to the certificate in Addiction Prevention and Treatment and a test code of APTW

HMSV 468 Internship in Human Services (12 Credit Hours)

This course involves field placement in a human services setting. Approximately 400 hours are devoted to field placement, group seminars and individual supervision.

Prerequisites: Completion of all coursework including General Education requirements, core courses, major courses, and elective courses; a grade of C or better in all prior HMSV courses and program approval is required

Pre- or corequisite: HMSV 339, HMSV 341, HMSV 343, HMSV 344, HMSV 346, HMSV 368, HMSV 440W, HMSV 444, HMSV 447 or HMSV 448, HMSV 449, HMSV 452 or HMSV 494, and HMSV 491

HMSV 491 Family Guidance (3 Credit Hours)

This course provides a study of the family as a system and an introduction to a variety of issues confronting the family, including child abuse, substance abuse and addiction, spouse abuse, and others that produce more than usual stress in the family. Available community resources for helping families will be examined.

Prerequisites: HMSV 341 with a grade of C or higher and HMSV 343 with a grade of C or higher

HMSV 494 Entrepreneurship in Human Services and Non-Profit Fundraising (3 Credit Hours)

This course is designed to expose human service students to the art of ethical fund-raising in human services, including annual and capital campaigns, telemarketing, special events, direct mail marketing, face-to-face solicitation, e-fund-raising, and grant writing. This course replaced HMSV 441. Students with credit for HMSV 441 cannot receive credit toward their degree for HMSV 494.

Prerequisites: HMSV 341 with a grade of C or higher and HMSV 343 with a grade of C or higher

HMSV 495 Topics in Human Services (1-6 Credit Hours)

The study of selected topics in human services.

Prerequisites: senior standing or permission of the instructor

HNRS - Honors

HNRS 100 Honors General Education Abroad (Humanities) (3 Credit Hours)

Taught in an international setting, special honors sections of general education courses meeting one of the following lower-division general education requirements: oral communication, information literacy, language and culture, literature, human creativity, human behavior, interpreting the past, the impact of technology, or philosophy and ethics.

Prerequisites: A passing score on the Writing Success Placement Tool (WSPT) and permission of the instructor

HNRS 101 Honors General Education Abroad (Sciences) (3-4 Credit Hours)

Taught in an international setting, special honors sections of general education courses meeting one of the following lower-division general education requirements: mathematical skills, information literacy, the nature of science, and the impact of technology.

Prerequisites: A passing score on the Writing Success Placement Tool (WSPT)

HNRS 109 Engineering Student Success (3 Credit Hours)

For Perry Honors College students, the course introduces students to the engineering profession. The course covers math skills with engineering applications, as well as study skills and strategies for a successful transition into college. An application-oriented, hands-on approach to reinforce math topics used in core engineering courses will be used in the course. The course prepares prospective engineering majors for ENGN 110. This course does not count towards Batten College of Engineering & Technology graduation credit.

Prerequisites: Honors College approval and MATH 102M or MATH 103M

HNRS 200 Peer Education and Leadership (3 Credit Hours)

This course prepares students for work as peer mentors and tutors. Students will develop skills in information literacy and research as they learn how to create and implement individualized student success/academic plans for themselves and others.

HNRS 201 Monarch Think Tank I (3 Credit Hours)

The Monarch Think Tank draws students from all disciplines to collaborate with each other, faculty and community members as they design project-based solutions to pertinent social issues. Think Tank topics vary each year. Guided by distinguished faculty, students analyze their topic through in-depth classroom and field research, readings and off-campus trips.

HNRS 226 Undergraduate Research Apprenticeship (1-3 Credit Hours)

The Research Apprenticeship offers students the opportunity to develop and acquire skills in research and information literacy through active involvement in ongoing research programs or in research projects under the supervision of a faculty mentor. Experiences may include but are not limited to gathering and analyzing information to develop proposals, survey construction, stakeholder identification, stimulus development, quantitative and qualitative data collection, statistical analysis, writing reports, and presenting results. Available research projects/programs will vary each semester. Interested students should consult with the Honors College Dean and visit the Honors College website for more information about research apprenticeship opportunities: <http://www.odu.edu/ao/honors>.

Prerequisites: approval of Honors College Dean

HNRS 250G Media and Info Literacy in the Google Age (3 Credit Hours)

This information literacy course focuses on communication technology and our sources for information, including digital, print, and non-print sources. By focusing on the credibility control, privacy, and ownership of information, students will learn to identify an information need, then locate, evaluate, and use resources effectively and responsibly. The course will enhance students' knowledge, evaluation, and use of scholarly and popular media material in the 21st century so that they might become well-informed critical thinkers, professionals, and citizens.

HNRS 300 Great Book Seminar (1 Credit Hour)

A 'Great Book' Seminar is a small (5-10 student), discussion-based class focused on a book that makes a difference, a work that has changed and influenced the ways people live and continue to think about themselves, others, and the world. Led by a faculty mentor, students will develop their information literacy by interpreting, communicating, problem-solving, and charitably listening to a variety of viewpoints. Faculty and student mentors will select the book read in this course.

Prerequisites: Must be a student in the Perry Honors College

HNRS 301 Monarch Think Tank II (3 Credit Hours)

The Monarch Think Tank draws students from all disciplines to collaborate with each other, faculty and community members as they design project-based solutions to pertinent social issues. Think Tank topics vary each year. Guided by distinguished faculty, students analyze their topic through in-depth classroom and field research, readings and off-campus trips.

Prerequisites: ENGL 211C or equivalent

HNRS 326 Undergraduate Research Apprenticeship II (3 Credit Hours)

Research apprenticeship with a faculty member, assisting a faculty member in the development and execution of research. May be repeated to 9 credit hours maximum.

Prerequisites: Honors College, permission of the instructor and 3.0 cumulative grade point average

HNRS 368 Honors Internship (3 Credit Hours)

Internship credit is available for Perry Honors College students who have secured an internship outside of their field of study or students that are not offered internship credit through their department.

Prerequisites: Must be a Perry Honors College Student

HNRS 386T Evolution of Modern Science (3 Credit Hours)

A section of SCI 302T/HIST 386T for Perry Honors College students, this course outlines the history of science from Aristotle to the present. Scientific progress has always been coupled with human progress and subject to the politics and culture of the times. Scientists, in most instances, have been in the mainstream of society. But, because of their curiosity and innovation, scientists have often clashed with the prevailing culture.

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, HIST 105H, HIST 126H, or HIST 127H

HNRS 387 Honors Civic Learning Project (1 Credit Hour)

Students volunteer for 45 hours of work, keep a work experience journal reflecting on their day-to-day experiences as a volunteer, and write a short paper detailing how the experience helped them to identify, revise and accomplish future learning and career goals.

Prerequisites: junior standing in the Honors College

HNRS 389 McNair Summer Research Institute (3 Credit Hours)

This research course is open only to TRiO McNair Scholars. During this 8-week course, students will acquire basic skills in research to include understanding research ethics, developing technical writing skills, and effectively disseminating their research. Students will demonstrate an understanding of research methodology, prepare a written literature review, construct their research proposal, and perform statistical analyses. Course instructors, faculty mentors, and the graduate assistant serving as the research and writing coach will offer individualized support to students in the completion of their research projects.

Prerequisites: junior standing in the Honors College

HNRS 390 McNair Senior Seminar (1 Credit Hour)

This course is open only to TRiO McNair Scholars. The purpose of this course is to prepare students for applying for admission into graduate programs and provide critical strategies for thriving at the graduate level and as a professional. Students will receive support in identifying the essential components of a graduate school application and establishing a clear understanding of how to prepare and succeed as a graduate student.

Prerequisites: Junior standing in the Honors College

HNRS 395 Honors Topics (1-3 Credit Hours)

A study of selected topics. Honors Topics courses are designed to help students to make connections between academic knowledge and relevant experience, observe connections across disciplines, as well as adapt/apply skills, abilities, theories or methodologies gained in one situation to meet the needs of new situations. These courses are open to non-honors students with at least a 3.25 cumulative GPA. Courses will appear in the course schedule, and will be more fully described in information distributed to all academic advisors.

Prerequisites: Junior standing and permission of the instructor

HNRS 396 Honors Topics (Study Abroad) (1-4 Credit Hours)

A study of selected topics examined in an international setting. Honors Topics Abroad courses are designed to help students gain new perspectives on their fields of study, develop intercultural competencies and communication skills, and engage with situations and questions that challenge their own assumptions/values. These courses are open to non-honors students with a cumulative GPA of at least 3.25. Courses will appear in the course schedule, and will be more fully described in information distributed to all academic advisors.

Prerequisites: Junior standing and permission of the instructor

HNRS 400 Honors ePortfolio (1 Credit Hour)

Recommended for juniors and seniors in the Perry Honors College, this course explores ways to showcase and reflect on the students' curricular and extracurricular honor education--showing the progression of their learning, experiences, and accomplishments that leads to where they want to go in life. This is a guided opportunity to assist students in fulfilling their honors ePortfolio requirement and to develop their social media profiles.

Prerequisites: must be a Perry Honors College student

HNRS 401/501 Social Entrepreneurship (3 Credit Hours)

This class draws students from all disciplines to collaborate with each other, faculty, and community members as they co-design project-based solutions to pertinent social issues. Topics related to social entrepreneurship vary each year. Guided by distinguished faculty, students analyze their topic through in-depth classroom and field research, readings, and off-campus trips.

Prerequisites: ENGL 211C or equivalent

HNRS 402 Language Directed Study (3 Credit Hours)

Under the supervision of a faculty mentor, students work independently using self-instructional materials. The focus is on grammar, reading or writing. Language Directed Study does not satisfy general education, major or college language requirements. Permission of the Honors College required.

Prerequisites: Honors College Students Only; Permission of Honors College required

HNRS 490 Translation Project (3 Credit Hours)

Honors College students will work in teams and individually to prepare sample translations for a variety of target audiences, markets, or clients. Individual project content will be varied: some projects may focus on literary translation, while others with adapting websites, software, video games, and other products into forms that meet local expectations for content. The overarching goal is for students to develop tools for thinking about the centrality of translation across academic disciplines and realms of human experience. An intermediate or advanced level of fluency in a language other than English is recommended to take this course.

Prerequisites: Perry Honors College student

HNRS 497 Honors Independent Study (1-3 Credit Hours)

Offered upon request each semester. This course is an opportunity for students to engage in directed readings and/or research in a topic with which they are familiar.

Prerequisites: open to juniors and seniors in the Honors College

HNRS 498 Honors Independent Study (1-3 Credit Hours)

Offered upon request each semester. This course is an opportunity for students to engage in directed readings and/or research in a topic with which they are familiar.

Prerequisites: open to juniors and seniors in the Honors College

HNRS 499 Senior Honors Thesis (3 Credit Hours)

Each student will undertake a research experience under the supervision of a faculty member. A research proposal and research report are required.

Prerequisites: permission of the Honors College Dean, 3.25 cumulative GPA

HPE - Health and Physical Education

HPE 200 Foundations of Education, Physical Education and Health (3 Credit Hours)

Teacher candidates gain insight into the techniques, methodology, and philosophy of field-based health and physical education teachers. Teacher candidates will be expected to observe and participate in the teaching of simple lessons. This course requires a completed ODU clearance/background check prior to entering a school or community agency. Visit: odu.edu/occe for clearance procedures. If students do not have the clearance by the first week of classes, they will be dropped. This course requires a 20 hour placement in an elementary setting.

HPE 218 Aquatics and Outdoor Education (2 Credit Hours)

Teacher candidates gain insight into the techniques, methodology, and philosophy of field-based health and physical education teachers. Teacher candidates will be expected to observe and participate in the teaching of simple lessons.

Prerequisites: open to PE - Teacher Prep majors only

HPE 220 Teaching of Team Sports (3 Credit Hours)

This course covers skills and strategies of team sports, where opposing teams interact directly and simultaneously to achieve an objective. The team sports will be broken down into the components of territory, net/wall, and fielding/run scoring games. The student teacher will become familiar with teaching and organizational techniques appropriate for each activity. Emphasis is placed on a tactical approach and knowledge of sport specific skills, game strategy, rules, teaching facilitation, organization, and demonstration of different parts of a lesson.

Prerequisites: open to PE-Teacher Preparation majors only

HPE 222 Teaching Individual Sports and Dance (3 Credit Hours)

This course is designed as both a laboratory and methods class in which the student learns skills and strategies of pickleball, bowling, badminton, golf, tennis, gymnastics, and dance. It is designed to develop knowledge, understanding, and attitudes of fundamental movements. The student teacher will become familiar with teaching and organizational techniques appropriate for each activity. Emphasis is placed on a tactical approach and knowledge of specific skills, game strategy, rules, teaching facilitation, organization, and demonstration of different parts of a lesson.

Prerequisites: open to PE - Teacher Prep majors only

HPE 295 Topics in Physical Education (1-3 Credit Hours)

This course provides an opportunity for in-depth study of selected topics in physical education.

Prerequisites: sophomore standing and approval of program advisor

HPE 300 Teaching Elementary Physical Education (3 Credit Hours)

This course is designed to acquaint the teacher candidate with elementary age children, their characteristics, interests, needs, and learning styles. Observation, analysis, and prescription of motor skills, curriculum design using skill themes and movement concepts are aimed at providing the teacher candidate with an increased understanding of how these actions directly relate to the process of effective teaching. Includes a 15 hour field experience.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C and HPE 200

HPE 301W Methods and Materials in Teaching Physical Education (3 Credit Hours)

This course is designed to acquaint the teacher candidate with the current theories, techniques, and practices utilized in teaching physical education at the secondary level. Discussions will focus on the various age group characteristics, interests, needs and learning styles as related to a school setting. Observation, analysis, and prescription of motor skills, movement concepts, instructional techniques, and curriculum models are aimed at providing the professional educator with an increased understanding of how these factors directly relate to a process of effective teaching. This writing intensive course includes a 15 hour field experience.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C and HPE 200

HPE 308 Driver Education Foundations of Traffic Safety (3 Credit Hours)

The intent of the course is to develop a thorough understanding of the highway transportation systems, the complexity of the driving task, and factors contributing to performance of highway users (e.g. attitudes and skills) necessary to develop competent drivers. The course will provide prospective teachers with the essential knowledge and skills to effectively deliver course content as an endorsed driver education trainer.

Prerequisites: A grade of C or better in ENGL 110C or instructor permission

Pre- or corequisite: HPE 309

HPE 309 Principles and Methodologies of Classroom and In-Car Instruction (3 Credit Hours)

This course provides teacher candidates with an overview of teaching methods and effective practices for driver education instruction with a focus on teaching skills. An emphasis is placed on program organization, administration, classroom instruction, single car instruction, multiple-car range instruction, simulation and evaluation. A minimum of 20 hours behind-the-wheel supervised teaching experiences.

Prerequisites: A grade of C or better in ENGL 110C or instructor permission

Pre- or corequisite: HPE 308

HPE 317 Human Growth & Motor Development (3 Credit Hours)

This course is an examination of the physical growth and motor development of the human being over the life span. Emphasis is on the assessment of physical and cognitive development, particularly in the K-12 ages. Theory and technique for research are discussed and the use of research findings is incorporated into the assessment materials. Attention is directed toward acquisition of basic skills, perceptual-motor development, and age-related changes.

Prerequisites: HPE 200

HPE 318 Motor Learning (3 Credit Hours)

This course is designed to provide the student with experiences in the practical application of theory related to motor learning. Feedback, transfer learning, practice, and motor control principles and concepts are addressed.

Prerequisites: HPE 200

HPE 324 Teaching Injury Care for Sports (3 Credit Hours)

This course presents the knowledge, skills, and teaching techniques essential for proper care in emergency and sport injury situations. Aspects of emergency first aid, sport specific injury recognition and care, and CPR will be covered. Upon satisfactory completion of the course and payment of certification fees, students will receive a two-year certification in first aid and CPR. Students will have the option of taking the sports first aid certification test from ASEP for coaching.

Prerequisites: HPE 200

HPE 327 Teaching of Health and Physical Education, Pre-K-8 (3 Credit Hours)

This course is designed to prepare classroom teachers in PreK-8 licensure programs for the teaching of health and physical education. Appropriate content, instructional strategies, effective classroom management, and safety issues and requirements will be presented.

Prerequisites: junior standing

HPE 368 Coaching Internship (6 Credit Hours)

Final field placement required for all students with an emphasis in a coaching minor. Students will be placed in an athletic coaching environment to gain experience in personal communication, technique instruction, practice organization and administrative duties required of the specific sport of their emphasis. Placement of internship subject to instructor approval. Minimum of 200 clock hours (hours to be arranged).

Prerequisites: Senior standing and HPE 409, HPE 415, and HPE 456

HPE 400 Management Skills for Teaching Health and Physical Education (3 Credit Hours)

Foundations in psychological, sociological, and academic needs of students, with specific focus on management skills in open classroom and sport settings. Specialized safety concerns and environmental considerations are also addressed. Lesson planning, goal setting, and movement formations unique to HPE activities are included.

Prerequisites: HPE 200

HPE 402/502 Methods and Materials in Health Education (3 Credit Hours)

This course will enable teacher candidates to gain insight into the techniques, methodology, and philosophy of field-based health and physical education. Teacher candidates will be expected to observe and participate in the teaching of simple lessons.

Prerequisites: HPE 200

HPE 404/504 Adapted Physical Education (4 Credit Hours)

Students will become acquainted with the practices and researching of different disabilities, the learning modes of the exceptional child, and IDEA (the law that advocates free and appropriate education). The course will also examine how to work within the ecosystem surrounding a child with disabilities. A vital component of the course will be the practical application of theory.

Prerequisites: HPE 200

HPE 406/506 Tests and Measurement in Physical Education and Health (3 Credit Hours)

This course is designed to acquaint the student with tests and measurement in the fields of health and physical education, test construction, scoring, and methods of using results.

Prerequisites: junior standing

HPE 409/509 Physiology of Exercise (3 Credit Hours)

An investigation into the physiological adjustments of the human organism to exercise, including systematic and biochemical molecular changes. Major areas of concern include neuromuscular, metabolic, and cardiorespiratory changes during exercise and the influence of such variables as nutrition, drugs, environment, age, sex, training and body weight.

Prerequisites: BIOL 240 or BIOL 250

HPE 415/515 Principles of Coaching Management (3 Credit Hours)

This course is designed to provide students with a basic knowledge of the coaching profession. Special emphasis will be placed on establishing a sound coaching philosophy, selecting a coaching style, desirable qualities of a coach, ethics and the coach, roles of the head coach, planning and organizing for games and practices, coaching pedagogy, off-season planning, final preparations for the season, and issues and problems related to coaching and recruiting athletes.

Prerequisites: Junior standing

HPE 430/530 Nutrition and Fitness Education (3 Credit Hours)

The study of techniques for the teaching of nutrition and health-related fitness. Content to be covered includes nutrition and various aspects of fitness training appropriate for the teaching of PreK-12 physical education and health.

Prerequisites: HPE 200 and HPE 402

HPE 456/556 Sports Psychology (3 Credit Hours)

Study of the psychological bases of coaching strategies and methodologies. Emphasis is placed on applying knowledge in field settings.

Prerequisites: Junior standing

HPE 469/569 Practicum Experience and Instructional Planning in Health and Physical Education (3 Credit Hours)

Instructional planning coupled with a clinical experience that allows the teaching candidate to teach and observe professionals in a field-based setting. Portfolio development, reflective assessment of teaching, and student assessment techniques will be emphasized. This course requires a completed ODU clearance/background check prior to entering a school or community agency. Visit: <https://www.odu.edu/oce> for clearance procedures. If students do not have the clearance by the first week of classes, they will be dropped.

Prerequisites: HPE 200 and admission into teacher education program

HPE 480 Teacher Candidate Seminar (1 Credit Hour)

Study and group discussion of problems growing out of the student teaching (teacher candidate internship) experience.

Prerequisites: acceptance into teacher education and approval of the program advisor

HPE 485 Teacher Candidate Internship (12 Credit Hours)

A culminating experience that provides a field-based application of effective techniques in behavior, management, instructional strategies, and the development of professional attributes in K-12 school setting. This course requires a completed ODU clearance/background check prior to entering a school or community agency. Visit: <https://www.odu.edu/oce> for clearance procedures. If students do not have the clearance by the first week of classes, they will be dropped.

Prerequisites: acceptance into teacher education, completion of approved program, passing scores on the appropriate PRAXIS II content examination, and an approved application for Teacher Candidate Internship

HPE 497 Topics in Health and Physical Education (1-3 Credit Hours)

A study of specialized topics in health and physical education.

Prerequisites: permission of the instructor

HPE 498 Topics in Health and Physical Education (1-3 Credit Hours)

A study of specialized topics in health and physical education.

Prerequisites: permission of the instructor

IDS - Interdisciplinary Studies

IDS 300W Interdisciplinary Theory and Concepts (3 Credit Hours)

An examination of the history, concepts and application of interdisciplinary study. This course includes an analysis of similarities and differences in academic disciplines and the application of interdisciplinary approaches to a specific topic of study. This is a writing intensive course.

Prerequisites: a grade of C or better in ENGL 211C, ENGL 221C or ENGL 231C

IDS 301 Data and Humanities Research (3 Credit Hours)

This course examines the ways quantitative and qualitative data can enhance our understanding of cultural, historical, and artistic phenomena across the humanities. Students will learn to analyze, visualize, and interpret data while engaging with theoretical frameworks relevant to the humanities.

Prerequisites: Junior-level or above

IDS 307T Digital Writing (3 Credit Hours)

This course introduces students to issues of writing in various digital environments like web pages, email, blogs, wikis, and discussion boards. It also introduces fundamentals of hypertext authoring, digital and visual rhetoric, and image manipulation.

Prerequisites: ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C

IDS 368 Internship in Interdisciplinary Studies (1-6 Credit Hours)

An opportunity to integrate service and applied learning experience with interdisciplinary perspectives.

Prerequisites: junior standing and permission of individualized interdisciplinary studies program coordinator

IDS 369 Internship in Sustainability and Conservation Leadership (3-6 Credit Hours)

As part of the Sustainability and Conservation Leadership minor, this graded internship will provide an opportunity to integrate service and applied learning experience with interdisciplinary perspectives. 300 hours are required for the 3-credit option, and 600 hours are required for the 6-credit option.

Prerequisites: BIOL 466W/OEAS 466W/IDS 466W and BIOL 467/OEAS 467/IDS 467

IDS 397 Independent Study (1-6 Credit Hours)**IDS 398 Independent Study (1-6 Credit Hours)****IDS 400/500 Study Abroad (0 Credit Hours)**

IDS 466W Introduction to Mitigation and Adaptation Studies (3 Credit Hours)

Students will be introduced to the science underpinning mitigation of human-induced changes in the Earth system, including but not limited to climate change and sea level rise, and adaptation to the impacts of these changes. The course will cover the environmental hazards and the opportunities and limitations for conservation, mitigation and adaptation. This is a writing intensive course. Cross listed with BIOL 466W and OEAS 466W.

Prerequisites: BIOL 291 or permission of instructor

IDS 467 Sustainability Leadership (3 Credit Hours)

In this class, students will discover what makes a leader for sustainability. They will consider a range of global and local crises from a leadership point of view in the context of sustainability science, which addresses the development of communities in a rapidly changing social, economic, and environmental system-of-systems environment. The course will be based on taking a problem-motivated and solution-focused approach to the challenges considered. The course includes a service learning project focusing on a leadership experience in solving a real-world environmental problem.

Prerequisites: BIOL 466W or OEAS 466W or IDS 466W

IDS 493 IDS Electronic Portfolio Project (3 Credit Hours)

The preparation of an electronic portfolio integrating the student's academic study, work experiences, skill identification and work products. Alternative formats are used for varying uses of the portfolio.

Prerequisites: IDS 300W or permission of the instructor and senior standing

IDS 494 Entrepreneurship in Interdisciplinary Studies (3 Credit Hours)

This course is designed to help students enhance their personal and professional development through innovation guided by faculty members and professionals. It offers students an opportunity to integrate disciplinary theory and knowledge through developing a nonprofit program, product, business, or other initiative. The real-world experiences that entrepreneurs provide will help students understand how academic knowledge leads to transformations, innovations, and solutions to different types of problems.

Prerequisites: IDS 300W and approval of the program coordinator

IDS 495 Topics in Integrative Studies (3 Credit Hours)

Focused study of selected topics linking perspectives, research and applications from a variety of disciplines. Emphasis is on disciplinary synthesis.

Prerequisites: IDS 300W

IDS 496/596 Topics in Interdisciplinary Studies (3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule and will be more fully described in information distributed to all academic advisors.

Prerequisites: IDS 300W or permission of instructor

IDS 497 IDS Individualized Senior Project (3 Credit Hours)

This course is a vehicle for the execution of the senior project requirement of the Interdisciplinary Studies Program. The project will be negotiated between the student, faculty sponsors, and the program. Open only to individualized integrative studies majors.

Prerequisites: IDS 300W, permission of the instructor and an approved individualized integrative studies curriculum plan

INBU - International Business

INBU 367 Cooperative Education (1-3 Credit Hours)

May be repeated for credit. Supervised experience in the international business work place requiring written statement of objectives and evaluation of experience. Pass/fail grading only.

Prerequisites: Permission of IB coordinator and a declared major in the University or permission of the Dean's Office

INBU 368 Internship in International Business (1-3 Credit Hours)

Supervised experience in the international business work place requiring written statement of objectives and evaluation of experience. Pass/fail grading only.

Prerequisites: Permission of IB coordinator, and a declared major in the University or permission of the Dean's Office

INBU 431 Doing Business in Europe (3 Credit Hours)

A survey course to provide an overview of the contemporary business environment in Europe, with a focus on the European Union. Topics will include an examination of the social, political, and economic forces which affect business in Europe.

Prerequisites: MGMT 325, FIN 323, and MKTG 311 or permission of the instructor, and a declared major in the University or permission of the Dean's Office

INBU 432 Doing Business in Latin America (3 Credit Hours)

A survey to provide an overview of the contemporary business environment in Latin America. Topics will include an examination of the social, political and economic forces which affect business in Latin America.

Prerequisites: MGMT 325, FIN 323, and MKTG 311 or permission of the instructor, and a declared major in the University or permission of the Dean's Office

INBU 433 Doing Business in Asia (3 Credit Hours)

An analysis of business practices in Asia. Emphasis will be on business, government relations, business strategy, structure, organizational processes, and human resource management.

Prerequisites: MGMT 325, FIN 323, and MKTG 311 or permission of the instructor, and a declared major in the University or permission of the Dean's Office

INBU 434 International Trade Field Study (3 Credit Hours)

An applied field research study to develop an export trade plan which involves market analysis, risk analysis, financing and distribution decisions in overseas markets.

Prerequisites: ECON 450, MKTG 411, FIN 435 or MGMT 361, or permission of the instructor, and a declared major in the University or permission of the Dean's Office

INBU 436 International Business Law (3 Credit Hours)

This course examines the sources of international business law, the relationship between such law and the U.S. legal system, the choice of law in international business disputes, the special issues that arise when doing business with foreign governments, the law governing international sales and the shipment of goods, and international intellectual property protection. In addition, the relationships between law and culture involved in international business transactions will be examined.

Prerequisites: WCS 350 and a declared major in the university or permission of the Dean's Office

INBU 437 International Human Resource Management (3 Credit Hours)

International HRM focuses on the management of human resources in an international context. The course will focus on policies, programs and practice characteristics of organizational efforts to manage human assets worldwide, including an overview of cross-national team dynamics and communication systems, leadership techniques, and national employment laws. It will also explore the critical impact that these policies have on the success of firms in doing business abroad.

Prerequisites: MGMT 325 (or equivalent) or permission of the instructor, and a declared major in the University or permission of the Dean's Office

INBU 438 Globalization and International Trade (3 Credit Hours)

This course provides an economic overview of international trade and the theories that support globalization and international trade policies. The course introduces students to the global value chain and its stakeholders, with an emphasis on costs, transportation, infrastructure, and technology. Students will examine supply chain management processes that organizations use to successfully manage import and export operations.

Prerequisites: ECON 201S and ECON 202S, and a declared major in the university or permission of the Dean's office

INBU 450 Global Business (3 Credit Hours)

Lecture, discussion and case studies. A capstone course to integrate and apply the theories and concepts learned in required international business courses to the operations of international business organizations.

Prerequisites: ECON 450, MKTG 411, FIN 435, or permission of the instructor, and a declared major in the University or permission of the Dean's Office

INBU 463 International Business Seminar Abroad (3 Credit Hours)

A study tour abroad arranged in cooperation with a foreign university, including lectures on international business topics and visits to international firms and economic/business organizations. Written work required.

Prerequisites: a declared major in the University or permission of the Dean's Office

INBU 495 Topics in International Business (1-3 Credit Hours)

A study of selected topics, the title of which will appear in the course schedule.

Prerequisites: permission of the IB coordinator, and a declared major in the University or permission of the Dean's Office

INBU 496 Topics in International Business (1-3 Credit Hours)

A study of selected topics, the title of which will appear in the course schedule.

Prerequisites: permission of the IB coordinator, and a declared major in the University or permission of the Dean's Office

INBU 497 Independent Study in International Business (1-3 Credit Hours)

Affords students the opportunity to undertake independent study under the direction of a faculty member.

Prerequisites: permission of the department

IPEH - Interprofessional Education-Health

IPEH 490/590 Social Determinants of Health: An Interprofessional Approach (3 Credit Hours)

The social determinants of health status and health outcomes, including structural, financial and personal influences will be examined. The utility of an interprofessional collaborative approach to health care delivery will be highlighted.

Prerequisites: Junior standing or permission of the instructor

IT - Information Technology

IT 150G Basic Information Literacy and Research (3 Credit Hours)

This course is designed to provide students with the basic skills necessary to identify, to access and to utilize task appropriate information. Students will learn to evaluate information sources and to apply good research strategies. The course will address qualitative, quantitative, visual and auditory data sources along with the ethical use of data and respect for intellectual property. Focus will be given to research topics in various fields including business, humanities, social science and technology.

IT 200T Cybersecurity, Technology, and Society (3 Credit Hours)

Students will explore how technology is related to cybersecurity from an interdisciplinary orientation. Attention is given to the way that technologically-driven cybersecurity issues are connected to cultural, political, legal, ethical, and business domains.

IT 201 Introduction to Information Systems (3 Credit Hours)

An introduction to the major hardware/software components of modern information systems. Topics include introduction to the history of computers, numbering systems conversion, system and application software, networks and the Internet. Additional topics include Information Systems and Systems Development Life Cycle, Introduction to Programming, Databases and Business Intelligence, Information Security, and Privacy and Ethics in the cyber world. Intended as a comprehensive introduction course to the Information Systems majors.

IT 205 Introduction to Object-Oriented Programming (3 Credit Hours)

An introductory course on object-oriented programming that emphasizes problem solving for business applications. The programming language is Java, Python, or instructor's choice. Topics include simple data types, selections, loops, methods, arrays, classes, inheritance, etc.

IT 310 Object-Oriented Programming with C++ (3 Credit Hours)

An advanced C++ programming course focusing on object-oriented design/ methodologies and the development of Graphic User Interfaces (GUI) for business applications. Special topics include: dynamic variables, linked lists, abstract data types, classes, inheritance, composition, exception handling, templates, and overloading.

Prerequisites: IT 205 and a declared major in the university or permission of the Dean's Office

IT 315 Introduction to Networking and Security (3 Credit Hours)

Introduction to modern networking concepts and technology. Provides students with the fundamental concepts, technologies, components and issues related to communications and data networks. Topics include network architectures, infrastructures, services, protocols, cyber attacks, adversaries, and defense.

Prerequisites: IT 201

IT 317 Enterprise Information Architecture (3 Credit Hours)

A comprehensive treatment of the fundamental concepts of enterprise information architecture. Topics include enterprise architecture, information technology infrastructure, components of modern computing environments, system usability and security.

Prerequisites: IT 201 with a C or better (grade requirement may be waived by the department), and a declared major in the university or permission of the Dean's Office

IT 325 Web Site and Web Page Design (3 Credit Hours)

Advanced design and hands-on implementation skills in designing and creating dynamic web sites. Key topics include: web page design, usability principles, HTML, XHTML, Cascading Style Sheets (CSS), JavaScript and Internet security.

Prerequisites: IT 150G

IT 360T Principles of Information Technology (3 Credit Hours)

A survey of computer hardware, software, procedures, applications, and management information concepts. Provides an understanding of the application of the computer to the support of managerial decision making. Information Systems majors may not use this course for credit toward the B.S.B.A. degree.

Prerequisites: completion of general education information literacy and research requirement and junior standing; and a declared major in the University or permission of the Dean's Office

IT 363 Systems Analysis and Design (3 Credit Hours)

This course provides an introduction to the analysis and design of computer-based information systems. Emphasis is placed upon the development of requirements that serve the business needs of the organization as well as the logical and physical design of business information systems. This course covers both the structured and the object-oriented approach of system analysis and design process. Topics covered include introduction to the software development methodologies, requirement gathering, modeling, and logical/physical design techniques. Students are also exposed to emerging topics that promise major improvements in software development area. Factors relevant to the creation of business information systems through development and implementation will be examined in detail.

Prerequisites: IT 201 with a C or better, IT 205, and a declared major in the university or permission of the Dean's Office of the Strome College of Business

IT 367 Cooperative Education (1-3 Credit Hours)

Approval for enrollment and allowable credits are determined by the department in the semester prior to enrollment. Available for pass/fail grading only.

Prerequisites: junior standing and a declared major in the university or permission of the Dean's Office

IT 368 Student Internship (1-3 Credit Hours)

Approval for enrollment and allowable credits are determined by the department in the semester prior to enrollment. Available for pass/fail grading only.

Prerequisites: junior standing and a declared major in the university or permission of the Dean's Office

IT 369 Practicum (1-3 Credit Hours)

Approval for enrollment and allowable credits are determined by the department in the semester prior to enrollment. Available for pass/fail grading only.

Prerequisites: junior standing and a declared major in the university or permission of the Dean's Office

IT 374 C# and Applications (3 Credit Hours)

An introduction to programming concepts and skills of the C# programming language and Visual Studio .NET. Topics include: computing fundamentals and Microsoft .NET platform, C# programming fundamentals and object-oriented programming, web app development and cloud app development.

Prerequisites: CS 150 or equivalent

IT 376 PHP and Applications (3 Credit Hours)

An introduction to programming concepts and skills of the PHP programming language. Topics include: Internet and web concepts, HTML, CSS and XML, PHP programming basics, database with PHP, PHP web services.

Prerequisites: IT 201

IT 401 Mobile and Cloud Computing (3 Credit Hours)

An introduction to key concepts and techniques of mobile and cloud computing. Topics include: cloud deployment and service models, cloud programming and software environments, performance and security of cloud systems, cloudlets and mobile cloud computing.

Prerequisites: IT 450 or CS 450

IT 408 E-Business Portal Programming (3 Credit Hours)

An introduction to key concepts, programming techniques, technologies and standards involved in the development of E-Business portal. Topics include: E-Business programming technologies, software development environments, developing a practical E-business project, securing the E-business portal, performance tuning and evaluation.

Prerequisites: IT 325

IT 410 Business Intelligence (3 Credit Hours)

Business intelligence, data warehouse, data mining, and OLAP. The course will use state-of-the-art business intelligence software tools including SAS products to provide hands-on experience in designing and using data warehouses.

Prerequisites: BNAL 206

IT 416 Network Server Configuration and Administration (3 Credit Hours)

Advanced course on configuration and management of network servers. Topics include: user and storage management, ACLs, group policy, configuring security, backups and disaster recovery, and server management.

Prerequisites: A grade of C or better in IT 315 and a declared major in the university or permission of the Strome College of Business Dean's Office

IT 417 Management of Information Security (3 Credit Hours)

This course emphasizes the need for management and technology to successfully implement an information security program in an organization. Threats, attacks, legal and ethical issues, risk assessment and control strategies; planning, development, and maintenance of security policies; contingency planning; firewalls, intrusion detection systems and security tools; and management of information security are some of the topics covered in this course.

Prerequisites: A grade of C or better in IT 315 or IT 360T and a declared major in the university or permission of the Strome College of Business Dean's Office

IT 418 Enterprise Information Assurance (3 Credit Hours)

Assure information and manage risks related to the use, processing, storage, and transmission of information. Topics include assurance of integrity, availability, authenticity, non-repudiation and confidentiality. Students will gain a firm understanding of information-related risk management in cyber and physical systems. Hands-on exercises and practice opportunities will be provided to students.

Prerequisites: A grade of C or better in IT 315 and a declared major in the university or permission of the Dean's Office

IT 419 Enterprise Cyber Defense (3 Credit Hours)

Provide students with an awareness of the options available to mitigate security threats in enterprise information systems. Topics include network mapping, network security techniques and components, applications of cryptography, malicious activity detection, countermeasures, and vulnerability scanning. Students will learn how to describe potential attacks, defense tools and methods, and measures to be taken when compromises occur.

Prerequisites: A grade of C or better in IT 315 and a declared major in the university or permission of the Dean's Office

IT 420 Object-Oriented Application Development Using Visual Basic (3 Credit Hours)

Advanced design and implementation strategies are utilized to create dynamic client/server applications that solve complex problems in a secure and robust manner. Key concepts include: abstractions, encapsulation, inheritance, polymorphism, persistence, and dynamic binding.

Prerequisites: IT 205 and a declared major in the university or permission of the Strome College of Business Dean's Office

IT 425 Information Systems for International Business (3 Credit Hours)

The international business organization and its relationship to information systems architecture with emphasis on the role of connectivity technology as a driver of globalization. An introduction to the economics and structure of the international information technology marketplace.

Prerequisites: The general education impact of technology requirement, a declared major in the university or permission of the department

IT 430 Object-Oriented Application Development with JAVA (3 Credit Hours)

Using JAVA as an object-oriented language to write business applications that solve complex problems in a secure and robust manner. Business examples incorporating multimedia, multithreading, networking, and advanced graphical interfaces are used to reinforce the object-oriented concepts of abstraction, encapsulation, inheritance, polymorphism, persistence, and dynamic binding.

Prerequisites: IT 205 and a declared major in the university or waiver approved through the Strome College of Business Undergraduate Advising

IT 440 Secure Programming (3 Credit Hours)

An introduction to methods of secure software design and development. Key topics include principles and practices of secure programming, input validation, type checking, parameter validation, buffer overflow prevention, error handling, web application issues (SQL injection, Cross site scripting, Cross site request forgery, etc.), static analysis tools and black box testing tools.

Prerequisites: IT 205

IT 450 Database Concepts (3 Credit Hours)

Introduction to database concepts. Historical development, data models, database analysis, design and implementation, query languages, data security, and introduction to business transaction systems.

Prerequisites: IT 201 with a C or better or IT 360T for non-IT major students and a declared major in the university or waiver approved through the Strome College of Business Undergraduate Advising; permission of the instructor is required for non-IT major students

IT 451 Database Administration (3 Credit Hours)

An introduction to the theory and practice for performing the standard database administrative tasks. Course could serve as a basis in preparation to OCA Exams 1Z0-051 and 1Z0-052 for Oracle Administrator Certified Associate. Topics to be covered include: advance SQL statements, creating schema objects, database installation and configuration, database architecture, performance monitoring and tuning, storage management, database security, user management, database connectivity, backup/recovery techniques and usage analysis. Oracle will be the primary DBMS software used in the course; other software may be used as well. Hands-on exercises and practice opportunities will be provided to students.

Prerequisites: IT 450, and a declared major in the university or permission of the instructor

IT 452 Cloud Database (3 Credit Hours)

An introduction to the principles, techniques, and systems of cloud database. Topics include: cloud service models, cloud database design, cloud database management, cloud database development, cloud security, and cloud database services.

Prerequisites: IT 450 or instructor approval

IT 453 Advanced Database Concepts (3 Credit Hours)

This course examines the theoretical and practical foundations of advanced database concepts. It also covers techniques and methodologies that are used to perform the advanced database management tasks and to insure the deployment of efficient, secure, and high-performance database applications. Topics include: advanced database and application design, database performance tuning and query optimization, data movement and distribution, distributed DBMS, Business Intelligence and Data Warehouses, Big Data Analytics and NoSQL, databases and the Internet, and other advanced database concepts. This course also examines the material included in OCA Exams 1Z0-051 and 1Z0-052 for Oracle Administrator Certified Associate.

Prerequisites: IT 450 and a declared major in the university or permission of the instructor

IT 454 Web-based Database Administration (3 Credit Hours)

An introduction to key concepts and techniques related to web-based database administration. Students will gain hands-on experience with a variety of web-based database technologies. Topics to be covered include: MySQL, EasyPHP, phpMyAdmin, XML database technologies such as XQuery, XPath, and XML Schemas, performance tuning, trouble shooting, and web log analysis tools.

Prerequisites: IT 450, or permission of the instructor

IT 455 SAP Applications (3 Credit Hours)

This course introduces students to the concept of enterprise resource planning. Students will learn SAP (Systems, Applications and Products in Data Processing) enterprise software to manage business operations and customer relations by analyzing and presenting data stats in an engaging way, and producing meaningful and insightful business solutions.

Prerequisites: IT 201, or IT 360T, or OPMT 303, or instructor's permission

IT 461 Implementing Internet Applications (3 Credit Hours)

Advanced design and implementation strategies are utilized to create dynamic e-commerce applications that solve complex problems in a secure and robust manner. Key concepts include: Internet architecture, structured data languages, scripting languages, programming languages, database connectivity, and Internet security.

Prerequisites: IT 205 and IT 363, or instructor's permission

IT 464/564 Essentials of Project Management (3 Credit Hours)

This course focuses on project management concepts and methodologies. Topics include project management framework, knowledge areas, and techniques.

Prerequisites: IT 317 with a C or better, IT 363, and a declared major in the university or waiver approved through the Strome College of Business Undergraduate Advising

IT 474 Strategic IT Administration (3 Credit Hours)

Focuses on improving business use of existing IT and achieving competitive advantage. All students gain a strategic perspective on an important organizational resource--information. Prepares IT students for managerial positions and effective communication with executives.

Prerequisites: IT 317 with a C or better, IT 363, and a declared major in the university or waiver approved through the Strome College of Business Undergraduate Advising

IT 494 Entrepreneurship in Information Technology (3 Credit Hours)

This course is designed to help students enhance their personal and professional development through real-world entrepreneurial innovation guided by faculty members and professionals. This course allows students to integrate disciplinary knowledge by developing innovative processes, products, businesses, or other innovations utilizing information technology. The real-world entrepreneurial experience will help students understand how academic knowledge leads to innovation and problem solving.

Prerequisites: six credit hours of any IT 300 or 400 level courses

IT 495/595 Selected Topics in Information Systems (1-3 Credit Hours)

Taught on an occasional basis. See the course schedule for the particular topic being taught each semester.

Prerequisites: permission of the department

IT 497 Independent Study in Information Systems (1-3 Credit Hours)

Affords students the opportunity to undertake independent study under the direction of a faculty member.

Prerequisites: permission of the department

ITAL - Italian

ITAL 101F Beginning Italian I (3 Credit Hours)

Aural comprehension, oral drills and discussion of grammar principles; written exercises, and reading assignments.

ITAL 102F Beginning Italian II (3 Credit Hours)

Aural comprehension, oral drill and discussion of grammar principles; written exercises, and reading assignments.

Prerequisites: ITAL 101F

ITAL 201 Intermediate Italian I (3 Credit Hours)

Aural comprehension, oral drills and discussion of grammar principles; written exercises, and readings assignments.

Prerequisites: ITAL 102F or satisfactory score on the placement test

ITAL 202 Intermediate Italian II (3 Credit Hours)

Aural comprehension, oral drills and discussion of grammar principles; written exercises, and reading assignments.

Prerequisites: ITAL 201

ITAL 295 Topics (1-3 Credit Hours)

A study of selected topics for elective credit. These courses will appear in the course schedule and will be more fully described in information distributed to all academic advisors.

ITAL 296 Topics (1-3 Credit Hours)

A study of selected topics for elective credit. These courses will appear in the course schedule and will be more fully described in information distributed to all academic advisors.

ITAL 395 Topics in Italian (1-3 Credit Hours)

A study of selected topics for elective credit. These courses will appear in the course schedule.

Prerequisites: ITAL 202 or equivalent

ITAL 396 Topics in Italian (1-3 Credit Hours)

A study of selected topics for elective credit. These courses will appear in the course schedule.

Prerequisites: ITAL 202 or equivalent

JAPN - Japanese

JAPN 111F Beginning Japanese (6 Credit Hours)

This course introduces basic speaking, listening, reading, and writing skills, including the three forms of written Japanese: Hiragana, Katakana, and Kanji. Students will have the opportunity to interact with Japanese students on campus through the coursework. The course enhances speaking and listening skills and provides awareness of the Japanese style of communication. Analyzing Japanese sentence structures and grammar leads students to be aware of the different value systems of a high context culture.

JAPN 195 Topics in Japanese (1-3 Credit Hours)

A study of selected topics designed as electives for non-majors. These courses will appear in the course schedule and will be more fully described by academic advisors.

JAPN 196 Topics in Japanese (1-3 Credit Hours)

A study of selected topics designed as electives for non-majors. These courses will appear in the course schedule and will be more fully described by academic advisors.

JAPN 212 Intermediate Japanese (6 Credit Hours)

The main focus of this course is to build communication skills, developing the basic language skills acquired in JAPN 111F. Students may have an opportunity to exchange emails with a Japanese speaker in addition to direct or online conversation. Through this interaction, skills to negotiate meaning are gained. Use of authentic TV materials introduces pragmatic features that are unique to Japanese. Through systematic explicit instruction of the skills using pragmatic elements, skills for a Japanese style of communication are enhanced.

Prerequisites: JAPN 111F

JAPN 295 Topics in Japanese (1-3 Credit Hours)

A study of selected topics designed as electives for non-majors. These courses will appear in the course schedule and will be more fully described by academic advisors.

Prerequisites: 6 hours at the 100 level

JAPN 296 Topics in Japanese (1-3 Credit Hours)

A study of selected topics designed as electives for non-majors. These courses will appear in the course schedule and will be more fully described by academic advisors.

Prerequisites: 6 hours at the 100 level

JAPN 301 Intermediate to Advanced Japanese I (3 Credit Hours)

This course aims to develop the oral and written communicative proficiency gained up until the JAPN 212 course. Students learn vocabulary, sentence structures, kanji, communication skills, and various aspects of Japanese culture. Throughout the course, students evaluate and monitor their own progress and utilize feedback from others for further progress.

Prerequisites: A grade of C or better in JAPN 212 or advanced placement

JAPN 302 Intermediate to Advanced Japanese II (3 Credit Hours)

This course aims to develop the oral and written communicative proficiency gained up until the JAPN301 course. Students learn vocabulary, sentence structures, kanji, communication skills, and various aspects of Japanese culture. Throughout the course, students evaluate and monitor their own progress and utilize feedback from others for further progress.

Prerequisites: JAPN 301

JAPN 305 Speaking and Writing Workshop (3 Credit Hours)

In this course, each student will work with a Japanese speaker as a mentor to learn natural communication skills in both speaking and writing. Keeping a journal in the blog style and having the entries revised by their mentor, students will utilize a variety of learned sentence structures and expand their vocabulary.

Prerequisites: JAPN 212 or advanced placement

JAPN 309 Kanji Skills for Reading Japanese (3 Credit Hours)

This course introduces the basic structure of kanji, which is one of the forms of written Japanese, and the history behind its creation as well as cultural aspects of kanji usage in Japanese society. Identifying radicals or parts of kanji, and understanding the system of Kanji compounds, makes it possible to easily guess the meaning of kanji characters. Advanced reading skills are efficiently developed by guessing the meaning of kanji. Daily journal writing on authentic novels or newspaper articles builds vocabulary and enhances flexibility with reference materials.

Prerequisites: JAPN 212

JAPN 310 Japan: A Cultural Odyssey (3 Credit Hours)

Exploration of Japanese culture and society from local and global perspectives. Topics may include language, arts, literature, music, food, traditional and contemporary culture, entertainment, media, religion, gender, education and work. The course aims to foster in-depth cultural understanding beyond stereotypes and to develop critical thinking and analytical skills to reflect on one's own experiences and assumptions about cultural similarities and differences. All readings, discussions, and lectures in English. No knowledge of Japanese is necessary. Cross-listed with WCS 310.

Prerequisites: ENGL 110C and junior standing or permission of the instructor

JAPN 311 Global Conversations (3 Credit Hours)

This is primarily a conversation course to develop linguistic and cultural proficiency in verbal communication. Task-oriented communication strategies in cross-cultural training will be practiced by presenting students with models that demonstrate appropriate linguistic and cultural competencies. Students will practice these skills by role-playing, giving presentations, enriching self-awareness with practiced in-group discussions on various topics (such as, prejudice, racism, values, and customs) that dispel stereotypes and foster more in-depth social-cultural understanding, and with participation in guided cultural encounters. Students will improve their listening and comprehension skills and deepen cultural proficiency by learning how to communicate and collaborate with other people and cultures in a global age.

Prerequisites: JAPN 302 with a grade of C or above or a satisfactory score on the placement test

JAPN 312W Writing Around the World (3 Credit Hours)

This is a writing intensive course designed with writing assignments that examine various cultural contexts that enable students to understand cultural content, style, audience and organization. The main objective of the course is increased awareness of and sensitivity to appropriate word choice and syntax in the language. Students will engage in writing for different cultural audiences and in varied contexts such as literary, artistic and media expressions around the world. Special emphasis is placed on the methodology of close reading as students hone the analytics skills and vocabulary necessary to interpret idioms, regionalism, cultural expressions and overall intercultural skills observed in various genres and cultures. Students will analyze compelling global issues and the diverse cultural perspectives that inform them.

Prerequisites: a grade of C or better in ENGL 211C or ENGL 231C and JAPN 302 with a grade of C or above or a satisfactory score on the placement test

JAPN 323 World Cultures and Contexts (3 Credit Hours)

This course explores Japanese culture and society from traditional to current perspectives. Through readings, discussions, interviews, and reflections, the course aims to foster deeper understanding of current Japanese culture where lifestyles, customs, and value systems are rapidly changing. Students have an opportunity to develop their critical thinking, especially by analyzing what they learn from their interviews with Japanese people and comparing this to information they gained from their readings. Major topics this semester include group consciousness and social relationships, food and society, history of Japanese language.

Prerequisites: JAPN 302 with a grade of C or better or Advanced Placement

JAPN 335 Japanese Society and Language (3 Credit Hours)

This course explores the social and cultural aspects of the Japanese language. It examines actual language use in various social settings and contexts by different people, including the use of regional dialects, gendered language, speech levels, and fictional role languages.

Prerequisites: JAPN 212 or permission of the instructor

JAPN 395 Topics in Japanese (1-3 Credit Hours)

This course provides a study of selected topics in Japanese. Topics vary with the semester and the instructor. Expectations for materials covered and produced for the class vary with the level (higher-level classes will have higher expectations). Contact the Japanese Program Coordinator for details about specific topics covered in a given semester.

Prerequisites: JAPN 212 or the equivalent

JAPN 396 Topics in Japanese (1-3 Credit Hours)

A study of selected topics in Japanese. These courses will appear in the course schedule and will be more fully described by academic advisors.

Prerequisites: JAPN 212 or the equivalent

JAPN 422/522 Analyzing Japanese Conversation (3 Credit Hours)

This course examines Japanese conversation from a comparative perspective using the framework of Conversation Analysis. It explores the basic mechanisms of social interaction in English and Japanese spoken discourse with a particular focus on everyday talk.

Prerequisites: JAPN 312W or permission of the instructor

JAPN 435 Japanese Food Culture (3 Credit Hours)

This course explores Japanese food culture from a variety of aspects. Major topics this semester include (1) 'Washoku' as a UNESCO Intangible Cultural Heritage, (2) food and health, (3) food and education, and (4) food and regions. Through readings, discussions, hands-on activities, and reflections, the course aims to foster in-depth cultural understanding and develop critical thinking and analytical skills to reflect on your own experiences and what you hear and see about Japanese food.

Prerequisites: JAPN 311 and JAPN 312W or permission of instructor

JAPN 445 Japanese Language Acquisition and Teaching (3 Credit Hours)

This course introduces students to fundamental principles of second language acquisition (SLA) and teaches them practical skills to develop course materials and class activities informed by SLA principles. The course covers world language learning and teaching in general but focuses on Japanese as a second or world language when working on course material and activity development.

Prerequisites: JAPN 312W or permission of the instructor

JAPN 495/595 Topics in Japanese (1-3 Credit Hours)

This course provides a study of selected topics in Japanese. Topics vary with the semester and the instructor. Expectations for materials covered and produced for the class vary with the level (higher-level classes will have higher expectations). Contact the Japanese Program Coordinator for details about specific topics covered in a given semester.

Prerequisites: JAPN 311 and JAPN 312W or permission of the instructor

JAPN 496/596 Topics in Japanese (1-3 Credit Hours)

A study of selected topics in Japanese. These courses will appear in the course schedule and will be more fully described by academic advisors.

Prerequisites: JAPN 311 and JAPN 312W or permission of the instructor

JAPN 497 Tutorial Work in Japanese (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: JAPN 311 and JAPN 312W or permission of the instructor

JAPN 498 Tutorial Work in Japanese (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: JAPN 311 and JAPN 312W or permission of the instructor

JST - Jewish Studies

JST 300 Holocaust and Genocide Studies (3 Credit Hours)

After the atrocities of the Holocaust, 'Never again!' has been repeated throughout the world. However, the reality is that genocide did not begin or end with the Holocaust. This course uses the Holocaust as a case study in genocide, tracing the history of anti-Judaism and anti-Semitism in Europe through its reappropriation by Adolf Hitler. Through an interdisciplinary approach to the Holocaust where history, literature, film, and oral narratives are considered, students establish a basis for critiquing and understanding other genocides. The course will culminate with an analysis of contemporary genocide, taking into consideration how the genocides and the Holocaust inform our worldview of hatred and impact societies and cultures.

Prerequisites: Grade of C or better in ENGL 110C

JST 350 Judaism (3 Credit Hours)

This course is a basic introduction to Judaism. We will explore the fundamental tenets of Jewish belief, examine primary expressions of Jewish ritual and practice, discuss the historical development of Judaism, and explore sacred texts, secular Yiddish texts, and contemporary issues confronting Jews and Judaism.

Prerequisites: ENGL 110C

JST 395 Topics in Jewish Studies (3 Credit Hours)

This course addresses various topics in Jewish Studies.

Prerequisites: junior standing or permission of instructor

JST 495/595 Topics in Jewish Studies (3 Credit Hours)

This course addresses various topics in Jewish Studies.

Prerequisites: Junior standing or instructor approval

JST 497 Research Project in Jewish Studies (3 Credit Hours)

Independent reading and study of a topic to be selected in consultation with the director. Research proposal conference, research meetings and research project are required.

Prerequisites: junior standing, 6 hours of course work in Jewish studies, and approval of the director of Jewish Studies

LAS - Latin American Studies

LAS 320 Latin American Studies: Overview of Field (3 Credit Hours)

The objective of this course is to enhance students' understanding of the region of Latin America. It will seek to engage more closely with the culture, politics, social and human landscape of the region through the concepts of land, peoples, exchange and creativity. Readings, lectures, film viewings, and discussions will constitute integral components of the course and draw upon the work of various academic disciplines and artistic traditions. The course insists on the inter-disciplinary nature of Latin American Studies and the different insights offered by its different constituent disciplines. All readings and lectures are in English.

Prerequisites: A grade of C or better in ENGL 110C or permission of instructor

LAS 321 Comparative Caribbean and Latin American Culture and Civilization (3 Credit Hours)

An introductory, panoramic course that covers a wide, but representative array of eras in Latin American history (colonial, post-colonial, present-day) and problems (indigenous groups, exploitation of the land and natural resources, political tendencies, and U.S. sphere of influence). Literary and historical readings will be paired with other media in order to discuss issues of colonialism, wars of independence, revolutions, exile, migration, race, class, and gender. All readings and lectures are in English.

Prerequisites: A grade of C or better in ENGL 110C or permission of instructor

LAS 330 Afro-Latinx Narratives (3 Credit Hours)

This course will explore through poetry, songs, music, stories, (auto)biographical accounts and novels the importance, creativity, and meaning produced by people of African descent living in or from Latin America. It will focus on the Afro- Latinx narrative forms coming out of Ecuador, Brazil, Colombia, Cuba, Dominican Republic, Mexico, Puerto Rico and the United states. Through examining the narrative expressions of Blackness throughout regions of Latin America students can consider the relationship that social historical processes such as colonialism, nation-making and continued racism have on narrative production. Key to this course will be examining the ways race and gender/sexuality intersect within the multiple forms of expression of the Afro-Latinx community. Readings and lectures in English.

Prerequisites: A grade of C or better in ENGL 110C or permission of instructor

LAS 331 Brazilian Cultural History (3 Credit Hours)

This course provides a comprehensive introduction to Brazil's regions and cultural history, to Brazil's unique place in the Americas, and to its place in the world of Portuguese language. It presents major topics in the panorama of Brazilian cultural history and civilization from 1500 to the present through readings on regions, cultures, peoples, and arts, including the architects of Brazil's national cultural identity, its chronological development, and modern self-description. Topics include discovery and rediscovery of Brazil, baroque architecture, romanticism and empire, regionalism, immigration, urbanization, and modernization. The main texts draw on a cultural history of Brazil through selected writings by major authors and scholars. All lectures and readings in English.

Prerequisites: A grade of C or better in ENGL 110C

LAS 332 Latinx Literature (3 Credit Hours)

Course focuses particularly on works produced by the three major groups of U.S. Latinx (Mexican Americans or Chicanos, Puerto Ricans or Nuyoricans, and Cuban Americans) during the 20th and 21st centuries but will also include some pieces representative of other Latinx identities. Students will analyze works from a range of genres and cultural expressions including poetry, fiction, memoirs, film, and performance, along with recent literary and cultural theory works. Topics to be discussed include identity formation and negotiation in terms of language, race, gender, sexuality, and class; the colonial subject; diaspora and emigration; the marketing of the Latinx identity; and activism through art. Lectures and readings are in English.

Prerequisites: A grade of C or better in ENGL 110C

LAS 395 Topics in Latin American Area Studies (3 Credit Hours)

Investigation of special topics on Latin America. All readings and lectures are in English.

Prerequisites: A grade of C or better in ENGL 110C

LAS 421/521 Human Rights in Latin America (3 Credit Hours)

This course evaluates human rights movements, mechanisms, and their impacts in Latin America. Students will examine different human rights crises to understand how these events have shaped the region and what the response to them has been. The class is less a study of the specific legal mechanisms used in human rights practice and more a study of how human rights have evolved as a discourse and political strategy in struggles for justice. It adopts a more anthropological and geographic approach to understanding human rights theory and practice. All readings and lectures in English.

Prerequisites: A grade of C or better in ENGL 110C

LAS 430/530 Latin American Thinkers Changing Culture and Politics (3 Credit Hours)

In this course students will study the ideas of some important Latin American thinkers whose work has helped to shape Latin American history and society from Independence in the early 19th Century to the present. Even though special attention will be paid to some writers, works by a larger number of intellectuals will be analyzed as a way of understanding some of the central ideas in Latin American culture: "mestizaje," nationalism and popular culture, among others. All readings and lectures in English.

Prerequisites: A grade of C or better in ENGL 110C

LAS 431/531 Race and Culture in Brazil (3 Credit Hours)

This course will explore some of the unique contradictions shaping Brazilian reality as related to notions of race and culture by tracing the history of race relations in the ongoing transformation of Brazilian culture, examining such key examples and events as slavery and the plantation economy, popular music, Carnival, populism, racial democracy, affirmative action, and urban and rural violence. All readings and lectures in English.

Prerequisites: A grade of C or better in ENGL 110C

LAS 495/595 Topics in Latin American Area Studies (3 Credit Hours)

Investigation of special topics on Latin America. All readings and lectures are in English.

Prerequisites: A grade of C or better in ENGL 110C

LATN - Latin

LATN 101F Beginning Latin I (3 Credit Hours)

Introduction to Latin literature and Roman civilization.

LATN 102F Beginning Latin II (3 Credit Hours)

Latin is immortal! Roman mythology, the destruction of Pompeii, and the rise of the Colosseum are some of the topics. Reading Latin and building your vocabulary are reinforced with interactive student activities and videos.

Prerequisites: LATN 101F

LATN 201 Intermediate Latin I (3 Credit Hours)

Latin Lives! Roman mythology, gladiator fights, and comedy in the theater are some of the topics. Advanced Latin readings and grammar are reinforced with interactive student activities and videos.

Prerequisites: LATN 102F or satisfactory score on the placement test

LATN 202 Intermediate Latin II (3 Credit Hours)

Carpe diem! The poetry of Catullus and Horace is funny, nasty and philosophical. Translate analyze, and compare their poetry to our culture today. Also read parts of Ovid's Metamorphoses the mythology book which kept Latin alive through the Dark Ages until its resurgence in the Renaissance.

Prerequisites: LATN 201

LATN 395 Topics in Latin (1-3 Credit Hours)

A study of selected topics for elective credit. Study Roman literature, culture, and its influence. Translate, analyze, discuss relevance to today's world.

Prerequisites: LATN 202 or equivalent

LATN 396 Topics in Latin (1-3 Credit Hours)

A study of selected topics for elective credit. These courses will appear in the course schedule booklet and will be more fully described in a booklet distributed to all academic advisors.

Prerequisites: LATN 202 or equivalent

LIBS - Library Science

LIBS 110G Information Literacy for the Digital Age (3 Credit Hours)

Students require a comprehensive understanding of information literacy so they can become effective users of ideas and information and guide others in activities of knowledge use and creation. This course will provide an introduction to the process and methods of retrieving information using digital literacies. Students will learn to identify an information need, then locate, evaluate, and use appropriate resources while embedding the dispositions of academic integrity and ethical use. Topics include use of collaborative tools for development of information, including social media. The content focuses on implementing effective digital information literacy strategies situated in various content areas with the intent that these strategies can be incorporated into future professional and instructional practices.

MAE - Mechanical and Aerospace Engineering

MAE 195 Topics (1-3 Credit Hours)

Permission of the chair required.

MAE 201 Materials Science (3 Credit Hours)

Principles of materials science with emphasis on the relationship between structure and properties and their control through composition and processing. Metals, polymers, ceramics, and composite materials are considered.

Prerequisites: MATH 211 with a grade of C or better

MAE 203 Mechanical Engineering Laboratory I - Materials Science (1 Credit Hour)

This laboratory involves experiments demonstrating lecture material covered in the MAE 201 course.

Pre- or corequisite: MAE 201 and CS 150 or ENGN 150

MAE 204 Engineering Mechanics I - Statics (3 Credit Hours)

Introduction to mechanical engineering problems and their solutions through the study of statics of particles and rigid bodies. Emphasis will be placed on the relationship of the static loads with the mechanical properties of the materials being considered. Introduction to the concepts of stress and strain and internal forces as applied to static bodies.

Prerequisites: MATH 211 with a grade of C or better

Pre- or corequisite: PHYS 231N

MAE 205 Dynamics (3 Credit Hours)

Introduction to engineering problems and their solutions through a study of the dynamics of particles and rigid bodies. General force systems are studied including friction.

Prerequisites: A grade of C or better in MAE 204 or CEE 204

Pre- or corequisite: MATH 212

MAE 220 Engineering Mechanics II - Solid Mechanics (3 Credit Hours)

Introduction to concepts of stress, strain and their relation to each other. Stress and strain in axially loaded members and circular rods and tubes subjected to torsion. Normal and shear stress in beams under bending loads. Additional topics include bending deflection, transformation of stress and strain, Mohr's circles, statically indeterminate problems, combined stress and thin walled pressure vessels.

Prerequisites: A grade of C or better in MAE 204 or CEE 204

MAE 225 Mechanical Engineering Laboratory II - Solid Mechanics (1 Credit Hour)

Experimental study of the mechanical behavior of materials under axial, bending and torsional loads. Measurements of elastic properties and strengths. Statistical treatment of data. Use of strain gauges. Experiments with composite materials and piezo-electric transducers. Use of data acquisition system. Experiments parallel lectures in MAE 220.

Prerequisites: ENGN 122 or ENGN 150 or CS 150

Pre- or corequisite: MAE 220

MAE 230 Engineering Graphics and Computer Solid Modeling (2 Credit Hours)

Graphical communication for engineers by means of 3D parametric modeling and its applications in industry. Fundamentals of sketching, basics of surface design, assembly modeling, and dynamic modeling of mechanisms using industry standard parametric modeling software. Emphasis on developing the skills needed for engineering design, including use of engineering standards.

MAE 303 Mechanics of Fluids (3 Credit Hours)

Fundamental concepts, fluid statics, basic equations in integral form, open-channel flow, Bernoulli's equation, dimensional analysis and similitude, incompressible viscous flow, pipe friction, boundary layers, introduction to differential analysis.

Prerequisites: MATH 307, MATH 312, and a grade of C or better in MAE 205

MAE 305 Mechanical Engineering Laboratory III - Thermo/Fluids (1 Credit Hour)

An introduction to thermo-fluid experimentation and measurement; basic flow phenomena demonstrated; measurement techniques for flow temperature, pressure and properties; report writing and data reduction methods, including statistical treatment of data; formal oral reports.

Prerequisites: Junior standing

Pre- or corequisite: MAE 303 and MAE 311

MAE 311 Thermodynamics I (3 Credit Hours)

Essential definitions of thermodynamics, first law, physical properties, ideal and real gases, second law, reversibility, irreversibility and consequences of thermodynamic cycles.

Prerequisites: MATH 312, and a grade of C or better in CHEM 121N

MAE 312 Thermodynamics II (3 Credit Hours)

Concepts and principles dealing with thermodynamic cycles, relations and generalized charts, mixtures of fluids, chemical reactions, chemical and phase equilibrium, thermodynamic aspects of fluid flow; introduction to compressible flow, isentropic and normal shock wave relations.

Prerequisites: MATH 307, and a grade of C or better in MAE 303, and a grade of C or better in MAE 311

MAE 315 Heat and Mass Transfer (3 Credit Hours)

Fundamental laws of heat transfer by conduction, convection, and radiation; boundary-layer concepts; simultaneous heat, mass, and momentum transfer.

Prerequisites: A grade of C or better in MAE 303, and a grade of C or better in MAE 311

MAE 332 Mechanical Engineering Design I (3 Credit Hours)

Introduction to machine design including review of stress and deflection analysis. Statistical considerations in design, strength of mechanical elements with emphasis on theories of failure and fatigue design.

Prerequisites: MAE 201, a grade of C or better in MAE 205, a grade of C or better in MAE 220, and MAE 230

Pre- or corequisite: MAE 225

MAE 336 Electromechanical Systems (3 Credit Hours)

Introduction to analog and digital circuits; sensors, actuators and signals; laboratory instrumentation (oscilloscope, function generator, etc.); data acquisition; and embedded microcontroller systems. Students will perform electronics experiments as homework assignments.

Prerequisites: ENGN 122 or ENGN 150 or CS 150, and PHYS 232N

MAE 340 Computational Methods in Mechanical Engineering (3 Credit Hours)

A survey of modern computing techniques for mechanical engineers. Numerical algorithms are presented to solve practical problems in mechanical engineering as found in solid mechanics, fluid mechanics, dynamics, and heat transfer. Emphasis is on providing computational experience in applied numerical methods using computers. Topics include roots of equations, simultaneous equations, differentiation, integration, regression analysis, interpolation and differential equations. Analysis, understanding, and quantification of computational errors are included in all topics and applications.

Prerequisites: ENGN 122 or ENGN 150 or CS 150; MATH 307 and MATH 312

MAE 367 Cooperative Education (1-3 Credit Hours)

Available for pass/fail grading only. Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures as formally determined by the department prior to the semester in which the work experience is to take place.

Prerequisites: Approval by department in accordance with the policy for granting credit for Cooperative Education programs

MAE 368 Internship (1-3 Credit Hours)

Available for pass/fail grading only. Academic requirements will be established by the department and will vary with the amount of credit desired. Allows students to gain short duration career-related experience.

Prerequisites: Approval by department is required; additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

MAE 369 Practicum (1-3 Credit Hours)

Academic requirements will be established by the department and will vary with the amount of credit desired. Allows students an opportunity to gain short duration career-related experience.

Prerequisites: Approval by department is required; Additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

MAE 403/503 Flight Mechanics (3 Credit Hours)

Aircraft concepts including performance prediction and optimization, flight and maneuver envelopes, and steady flight performance. Additional topics: longitudinal static stability and trim; aircraft dynamics; development, separation and solution of aircraft equations of motion; natural modes; dynamic stability; sensors and actuators; and design of stability augmentation and autopilot systems.

Prerequisites: MAE 303 with a grade of C or better and MAE 340

Pre- or corequisite: MAE 436

MAE 404/504 Vibrations (3 Credit Hours)

Free and forced vibrations of undamped and damped, single-degree of freedom, multi-degree of freedom, and continuous systems. Exact and approximate methods to find natural frequencies.

Prerequisites: A grade of C or better in MAE 205, a grade of C or better in MAE 220; MAE 340 and MATH 312

MAE 406/506 Flight Vehicle Aerodynamics (3 Credit Hours)

Inviscid flow concepts including: Euler equations, stream function, velocity potential, singularities, vorticity and circulation laws. Viscous flow topics including boundary layers, separation, and turbulent flow. In addition, external flows, lift and drag, thin airfoil theory, finite wing theory and airfoil design will be discussed.

Prerequisites: A grade of C or better in MAE 303; MAE 340

MAE 411/511 Mechanical Engineering Power Systems Theory and Design (3 Credit Hours)

Thermodynamic properties of gases and vapors relating to power generating devices, work-energy relations, combustion, and heat exchangers. Performance analyses and design concepts of gas turbines, internal combustion engines, steam power plants and heat exchanger equipment from theoretical and applied viewpoints.

Prerequisites: MAE 312 and MAE 315

MAE 412/512 Environmental Control (3 Credit Hours)

Engineering principles as applied to the analysis and design of systems for automatically controlling man or machine environments. Course encompasses fundamentals of heating, ventilating, air conditioning, refrigeration, cryogenics, and design of building energy systems.

Prerequisites: MAE 312 and MAE 315

MAE 413/513 Energy Conversion (3 Credit Hours)

Introduction of relevant kinetic theory, solid state, and thermodynamic principles; operation and analysis of thermoelectric, photovoltaic, thermionic, magnetohydrodynamic devices, fuel cell, isotopic, and solar power generators. Course seeks to define engineering limits of converter efficiency and other performance criteria.

Prerequisites: MAE 312

MAE 414/514 Introduction to Gas Dynamics (3 Credit Hours)

One-dimensional compressible flow considering isentropic flow, normal shocks, flow in constant area ducts with friction, flow in ducts with heating and cooling, oblique shocks, Prandtl-Meyer expansions, shock-expansion theory, flow around diamond shaped airfoils, and wind tunnel mechanics.

Prerequisites: MAE 312 and a grade of C or better in MAE 303

MAE 417/517 Propulsion Systems (3 Credit Hours)

Basic principles of design, operation and performance of propulsion systems - including turbojet, turboprop, turbofan, and ramjet engines. Introduction to chemical rockets, ion and plasma thrusters.

Prerequisites: A grade of C or better in both MAE 303 and MAE 311

MAE 420/520 Aerospace Structures (3 Credit Hours)

Analysis of aircraft and space vehicle structural components. Effects of bending, torsion and shear on typical aerospace structural components, statically indeterminate beams, shear center and shear flow. Introduction to typical aerospace structures. Introduction to composite structures.

Prerequisites: MAE 332 with a grade of C or better

MAE 422/522 Modern Engineering Materials (3 Credit Hours)

Limitations of conventional materials; inter-relationship among materials, design and processing, material selection criteria and procedures; strengthening mechanisms in metals; superelasticity; shape memory effect, amorphous metals; structure-property relationship in polymers; polymers crystallinity; thermoplastic and thermosets; high-temperature restraint polymers; ceramics; toughening mechanisms in ceramics.

Prerequisites: MAE 201, MAE 203, and a grade of C or better in MAE 220; MAE 332

MAE 431/531 Mechanisms Analysis and Design (3 Credit Hours)

Basic relations necessary for analysis of plane motion mechanisms, numerical and analytical solutions for some of the basic mechanisms, methods of calculating rolling and sliding velocities and accelerations of contacting bodies, cams, and gears.

Prerequisites: A grade of C or better in MAE 205, a grade of C or better in MAE 332, and MATH 312 or MATH 285

MAE 433 Mechanical Engineering Design II (3 Credit Hours)

Statistical considerations in design, strength of mechanical elements with emphasis on theories of failure and fatigue design in mechanical elements such as screws, fasteners, connections, welded joints, and flexible mechanical elements. Kinematic analysis, force analysis, and design of spur, helical, worm, and bevel gears. Antifriction bearings, lubrication and journal bearings, shaft design, mechanical spring design, design of clutches, brakes and couplings.

Prerequisites: A grade of C or better in MAE 332 and senior standing

MAE 434W Project Design and Management I (3 Credit Hours)

This course prepares students to complete their design projects in MAE 435. Lecture topics include engineering economics; project planning; costing and risk analysis; and product realization techniques. Course involves written and oral presentations for students to improve communication and teamwork skills. This is a writing intensive course.

Prerequisites: A grade of C or better in MAE 332, ENGL 211C or ENGL 221C or ENGL 231C

Pre- or corequisite: MAE 433

MAE 435 Project Design and Management II (3 Credit Hours)

Conceptual design ideas are expanded into detailed design ideas. Product realization is applied to complete hardware. Course covers Gantt charts, preliminary design, evaluation and trading matrices, detailed design and analysis, oral and technical reporting including cost analysis. Ethics and patent issues are also included.

Prerequisites: MAE 433 and MAE 434W

MAE 436 Dynamic Systems and Control (3 Credit Hours)

Analysis and synthesis of feedback systems; functional description of dynamic systems; basic controllers; sensitivity, stability and error analysis; transient and steady-state response using computational techniques, root locus and frequency response methods; state-space analysis of control systems.

Prerequisites: A grade of C or better in MAE 205; MAE 336, MATH 307 and MATH 312

MAE 438/538 Applied Analog and Digital Control (3 Credit Hours)

Computer-aided analysis and design of practical control systems. Introduction to state-space, digital signal processing and digital control. Laboratory sessions on aliasing, analog, system identification, and real-time control.

Prerequisites: a grade of C or better in MAE 436

MAE 440/540 Introduction to Finite Element Analysis (3 Credit Hours)

Basic concepts of finite-element method, method of weighted residuals, interpolation functions, numerical implementation of finite-element method, applications to engineering problems such as beam deflection, heat conduction, and plane elastic problems.

Prerequisites: MAE 340

MAE 441 Computer-Aided Design of Mechanical Systems (3 Credit Hours)

Case studies are used to introduce students to CAD software; design processes involving modeling, analysis and design, and verification. Typical case studies are beam and plate designs, turbine blade design, and pipe networks. Advanced topics include: thermal stress analysis and plates and shells.

Prerequisites: ENGN 122 or ENGN 150 or CS 150, MATH 312, and a grade of C or better in MAE 220

Pre- or corequisite: MAE 332

MAE 450/550 Principles of Naval Architecture (3 Credit Hours)

Basic principles of naval architecture related to ship geometry, stability, strength, resistance, propulsion, vibration and motions in waves and controllability.

Prerequisites: MATH 212 with a grade of C or better

MAE 460/560 Introduction to Space Systems Engineering (3 Credit Hours)

Introduction to spacecraft systems starting from mission design and space environment considerations and proceeding through propulsion, altitude control, spacecraft structural design, thermal control, power and communications for spacecraft.

Prerequisites: MATH 307 and PHYS 232N

MAE 495/595 Topics in Mechanical and Aerospace Engineering (1-3 Credit Hours)

Special topics of interest with emphasis placed on recent developments in mechanical and aerospace engineering or engineering mechanics. (offered fall, spring, summer)

Prerequisites: Senior standing; Permission of the chair is required

MAE 496 Topics in Mechanical and Aerospace Engineering (1-3 Credit Hours)

Special topics of interest with emphasis placed on recent developments in mechanical engineering or engineering mechanics. (offered fall, spring, summer)

Prerequisites: senior standing; permission of the chair is required

MAE 497/597 Independent Study in Mechanical and Aerospace Engineering (1-3 Credit Hours)

Individual analytical, computational, and/or experimental study in an area selected by student. Supervised and approved by the advisor.

Prerequisites: Senior standing; Permission of the chair is required

MATH - Mathematical Sciences

MATH 100 The Math Cooperative (1 Credit Hour)

This course is to prepare students who did not meet the prerequisites for MATH 102M or MATH 103M. This course is not open to students with prior credit for or who qualify for College Algebra or a higher-level math course.

MATH 101M An Introduction to Mathematics for Critical Thinking (3 Credit Hours)

This course fulfills the math general education requirement for some majors in the College of Arts and Letters and the College of Education and Professional Studies. It can also be used as a preparation for STAT 130M. An introduction to the ways in which modern mathematics can be used to analyze the modern world and make logical decisions. Topics include problem solving, sets, logic, consumer mathematics (loans, mortgages, annuities), probability, and elementary statistics.

MATH 102M College Algebra (3 Credit Hours)

A basic course in algebra that emphasizes applications and problem-solving skills. Topics include finding solutions, graphing of linear equations and inequalities, graphs and functions, combining polynomials and polynomial functions, factoring polynomials, simplifying and combining rational expressions and equations, simplifying roots and radicals, solving radical equations, and an introduction to quadratic functions and equations. This course fulfills the math general education requirement and can be used as a preparation for MATH 162M. MATH 101M is not a prerequisite for MATH 102M. Not open to students with credit for MATH 162M.

Prerequisites: SAT score of 540 or above, or ACT score of 22 or above, or qualifying score on the ALEKS placement exam

MATH 103M College Algebra with Supplemental Instruction (3 Credit Hours)

This course covers the same content as MATH 102M. It is designed for students who must complete MATH 102M as part of their degree program, but who do not meet the prerequisites for MATH 102M. MATH 103M may be used interchangeably with MATH 102M and may be used as a prerequisite requirement for any course that requires MATH 102M as a prerequisite. MATH 103M will require registration for a supplemental instruction session each week.

Prerequisites: High school GPA of 3.4 or above, or qualifying score on the ALEKS placement exam, or MATH 100

MATH 162M Precalculus I (3 Credit Hours)

The first course in a two-course sequence designed to provide a strong preparation for calculus. Topics include algebraic operations, equations and inequalities, graphs and functions, polynomial functions, theory of equations, systems of equations, exponential functions, and logarithmic functions.

Prerequisites: qualifying score on SAT or ACT, or qualifying score on a placement test administered by the University Testing Center or a grade of C or better in MATH 102M or MATH 103M

MATH 163 Precalculus II (3 Credit Hours)

The second course in a two-course sequence designed to provide strong preparation for calculus. Topics include exponential and logarithmic functions/equations, trigonometric functions/equations, trigonometric identities, laws of sines and cosines, vectors, polar representation of complex numbers, binomial theorem, and conic sections.

Prerequisites: A grade of C or better in MATH 162M

MATH 166 Precalculus I and II (4 Credit Hours)

A one-semester precalculus course covering the topics of MATH 162M and MATH 163 at an accelerated pace. Not available to students with credit in MATH 163.

Prerequisites: A grade of C or better in MATH 102M or MATH 103M

MATH 197 Undergraduate Research Experience in Mathematics (0 Credit Hours)

Student participation in a supervised, undergraduate research experience for which credit will not apply to the degree. Experience must be related to the student's major, minor or career area of interest.

Prerequisites: permission of the instructor

MATH 200 Calculus for Business and Economics (3 Credit Hours)

A Calculus course intended for those studying business and economics. Topics include applications of linear, quadratic, rational, exponential, and logarithmic business functions, solving applied linear systems using matrices, limits and continuity, derivatives with applications, and integration with applications.

Prerequisites: A grade of C or better in MATH 162M

MATH 205 Calculus for Life Sciences (3 Credit Hours)

This course covers the standard topics of first semester calculus including limits, derivatives and integrals. All examples for this course are drawn from biological sciences with specific applications to topics covered in the core courses of the undergraduate Biology major.

Prerequisites: A grade of C or better in MATH 162M

MATH 211 Calculus I (4 Credit Hours)

A first course in calculus and analytic geometry. Topics include differentiation and integration of algebraic and transcendental functions of one variable and applications.

Prerequisites: A grade of C or better in MATH 163 or MATH 166

MATH 212 Calculus II (4 Credit Hours)

A second course in calculus and analytic geometry. Topics include techniques of integration, polar coordinates, infinite series, solid geometry, vectors, lines and planes.

Prerequisites: A grade of C or better in MATH 211

MATH 280 Transfer Credit for Ordinary Differential Equations (3 Credit Hours)

This course is a VCCS transfer credit vehicle. Students who have earned transferable credit in MATH 279 or 291 at any member institution of the VCCS will be granted credit for MATH 280. The course will not be offered for credit by Old Dominion University. Cannot be used to substitute for MATH 307 for MATH majors or minors.

MATH 285 Transfer Credit for Calculus III (4 Credit Hours)

This course is a VCCS transfer credit vehicle. Students who have earned transferable credit for MATH 275 or 277 at any member institution of the VCCS will be granted credit for MATH 285. The course will not be offered for credit by Old Dominion University. Cannot be used to substitute for MATH 312 for MATH majors or minors.

MATH 295 Topics in Mathematics (1-5 Credit Hours)

Study of selected topics.

Prerequisites: departmental permission

MATH 302 Geometry (3 Credit Hours)

Elementary plane and solid Euclidean geometry with proofs and applications. Topics include angles, triangles, congruence, quadrilaterals, circles, similarity, perimeter, area, volume, polygons, plane and solid constructions. A dynamic geometry visualization software is used to discover geometric properties. (May not be used to satisfy the upper-division elective requirement of the math majors program.)

Prerequisites: A grade of C or better in MATH 102M or MATH 103M or MATH 162M

MATH 307 Ordinary Differential Equations (3 Credit Hours)

Topics include first order differential equations and systems, second and higher order linear equations, solution by series and Laplace transform, and applications.

Prerequisites: A grade of C or better in MATH 212

MATH 311W Abstract Algebra (3 Credit Hours)

Topics include introduction to logic and methods of proof; sets, relations, and functions; elementary group and ring theory. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C; MATH 212 or departmental permission

MATH 312 Calculus III (4 Credit Hours)

A third course in calculus and analytic geometry. Topics include vector functions, partial derivatives, multiple integrals and an introduction to vector calculus.

Prerequisites: A grade of C or better in MATH 212

MATH 316 Introductory Linear Algebra (3 Credit Hours)

An introduction to linear algebra. Topics include matrices, vectors, vector spaces, linear transformations, eigenvalues and eigenvectors.

Prerequisites: A grade of C or better in MATH 212

MATH 317 Calculus IV: Introductory Analysis (3 Credit Hours)

An introduction to real analysis. Topics covered include completeness and topological properties of the real line, theory of sequences, limits of functions, the derivative, the Riemann integral, and the Fundamental Theorem of Calculus.

Prerequisites: A grade of C or better in MATH 212

MATH 335 Number Systems and Discrete Mathematics (3 Credit Hours)

Estimation and other applications to real world problems, using elementary principles of algebra, geometry, number theory, number systems, and discrete mathematics. (May not be used to satisfy the upper-division elective requirement of the math majors program.)

Prerequisites: A grade of C or better in MATH 102M or MATH 103M or MATH 162M

MATH 367 Cooperative Education (1-3 Credit Hours)

Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures as formally determined by the department prior to the semester in which the work experience is to take place. Available for pass/fail grading only. May be repeated for credit.

Prerequisites: Permission of the departmental chair in accordance with departmental Cooperative Education policies; Student participation in a professional work experience; Approval for enrollment and allowable credits are determined by the department; Additional support may be provided by the Monarch Internship and Co-Op Office in at least one semester prior to enrollment

MATH 375 Advanced Concepts for Secondary Educators: Function and Modeling (3 Credit Hours)

This course engages students in explorations and laboratory activities designed to strengthen and expand their knowledge of the topics found in college mathematics, and in particular, students will delve into and illuminate the connections between secondary and college mathematics by exploring and highlighting the basic secondary school topics that need to be mastered in order to solve problems in college mathematics. Through this process, students will achieve mastery of topics they will be teaching in secondary mathematics and understand the connection between the high school curriculum and their students' success in college and in the workplace.

Prerequisites: MATH 307

MATH 395 Topics in Mathematics (1-3 Credit Hours)

Study of selected topics.

Prerequisites: departmental permission

MATH 399 Putnam Exam Problems and Related Topics (1 Credit Hour)

This course is designed to help students prepare for the Putnam Exam - an annual national mathematical competition. Problems from previous Putnam Exams and materials related to the solution of such problems will be considered.

Prerequisites: A grade of C or better in MATH 212

MATH 400/500 History of Mathematics (3 Credit Hours)

Seminal ideas in geometry, arithmetic, algebra, analysis and applied mathematics (along with their mathematical representations) from antiquity, the age of exploration, the Promethean age to the present day.

Prerequisites: MATH 311W or MATH 316 or MATH 317

MATH 401/501 Partial Differential Equations (3 Credit Hours)

Not available to students with credit in MATH 691. Separation of variable techniques, Sturm-Liouville systems, generalized Fourier series, orthogonal functions of the trigonometric, Legendre and Bessel type boundary value problems associated with the wave equation and the heat conduction equation in various coordinate systems, applications to physics and engineering.

Prerequisites: A grade of C or better in MATH 307 and MATH 312

MATH 404/504 Fundamental Concepts of Geometry (3 Credit Hours)

Fundamentals of Euclidean and non-Euclidean geometry. Alternatives to Euclidean geometry are examined using a variety of mathematical techniques. Special topics such as 'Taxicab' geometry, the hyperbolic plane, the art of M.C. Escher, and the mathematics of maps may be included.

Prerequisites: MATH 311W

MATH 406/506 Number Theory and Discrete Mathematics (3 Credit Hours)

A survey course. Topics include the prime number theorem, congruences, Diophantine equations, continued fractions, quadratic reciprocity, combinatorics, logic, graphs, trees, algorithms, coding and linear programming.

Prerequisites: A grade of C or better in MATH 311W and MATH 316

MATH 408/508 Applied Numerical Methods I (3 Credit Hours)

An introduction to the numerical methods commonly used by scientists and engineers. Topics include solutions of equations of one variable, direct methods for solving linear systems, matrix factorization, stability analysis, iterative techniques, polynomial interpolation, numerical differentiation and integration, approximation theory, and initial and boundary value problems for ordinary differential equations.

Prerequisites: A grade of C or better in MATH 316; CS 150 or equivalent programming ability also required

MATH 409/509 Applied Numerical Methods II (3 Credit Hours)

Topics include least squares problems, the QR factorization, the conjugate gradient method, Householder transformation and the QR method for approximating eigenvalues and singular values of a matrix. For applications, the finite difference method and the finite element method for solving partial differential equations, trigonometric interpolation and FFT as well as introductory study of optimization are discussed.

Prerequisites: A grade of C or better in MATH 408/MATH 508

MATH 417/517 Intermediate Real Analysis I (3 Credit Hours)

A rigorous course in classical real analysis. Topics include the topology of Euclidean n -space, properties of vector valued functions of several variables such as limits, continuity, differentiability and integrability, pointwise and uniform convergence of sequences and series of functions; Fourier series.

Prerequisites: a grade of C or better in MATH 317

MATH 418/518 Intermediate Real Analysis II (3 Credit Hours)

A rigorous course in classical real analysis. Topics include the topology of Euclidean n -space, properties of vector valued functions of several variables such as limits, continuity, differentiability and integrability, pointwise and uniform convergence of sequences and series of functions; Fourier series.

Prerequisites: A grade of C or better in MATH 417

MATH 420/520 Applied Mathematics I: Biomathematics (3 Credit Hours)

Exploring mathematical models in various biological contexts using both difference and differential equations: single and multiple species population growth, predator-prey and competing species (using phase plane analysis), epidemiological models of epidemics and pandemics, tumor growth, pattern formation in animals and insects.

Prerequisites: A grade of C or better in MATH 307

MATH 421/521 Applied Mathematics II: Mathematical Modeling (3 Credit Hours)

The philosophy and methodology of mathematical modeling, its successes and limitations. Topics include models of climate change and atmospheric and ocean dynamics, models in other physical and biological contexts, and an introduction to deterministic chaos.

Prerequisites: A grade of C or better in MATH 307, MATH 312, MATH 316, and MATH 317

MATH 422/522 Applied Complex Variables (3 Credit Hours)

Not available to students with credit in MATH 692. Topics include complex numbers, analytical functions and their properties, derivatives, integrals, series representations, residues and conformal mappings. Applications of the calculus of residues and mapping techniques to the solution of boundary value problems in physics and engineering.

Prerequisites: A grade of C or better in MATH 312

MATH 427/527 Applied Mathematics III: Elasticity (3 Credit Hours)

An introduction to the mathematical theory of linear and non-linear elastic continua. Topics include vectors, tensors, deformation, stress, nonlinear constitutive theory, exact solutions, infinitesimal theory, antiplane strain, plane strain, plane stress, extension, torsion, bending and elastic wave propagation.

Prerequisites: A grade of C or better in MATH 307 and MATH 312

MATH 428/528 Applied Mathematics IV: Fluid Mechanics (3 Credit Hours)

A mathematical investigation of the differential equations governing fluid flow with an emphasis on steady state incompressible flows.

The Navier-Stokes equations are derived and some exact solutions are presented including the potential flow solutions. Topics therefore include classical ideal fluid flow and its complex variable representation, various approximations to the Navier-Stokes equations, boundary layer theory, and also surface and internal gravity wave motion, aspects of hydrodynamic stability theory and convection. Other topics may be introduced by the instructor.

Prerequisites: A grade of C or better in MATH 307 and MATH 312

Corequisites: MATH 401

MATH 457/557 Mathematics in Nature (3 Credit Hours)

A calculus and differential equations based description of many patterns observable in the natural world including wave motion in the air, oceans, rivers, and puddles; rainbows, halos and other meteorological phenomena; arrangement of leaves, petals and branches; height of trees; river meanders; animal and insect markings; mudcracks; spider webs; and others. Partial differential equations will be discussed as needed but a knowledge of ordinary differential equations will be assumed.

Prerequisites: A grade of C or better in MATH 307

MATH 461 Preparation for Praxis Certification (3 Credit Hours)

This course will equip students to pass the Praxis 5161 Mathematics: Content Knowledge Exam. This exam is required for teaching licensure at the secondary Level in Virginia. Only open to students in the Secondary School Teaching Option in the Math B.S. program who have NOT yet passed the Praxis 5161 Exam.

Prerequisites: Instructor approval

MATH 494 Entrepreneurship in Mathematics (3 Credit Hours)

This course is designed to help students enhance their personal and professional development through innovation guided by faculty members and professionals. It offers students an opportunity to apply their knowledge of mathematics to the development of a new product, business, nonprofit program, or other initiative. The real world experiences that entrepreneurship provide will help students understand how academic knowledge leads to transformations, innovations, and solutions to different types of problems. This course is administered as an independent project for individual students, or as group projects.

Prerequisites: 3.0 GPA and approval of course instructor(s)

MATH 496/596 Topics in Mathematics (1-3 Credit Hours)

Study of selected topics.

Prerequisites: permission of the instructor

MATH 498/598 Tutorial Work in Special Topics in Mathematics (1-3 Credit Hours)

Independent study under the direction of an instructor including library research and reports.

Prerequisites: permission of the instructor

MBA - Master of Business Administration

MBA 420/520 Spreadsheet Modeling (1 Credit Hour)

This course introduces students to the use of spreadsheet modeling to analyze and make business decisions. Course topics include spreadsheet design, data analysis for modeling, and Monte Carlo simulation. The course is web-based providing tremendous flexibility for the students. Students will need some proficiency with Excel.

Prerequisites: Instructor permission

MDTS - Medical Diagnostic and Translational Sciences

MDTS 400/500 Principles of Molecular Diagnostics (3 Credit Hours)

Course will cover basic concepts of molecular biology including nucleic acids, chromosomes, DNA replication, transcription, and translation and the role of inherited and acquired mutations in disease. The role of clinical molecular diagnostics in detection, prognosis, theranostics, and monitoring and management of patients with inherited and infectious diseases will be explored.

Prerequisites: BIOL 240 or BIOL 250, BIOL 241 or BIOL 251; CHEM 211, CHEM 212 and permission of instructor

MDTS 401/501 Molecular Diagnostics Laboratory (3 Credit Hours)

Course will cover basic molecular biology laboratory techniques including nucleic acid isolation, restriction enzyme digestion, polymerase chain reaction (PCR), quantitative reverse-transcription PCR, DNA sequencing, western blot, ELISA, and PCR-RFLP. This includes both hands on experience and lecture-based explanation of the science behind the techniques.

Prerequisites: Restricted to students in the Medical Laboratory Science, Pre-Clinical Studies, or Cytology major, or Cytology certificate program, or permission of the instructor

MET - Mechanical Engineering Technology

MET 200 Materials and Manufacturing Processes (3 Credit Hours)

Application and characteristics, both physical and chemical, of the materials most commonly used in industry as well as procedures and processes used in converting raw materials into a finished product.

MET 225 Strength of Materials Laboratory (1 Credit Hour)

A laboratory course dealing with the standard methods of inspecting and testing materials used in engineering applications with emphasis on laboratory reports, including presentation and interpretation of experimental data.

Pre- or corequisite: ENGT 220

MET 295 Topics (1-3 Credit Hours)

Study of selected topics.

MET 300 Thermodynamics (3 Credit Hours)

The basic laws of thermodynamics, properties of fluids, heat, and work and their applications in processes and cycles and an introduction to conduction heat transfer.

Prerequisites: CHEM 121N, MATH 211, and PHYS 111N or PHYS 231N

MET 310 Dynamics (3 Credit Hours)

A fundamental treatment of coplanar and three-dimensional kinematics and kinetics of particles and rigid bodies, including relative motion, mass moment of inertia, Newton's laws, work and energy and impulse and momentum.

Prerequisites: A grade of C or better in MATH 211, and MET 210 or CET 200 or ENGT 200

MET 320 Design of Machine Elements (3 Credit Hours)

The course provides a comprehensive overview of mechanical design principles and stress analysis in design of mechanical drive systems (such as belts, chains, and gears), shaft design, bearings, and fasteners, as well as the integration of electric motors and motion control elements like clutches and brakes. The course emphasizes practical design applications in design of machine elements.

Prerequisites: A grade of C or better in MATH 211 and ENGT 220

MET 330 Fluid Mechanics (3 Credit Hours)

The study of fluid statics and dynamics, including momentum, energy, Bernoulli's equation, laminar and turbulent fluid flow and friction in pipes, fluid machinery, and open-channel flow.

Prerequisites: MATH 211, and MET 210 or CET 200 or ENGT 200

MET 331 Fluid Mechanics Laboratory (1 Credit Hour)

Experimental study of applied fluid mechanics, its fundamental concepts including fluid statics, Bernoulli's equation, pipe friction, flow measuring devices, and fluid machinery. Includes report writing, presentation and interpretation of experimental data.

Prerequisites: MATH 211

Pre- or corequisite: MET 330

MET 340 Heat Transfer (3 Credit Hours)

A study of conduction, convection, and radiation heat transfer, and heat exchangers. Emphasis is on applications and problem solving using current techniques, and modern numerical tools.

Prerequisites: A grade of C or better in MATH 211, and MET 300

MET 350 Thermal Applications (3 Credit Hours)

A study of the applications of thermodynamics. Topics include the basic steam and gas turbine power cycles, internal combustion engines, introduction to refrigeration systems, gas mixtures, and psychrometrics applied to air conditioning processes.

Prerequisites: MET 300 with a grade of C or better

MET 351 Thermal Applications Laboratory (1 Credit Hour)

Experimental study of applied thermodynamics and energy conversion efficiencies; power cycles, refrigeration cycles, compressible flow, and heat transfer. Includes teamwork and collaborative laboratory report writing, along with presentation and interpretation of experimental data.

Prerequisites: MET 331

Pre- or corequisite: MET 350

MET 367 Cooperative Education (1-3 Credit Hours)

May be repeated for credit. Available for pass/fail grading only. Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures as formally determined by the department prior to the semester in which the work experience is to take place. (offered fall, spring, summer)

Prerequisites: Permission of the departmental chair in accordance with departmental Cooperative Education policies; Student participation in a professional work experience; Approval for enrollment and allowable credits are determined by the department; Additional support may be provided by the Monarch Internship and Co-Op Office in at least one semester prior to enrollment

MET 368 Internship (1-3 Credit Hours)

Available for pass/fail grading only. Academic requirements will be established by the department and will vary with the amount of credit desired. Allows students to gain short duration career-related experience.

Prerequisites: Approval by department is required; additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

MET 369 Practicum (1-3 Credit Hours)

Available for pass/fail grading only.

Prerequisites: Approval by department is required; Additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

MET 395 Topics (1-3 Credit Hours)

Study of selected topics.

Prerequisites: permission of the instructor

MET 396 Topics (1-3 Credit Hours)

Study of selected topics.

Prerequisites: permission of the instructor

MET 427 Mechatronic System Design (3 Credit Hours)

A study of the integrated modeling and optimal design of a physical system, which includes sensors, actuators, electronic components, and its embedded digital control system. Includes simultaneous optimal design practice with respect to the realization of the design specifications related to different engineering domains.

Prerequisites: MATH 211

MET 431 Modeling and Simulation of Mechatronic Systems (3 Credit Hours)

The course provides foundations, principles, methods, and tools for modeling and simulation of electro-mechanical components and systems using appropriate modeling techniques. The course is focused on the multi-body dynamics systems, fluid, hydraulic, and electrical systems.

Prerequisites: ENGT 305

MET 435 Advanced Fluid Mechanics and Turbomachinery (3 Credit Hours)

Foundations, principles, methods, and tools for solving a variety of industrial fluid problems, computing pipe friction losses in complex systems, understanding fluid-machinery operation, pump selection process, understanding turbine and dam mechanics, and designing gas/air flow in ducts.

Prerequisites: MET 330

MET 460 Refrigeration and Air Conditioning (3 Credit Hours)

The design and application of refrigeration and air conditioning systems. Studies are made of compressors, condensers, evaporators, psychometric processes, load calculations and air distribution systems. High performance vapor compression systems, absorption systems and other cycles are analyzed.

Prerequisites: MET 330 and MET 350

MET 471 Nuclear Systems I (3 Credit Hours)

Reactor physics principles as applied to the design and operation of various types of commercial nuclear power reactors. Topics include sources of radiation and interaction with matter, neutron interactions, diffusion theory, and reactor kinetics.

Prerequisites: MATH 211

MET 472 Nuclear Systems II (3 Credit Hours)

Complete study of the nuclear fuel cycle, from mining through fabrication, fuel management in an operating commercial power reactor, spent fuel management, and fuel reprocessing, with emphasis on chemical engineering considerations.

Prerequisites: MET 471

MET 475 Marine Engineering I (3 Credit Hours)

This course includes: fundamental principles of naval architecture including nomenclature, geometry, stability, hydrostatics, structures, and motions; ship design processes; and a basic introduction to shipboard systems such as HVAC, refrigeration, power generation, propulsion, hydraulics, electronics, cargo handling systems, seawater systems, freshwater systems, and fuel, lube and other oil systems.

Prerequisites: MET 330 and MET 350

MET 476 Marine Engineering II (3 Credit Hours)

This course provides an in-depth look at shipboard systems and introduces topics such as basic shipboard specifications, design requirements, systems, and operations. Concepts related to digital threads and digital twin in shipbuilding are covered.

Prerequisites: MET 330 and MET 350

MET 485 Maintenance Engineering (3 Credit Hours)

This course looks at maintenance systems: predictive, preventative and corrective; large scale maintenance systems, principles of reliability engineering, logistics: planning for maintenance and repair, using and ordering spare parts, technical manuals, system specifications, and operations. Modern tools such as AI are included.

Prerequisites: MATH 211

MET 495 Topics in Mechanical Engineering Technology (1-3 Credit Hours)

Study of selected topics.

Prerequisites: permission of the instructor

MET 496 Topics in Mechanical Engineering Technology (1-3 Credit Hours)

Study of selected topics.

Prerequisites: permission of the instructor

MFET - Manufacturing Engineering Technology

MFET 235 Introduction to Robotics (3 Credit Hours)

An introductory course in robotics dealing with the history and development of robots, mechanical components and control systems, actuators, robot programming and utilization. Included are laboratory experiments in robot motion and programming.

Prerequisites: MATH 211

MFET 310 Design for Manufacturing (3 Credit Hours)

Principles of design for manufacturing, materials and process selection for design, design for assembly, design for production and case studies. Also includes impact of product design, design for maintenance, recyclability, disassembly, quality and robustness. Semester project requires redesign of an existing product for manufacturing.

Prerequisites: MATH 211

MFET 320 Introduction to Mechatronics (3 Credit Hours)

A study of the mechatronics concepts and their application on actual problems encountered in engineering practice. Includes the basics of electromechanical systems, electrical circuits, solid-state devices, digital circuits and motors, all of which are fundamental to understanding mechatronic systems.

Prerequisites: MATH 211

MFET 330 Quality Systems in Manufacturing (3 Credit Hours)

This course provides a comprehensive exploration of quality systems within the realm of manufacturing. Students will delve into the principles, methodologies, and tools essential for ensuring and enhancing product quality throughout the manufacturing lifecycle. Topics covered include quality management systems, statistical process control, Six Sigma methodologies, root cause analysis, quality assurance practices, and the integration of quality systems within various manufacturing processes. Through case studies and practical applications, students will gain a deep understanding of how quality systems contribute to operational excellence and competitive advantage in modern manufacturing environments.

Prerequisites: ENGT 365

MFET 340 Computer Integrated Manufacturing (3 Credit Hours)

This course offers an in-depth examination of material handling technologies, automatic identification, and data capture techniques. Students will grasp the concepts underlying manufacturing support systems, delve into the realm of digital manufacturing, and gain proficiency in manufacturing process simulation. Through practical applications and theoretical frameworks, this course equips learners with a comprehensive understanding of how technology intersects with modern manufacturing processes.

Prerequisites: MATH 211

MFET 410 Computer Numerical Control in Production (3 Credit Hours)

Principles of computer numerical control consistent with most recently developed standards, industry practices, and CAD/CAM systems including such topics as types of CNC machines, CNC milling, CNC turning and CNC electro-discharge machinery. A significant portion of the course includes programming in multiple axes.

Prerequisites: ENGT 365

MFET 420 Introduction To Welding Technologies (3 Credit Hours)

An introduction to conventional and non-conventional welding processes. This course is intended to provide the student with a basic understanding of the various welding processes, welding terminology, joints, symbols, welding defects, equipment. Topics covered include welding processes, heat and fluid flow, structure of metals, solidification phenomena, phase transformations, residual stresses, and nondestructive examination techniques. Real life examples will be used to illustrate the fundamental concepts of the course. The student will also be introduced to career opportunities in the welding field. Lab time will be used to enforce lecture topics when needed.

Prerequisites: ENGT 365

MFET 430 Additive Manufacturing (3 Credit Hours)

This course provides an overview of various additive manufacturing (AM) processes. Topics include fundamentals of polymer, composite, and metal AM processes, process parameters, AM software, AM cost, and AM's industrial potential such as prototyping, tooling, production customization, spare parts, art, design, architecture and construction.

Prerequisites: ENGT 365

MFET 440 Advanced Manufacturing Processes (3 Credit Hours)

This course explores the intricate methods and technologies revolutionizing manufacturing, encompassing additive manufacturing, precision machining, sustainable and green processes and technologies, custom manufacturing, intelligent production systems, digital manufacturing, and digital twin.

Through case studies and practical applications, learners develop a comprehensive understanding of innovative manufacturing processes driving efficiency, precision, and competitiveness in industry.

Prerequisites: ENGT 365

MFET 450 Lean Engineering (3 Credit Hours)

This course looks at the history of lean and six sigma philosophies, their principles and implementation methodologies for creating a world class enterprise. Topics in Lean include 5s, value stream mapping, cellular manufacturing, pull system, performance metrics, Lean supplier network, Lean product development and Lean implementation models. Through theory and practical applications, students gain a foundational grasp of Lean Manufacturing and its real-world applications.

Prerequisites: ENGT 365

MFET 460 Facilities Planning and Material Handling (3 Credit Hours)

This course takes a systematic approach to design of facilities and material handling systems for effective and lean production of goods and services. An array of qualitative and quantitative tools and techniques are introduced and utilized, emphasizing lean principles, waste reduction, and overall efficiency of operations. Flow analysis and optimization tools, including computer simulation, are introduced. Strong emphasis is placed on a comprehensive semester-long team project as an integral component of this course.

Prerequisites: ENGT 365

MGMT - Management

MGMT 325 Contemporary Organizations and Management (3 Credit Hours)

The fundamentals of the managerial process (planning, organizing, leading and controlling) are considered in the context of 21st century organizations. Topics are almost evenly split between macro and micro perspectives

Prerequisites: A declared major in the University or an intended major in the Strome College of Business or permission of the Dean's Office of the Strome College, AND Junior Standing

MGMT 327 Business Communication (3 Credit Hours)

This course is an introduction to the importance and centrality of communication in business. Students will learn the application of business communication principles by working both individually and collaboratively on communicating through effective business documents, presentations, professional written and oral correspondence, and use of digital media. Attention will be given to both interpersonal and group audiences, as well as formal and informal delivery.

Prerequisites: MGMT 325

MGMT 330 Organizational Behavior (3 Credit Hours)

This class examines theories and concepts pertaining to people at work. Topics include personality differences, motivation principles, high-performing work teams, and leadership development.

Prerequisites: Junior standing

Pre- or corequisite: MGMT 325

MGMT 336 International Entrepreneurship (3 Credit Hours)

This course provides students knowledge of fundamental issues and opportunities facing entrepreneurial ventures on the global stage. Students are exposed to core theories, contemporary trends, and cutting-edge research in international entrepreneurship. Students will examine what motivates entrepreneurs to seek foreign markets, and how to leverage cultural differences. The course discusses frameworks to analyze key factors and risks involved with venturing abroad, and assessing the strategies and resources needed for international success.

Prerequisites: MGMT 325

MGMT 340 Human Resource Management (3 Credit Hours)

This class examines all issues pertaining to managing people in an organization. Topics include strategic planning for Human Resources, recruitment and selection systems, performance evaluation and development programs, Equal Employment Opportunity, and diversity management.

Prerequisites: MGMT 325

Pre- or corequisite: MGMT 330

MGMT 350 Employee Relations Problems and Practices (3 Credit Hours)

Examines personnel topics such as absenteeism, substance abuse, theft, gambling and counseling problem employees. Policies and practices used by organizations to anticipate and resolve these problems are explored and evaluated.

Prerequisites: junior standing, and a declared major in the University or permission of the Dean's Office

MGMT 360 Labor Management Relations (3 Credit Hours)

A contextual study of the trade union movement and its development, structure and processes. Emphasizes the impact of union organization on management practice and effectiveness in both private and public sector organizations.

Prerequisites: MGMT 340, and a declared major in the University or permission of the Dean's Office

MGMT 361 International Business Operations (3 Credit Hours)

An examination of the environment of multinational business, foreign trade, and the operation of multinational enterprises. Management, marketing, accounting, and financial problems unique to enterprises operating in varying economic, cultural, and political legal environments are investigated. This course includes a CAP experience. International business majors may not take MGMT 361 for credit.

Prerequisites: FIN 323, MKTG 311 and MGMT 325, and a declared major in the University or permission of the Dean's Office

MGMT 367 Cooperative Education (1-6 Credit Hours)

Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures as formally determined by the department prior to the semester in which the work experience is to take place. May be repeated for credit. Available for pass/fail grading only.

Prerequisites: MGMT 325, approval by the department, and a declared major in the University or permission of the Dean's Office

MGMT 368 Management Internship (1-3 Credit Hours)

Approval for enrollment and allowable credits is determined by the department in the semester prior to enrollment. Available for pass/fail grading only. (qualifies as a CAP experience)

Prerequisites: MGMT 325, and a declared major in the University or permission of the Dean's Office

MGMT 369 Management Practicum (1-3 Credit Hours)

Approval for enrollment is determined by the Management advisor in the semester prior to enrollment. Student will participate in a relevant work setting.

Prerequisites: MGMT 325, and a declared major in the University or permission of the Dean's Office; transfer students must have completed one semester at Old Dominion University

MGMT 400/500 Managing Organizations (3 Credit Hours)

This course introduces students to understanding employee attitudes and behaviors as well as human resource management. Topics include job performance, performance management, organizational commitment, employee retention, motivation, compensation, and employee well-being.

Prerequisites: Instructor permission

MGMT 410 Leadership in Organizations (3 Credit Hours)

This course is designed to provide students with a comprehensive understanding of leadership as a phenomenon impacting individuals, organizations, and the larger society. Major leadership theories are examined along with processes through which leadership influences various internal and external organizational factors. Leadership traits, behaviors, styles, communication, and the dynamic nature of leader-follower developments will be addressed. Methods of instruction include case studies, experiential exercises, and simulations.

Prerequisites: MGMT 325 or permission of the Dean's office

MGMT 417/517 Employment Law (3 Credit Hours)

An analysis of how the federal and state governments may regulate the employer-employee relationship. Topics include labor relations law, equal employment opportunity law, other current statutory employment law and common law employment issues.

Prerequisites: junior standing and MGMT 325 or MGMT 602, and a declared major in the University or permission of the Dean's Office

MGMT 418 Advanced Human Resource Management: Contemporary Issues (3 Credit Hours)

An in-depth analysis of current issues and concerns within human resources management. The course will focus on specific issues and problems associated with the law and equal employment opportunity, employee selection, training and development, performance management/appraisal, and compensation. Methods of instruction include cases, exercises and PC applications.

Prerequisites: junior standing and MGMT 325 and MGMT 340, and a declared major in the University or permission of the Dean's Office

MGMT 420 Business Development (3 Credit Hours)

Course focuses on assessing the strategies, tactics, dilemmas, processes and solutions associated with developing a new business. Emphasis is devoted to how new ventures should raise rates (sales, prices, productivity), decrease costs, promote and execute while pursuing innovation. The course explores a wide variety of actual small business case studies to illuminate the critical strategic, operational and behavioral considerations necessary to build a successful enterprise, including rollouts (duplicating a business model in multiple locations), rollups (acquiring similar businesses to accelerate growth), and franchises.

Prerequisites: MGMT 325 and ACCT 201

MGMT 424 Technology and Innovation Management (3 Credit Hours)

This course focuses on three core elements of managing innovation and technology in small and large organizations. First, it teaches in-depth analysis of how innovations can transform companies and industries, including who gains and loses from such developments. Second, it explains how organizations can organize to create innovations internally and externally, and how they can take advantage of opportunities while mitigating threats in technology and innovation development. Third, it discusses how firms benefit and prosper by using various methods of commercialization and protecting new technologies and innovation.

Prerequisites: MGMT 325 or instructor approval

MGMT 426 Entrepreneurship: New Ventures Creation (3 Credit Hours)

A study of the essential elements leading to entrepreneurial and intrapreneurial success with emphasis on the creation, structure and management of new ventures. A recommended elective for business students.

Prerequisites: ENTR 301 OR ACCT 201, MKTG 311, MGMT 325, and must have senior standing

MGMT 427 Business and Society (3 Credit Hours)

An examination of the relationship between business (usually the individual firm, but occasionally a group of firms in an industry or a set of headline-makers in different industries) and society (an individual, group of people, the general public, or government entity representing the interests of this individual or group or the public). Emphasizes stakeholders and ethics. The course material is both philosophical and practical for executives and informative and practical for citizens.

Prerequisites: MGMT 325, 3 hours of ACCT and 3 hours of ECON, and a declared major in the University or permission of the Dean's Office

MGMT 430 Compensation Management (3 Credit Hours)

This class examines issues pertaining to developing, evaluating, and re-designing an organization's direct and indirect compensation systems. Topics include pay structure, incentive plans, benefit programs, and special cases such as executive compensation.

Prerequisites: Senior standing, MGMT 325, a C- or higher in MGMT 340, and a declared major in the University or permission of the Dean's Office

MGMT 440 Human Resource Staffing Strategies (3 Credit Hours)

This course examines both research and practice regarding the strategic recruitment, selection, and development of top talent in organizations. Discussion topics include understanding and planning for talent needs, use of current recruitment methods and selection techniques, development of both internal and external talent pools, and the influences of external and internal changes due to competitive business environments and job design/redesign initiatives. The strategic and legal context of employment decision making is emphasized.

Prerequisites: MGMT 325, MGMT 330, and MGMT 340

MGMT 450 Performance Measurement and Management (3 Credit Hours)

The role of performance management (PM) systems (performance measurement, appraisal, and development) is critical to organizational and workers success. This course focuses on how an effective PM system created in alignment with an organization's strategy, mission, values, and product or services, can attract, develop, and retain top-performers. We will discuss how PM systems are tied to reward systems and will examine the legal regulations to which an organization must adhere. Topics include performance appraisals, coaching, feedback, reward systems, and related management activities.

Prerequisites: MGMT 325, MGMT 330, and MGMT 340

MGMT 452/552 Negotiations and Change Management (3 Credit Hours)

This course focuses on negotiations and change. Students will develop analytical, interpersonal, and communication skills, with an emphasis placed on experiential learning through case studies, role playing, and simulations.

Prerequisites: MGMT 325 or permission of the Dean's Office

MGMT 460 Human Resource Analytics (3 Credit Hours)

This course provides an introduction to the use of people analytics to optimize HR processes. Students will learn about human resource analytics tools, technologies, and tasks. Topics include: modeling employee turnover, optimizing training and development, evaluating recruitment strategies, and identifying sources of pay inequity. Students will also receive training on ADP's Workforce Now cloud-based Human Resource information system.

Prerequisites: Senior standing and MGMT 325, MGMT 330, and MGMT 340

MGMT 462 Comparative International Management (3 Credit Hours)

The course examines organizational structure and functioning from cross-cultural and cross-national perspectives. Compares how management practices differ from one society to another. Comparisons are made between the U.S., Western Europe, Japan, the USSR, China, and the Third World nations.

Prerequisites: senior standing and MGMT 325, and a declared major in the University or permission of the Dean's Office

MGMT 463/563 Management Seminar Abroad (3 Credit Hours)

A study tour abroad under the direction of a faculty member including on-site visits and management lectures designed to provide insight into differences in management practices in foreign countries. Offered summers only and when available.

Prerequisites: permission of the chief departmental advisor, and a declared major in the University or permission of the Dean's Office

MGMT 465/565 SHRM Learning System (3 Credit Hours)

This is a course based on the SHRM (Society for Human Resource Management) Learning System® for SHRM-CP/SHRM-SCP. Comprised of comprehensive learning modules teaching the SHRM Body of Applied Skills and Knowledge™ (SHRM BASK™), and advanced online multimedia resources, these study materials streamline study time, accelerate learning and build confidence for passing the SHRM-CP/SHRM-SCP exam. The course tuition includes all books, including one year access to the SHRM online learning resources, but does not include registration for the SHRM-CP/SHRM-SCP examinations.

Prerequisites: MGMT 325, MGMT 330, and MGMT 340

MGMT 485W Business Policy and Strategy (3 Credit Hours)

Strategic management addresses the concerns of the high level executive or general manager, who must use a perspective that is qualitatively different from that of the lower-level functional manager or operations manager. Strategic decisions cut across functional lines. Whereas other courses focus on competency at a functional level (Are we doing things right?), this course deals with the overall effectiveness of the total organization (Are we doing the right things?). This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C; senior standing, FIN 323, MGMT 325, MKTG 311, and a declared major in the University or permission of the Dean's Office

MGMT 490 Management Consulting (3 Credit Hours)

An exploration of the consulting industry and its role in driving improvements across various types of organizations. Students will learn problem-solving frameworks used to direct decision making as well as real-world communication and project management skills.

Prerequisites: MGMT 325

Pre- or corequisite: MGMT 485W

MGMT 495/595 Selected Topics in Management (3 Credit Hours)

Designed to provide advanced students in management an opportunity to study administration in highly specialized areas under the guidance of a faculty member.

Prerequisites: permission of the chief departmental advisor/graduate program director

MGMT 497 Independent Study in Management (3 Credit Hours)

Designed to provide advanced students in management an opportunity for independent study of selected areas under the guidance of a faculty member.

Prerequisites: permission of the chief departmental advisor, and a declared major in the University or permission of the Dean's Office

MIDE - Middle Eastern Studies

MIDE 395 Topics in Middle Eastern Studies (3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on topics of mutual interest which, due to their specialized nature, may not be offered regularly.

Prerequisites: junior standing or permission of instructor

MIDE 405 Communication and Culture in the Middle East (3 Credit Hours)

The course examines the tensions between modernity and tradition in the context of Middle East culture. Cultural variables to be studied include myths, religion, family structures, and the use of science and technology.

Prerequisites: three hours of lower level social science

MIDE 495 Topics in Middle Eastern Studies (3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on topics of mutual interest which, due to their specialized nature, may not be offered regularly.

Prerequisites: junior standing or permission of instructor

MKTG - Marketing

MKTG 200R Professional Interactions and Negotiations (3 Credit Hours)

This class introduces and develops fundamental communication skills used in formal career settings. Students will learn and practice giving persuasive speeches, networking at formal career events, interviewing for jobs, and negotiating.

MKTG 311 Marketing Principles and Problems (3 Credit Hours)

The design, distribution, pricing, and promotion of goods, services, people, places, and causes. Course examines both national and international markets and includes an introduction to the legal and ethical constraints on marketing.

Prerequisites: A declared major in the University or an intended major in the Strome College of Business or permission of the Dean's Office of the Strome College, AND Junior Standing

MKTG 316 Professional Selling (3 Credit Hours)

This course examines professional selling as the link between the firm and the customer. The sales force has a key role in relationship management. As such, this class will emphasize selling skills that help to maintain positive long-term customer relationships. Topics will include prospecting for new clients, adaptive communication skills, addressing customer concerns, closing sales, following up with customers, understanding different types of sales positions and skills, and ethics in professional selling.

Prerequisites: C or better in ENGL 110C or ENGL 126C

MKTG 317 New Product Planning and Commercialization (3 Credit Hours)

This course addresses the complex, cross-disciplinary nature of product planning and commercialization, which encompasses product development and product management. Course content covers strategic issues that emerge during the product life cycle, beginning with idea conception to technical development to launch to eventual product dismissal, and includes understanding customer needs, translating customer needs into technical specifications, business and market analyses, coordination of marketing mix variables, testing, launch, and postlaunch management. While the term 'product' is employed, the course treats service planning alongside product planning. At the conclusion of this course, one should realize and understand good managerial practices for successful product planning and commercialization.

Prerequisites: Junior standing or instructor permission

MKTG 318 AI in Business: Foundations and Applications (3 Credit Hours)

This course provides a dynamic exploration of artificial intelligence and its transformative impact on business. Students gain a foundational understanding of key AI concepts and hands-on experience with popular AI tools like ChatGPT (among many other AI tools). Students analyze the strategic implications of AI for innovation, competitive advantage, and the changing landscape of work. This course also explores ethical considerations, responsible AI governance, and future trends to equip students with the knowledge and skills to leverage AI for business.

Prerequisites: Junior standing and/or instructor permission

MKTG 319 Artificial Intelligence (AI) in Digital Marketing Management (3 Credit Hours)

This course provides a comprehensive exploration of how artificial intelligence is transforming digital marketing. It equips students with the knowledge and skills to leverage AI tools and technologies across various aspects of marketing strategy and management. Students will build a strong foundation of AI concepts and technologies relevant to marketing and will learn to leverage AI to better understand and engage customers, plan and execute marketing plans, and increase operational efficiency. The course also highlights unique ethical considerations related to AI in marketing and examines emerging trends in AI-powered marketing, preparing students for a successful future in the field.

Prerequisites: Permission of Instructor

MKTG 367 Cooperative Education (1-3 Credit Hours)

May be repeated for credit. Available for pass/fail grading only. Student participation for credit based on the academic relevance of the work experience, criteria and evaluative procedures as formally determined by the department prior to the semester in which the work experience is to take place.

Prerequisites: C or better in MKTG 311 (or equivalent) and approval by the instructor in accordance with the policy for granting credit for Cooperative Education programs

MKTG 368 Marketing Internship (1-3 Credit Hours)

Student completes a relevant marketing experience in the marketplace after submitting a job description, learning objectives, and task accomplishments.

Prerequisites: C or better in MKTG 311 (or equivalent) and approval of instructor

MKTG 369 Practicum (1-3 Credit Hours)

Practicum experience in marketing.

Prerequisites: C or better in MKTG 311 (or equivalent) and approval of instructor

MKTG 402 Consumer Behavior (3 Credit Hours)

The effects of personality, motivation, perception, learning, attitudes, cultural and social influence and lifestyle on buying situations and how knowledge of these factors enables the marketer to better meet the needs of the marketplace.

Prerequisites: C or better in MKTG 311 (or equivalent), and a declared major in the University or permission of the Dean's Office

MKTG 403 Advertising Strategy (3 Credit Hours)

An examination of those advertising and promotional strategies directed toward the consumers of goods and services with emphasis on planning and executing an effective campaign to achieve meaningful goals.

Prerequisites: C or better in MKTG 311 (or equivalent), and a declared major in the University or permission of the Dean's Office

MKTG 404 Sales Management (3 Credit Hours)

Material focuses on quantitative and qualitative goal setting; management, control and evaluation of the sales program; selecting, training, motivating, and evaluating the sales force.

Prerequisites: C or better in MKTG 311 (or equivalent) and a declared major in the University or permission of the Dean's Office in the Strome College of Business

MKTG 405 The Art of Influence and Persuasion (3 Credit Hours)

This course is an introductory course on techniques and concepts on how to influence in a variety of business settings. Influence and persuasion is used daily in businesses throughout the world. Effective influence and persuasion can be the determining factor in successful business engagements. This course will develop students' influence and persuasion skills through oral and written communications. It will cover the underlying psychological mechanism of persuasion, the entire influence and persuasion process, influencing and persuading individuals as well as organizations in a business setting, and the ethical issues in influence and persuasion.

Prerequisites: C or better in MKTG 311 (or equivalent), and a declared major in the University or permission of the Dean's Office of the Strome College of Business or permission of the instructor

MKTG 406 Public Relations (3 Credit Hours)

For non-business as well as business majors. Development and application of a philosophy of business expressed in governmental, corporate, social or educational institutions in furthering their public image.

Prerequisites: C or better in MKTG 311 (or equivalent), and a declared major in the University or permission of the Dean's Office

MKTG 407 Marketing Research (3 Credit Hours)

Emphasis is given to the development of a strong theoretical base in the systematic selection, collection, and interpretation of marketing information leading to sound policies and strategies. Students are required to carry out a group project involving a marketing problem (or opportunity) for a company or involving a real market situation. The project will satisfy the practicum experience requirement of the College (CAP). (qualifies as a CAP experience)

Prerequisites: BNAL 306 and MKTG 402, a grade of C or better in MKTG 311 and a declared major in the University or permission of the Dean's Office

MKTG 411 Multi-National Marketing (3 Credit Hours)

An examination of the operational and cross-cultural aspects of international marketing, including the nature of competition, developmental marketing structures and channels, price and credit policies, promotional methods, trade barriers, and international arrangements.

Prerequisites: C or better in MKTG 311 (or equivalent), and a declared major in the University or permission of the Dean's Office

MKTG 412 Retail Marketing (3 Credit Hours)

This course will introduce students to a broad range of topics within the field of retailing: retailing strategy, targeting of customers, gathering of information, identifying and understanding customers, choosing a store location, managing a retail business, merchandise management and planning, and communication with the customer. The approach will combine both theory and practical application.

Prerequisites: C or better in MKTG 311 (or equivalent), and a declared major in the University or permission of the Dean's Office

MKTG 414 Ethics and Social Issues in Administration (3 Credit Hours)

An examination of the ethical and social problems confronting administrators and personnel in dealing with discrimination in employment practices, credit and financing, advertising, warranties and guarantees, packaging and labeling, and environmental problems.

Prerequisites: C or better in MKTG 311 (or equivalent), and a declared major in the University or permission of the Dean's Office

MKTG 417 Advanced Professional Selling (3 Credit Hours)

This course will reinforce and strengthen the sales skills learned in MKTG 316. Personal selling is a key skill for orchestrating the exchange of goods, services, ideas, and resources between organizations (business-to-business, B2B) and consumers (B2C). This course is not just for 'salespeople' — individuals involved in personal selling who operate under a variety of job titles (e.g., business development manager, sales representative, market development manager, account executive, relationship manager, and key account manager). This course will focus on skills and knowledge applicable to complex selling situations.

Prerequisites: C or better in MKTG 311 (or equivalent) and a declared major in the University or permission of the Dean's Office in the Strome College of Business

MKTG 428 Marketing of Services (3 Credit Hours)

This course examines the applications of the conceptual framework of marketing within the service business context. The course will focus on the characteristics of the service environment as well as important considerations in the service marketing mix.

Prerequisites: C or better in MKTG 311 (or equivalent), and a declared major in the University or permission of the Dean's Office

MKTG 450 Marketing on the Internet (3 Credit Hours)

This course examines the use of the Internet as a unique channel for marketing to consumers and businesses. It focuses on Internet marketing strategies, online strategic implementation, and the integration between companies' online and offline marketing efforts.

Prerequisites: C or better in MKTG 311 (or equivalent), and a declared major in the University or permission of the Dean's Office

MKTG 455 Social Media Marketing (3 Credit Hours)

This course will introduce students to the significance of today's social media marketing tools, and how to implement and evaluate these tools for a business. The students will learn how to create a social media plan with multiple creative social media strategies. The course will also highlight best practices in social media marketing by forward thinking and innovative companies and organizations.

Prerequisites: C or better in MKTG 311 (or equivalent), and a declared major in the University, or permission of the instructor

MKTG 460 Web Analytics (3 Credit Hours)

This course will introduce students to web analytic tools and methods and demonstrate how businesses can use web analytics to derive customer insight and improve marketing strategy. It will cover topics such as web traffic analysis, social media data mining, search and keyword analysis, social network analysis, and proactive analytics using testing and experimentation.

Prerequisites: A grade of C or better in MKTG 311, and a declared major in the University, or permission of the instructor

MKTG 475 Marketing Analytics (3 Credit Hours)

Marketing analytics comprises the processes and technologies that enable managers to have a better understanding of the market, i.e., the performance of marketing programs, the need of the customers, and the forecast of sales. In other words, it supports managers' decision making using evidence and insights from available data. This course will give students the tools and techniques to effectively use data to evaluate past marketing programs, boost the present marketing initiatives, and predict future business and customer performance.

Prerequisites: C or better in MKTG 311 and C or better in BNAL 306, a declared major in the University or permission of the Dean's Office of the Strome College of Business, or permission of the instructor

MKTG 490 Marketing Policy and Strategy (3 Credit Hours)

A capstone course covering the marketing function and its relationship to the total business organization and its environment. Emphasis is placed upon the design of total marketing systems, strategies, and the design and production of new products and services.

Prerequisites: marketing major, senior standing, MKTG 402, MKTG 407, plus two additional marketing courses or permission of instructor

MKTG 496 Selected Topics in Marketing (1-3 Credit Hours)

Designed to provide advanced students in marketing an opportunity to study, independently or in small groups, selected areas of marketing under the guidance of a faculty member.

Prerequisites: senior standing and permission of instructor

MLS - Medical Laboratory Science

MLS 210 Orientation to Medical Laboratory Science (1 Credit Hour)

An introduction to the profession of medical laboratory science (previously called medical technology). Professional, ethical and operational issues will be discussed.

MLS 307 Clinical Methods in Microbiology (1 Credit Hour)

Laboratory techniques in the diagnosis of clinically relevant microorganisms.

Prerequisites: Admission to the major or minor in medical laboratory science

Pre- or corequisite: MLS 308

MLS 308 Clinical Microbiology (2 Credit Hours)

A fundamental course in microbiology that includes bacterial growth, synthesis, differentiation, microbial nutrition and metabolism.

Prerequisites: A grade of C or better in BIOL 121N, and BIOL 122N or permission of the instructor

Pre- or corequisite: MLS 307

MLS 309 Medical Bacteriology (3 Credit Hours)

A comprehensive survey of bacteria, including colonial morphology, cultural characteristics, biochemical identification, pathogenicity, epidemiology, and treatment.

Prerequisites: Limited to students in the Medical Laboratory Science major or minor, or the Medical Laboratory Science Degree Completion major; must be fully declared in degree program

Pre- or corequisite: C or better in MLS 307 and MLS 308 or an approved equivalent

MLS 310 Urinalysis and Body Fluids (1 Credit Hour)

A study of the chemical, physical and microscopic analysis of human urine and other body fluids, with abnormal results interpreted and correlated to disease processes and cancer cytology of the urinary tract.

Prerequisites: Restricted to students with a major or minor in Cytology, Medical Lab Science, Medical Lab Science Degree Completion, or Pre-Clinical Studies, or permission of the instructor; C or better in BIOL 250 and BIOL 251 or an approved equivalent (BIOL 240/241 respectively)

MLS 311 Hematology (3 Credit Hours)

The study of the principles of the formation and development of blood, including the interpretation of normal and abnormal blood morphology and diagnostic procedures in the investigation of hematological disorders.

Prerequisites: Limited to students in the Medical Laboratory Science major or minor; must be fully declared into degree program; C or better in BIOL 250 and 251 or an approved equivalent (BIOL 240/241 respectively)

Pre- or corequisite: MLS 312

MLS 312 Hematology Laboratory (1 Credit Hour)

Laboratory methods utilizing microscopy and other analytical procedures in the diagnosis and investigation of hematological disorders.

Prerequisites: Limited to students in the Medical Laboratory Science major or minor; must be fully declared into degree program; C or better in BIOL 250 and 251 or an approved equivalent (BIOL 240/241 respectively)

Pre- or corequisite: MLS 311

MLS 313 Diagnostic Methods in Urinalysis (1 Credit Hour)

Laboratory experience in the chemical, physical, and microscopic examination of the urine and body fluids with emphasis on quality control, osmometry, and disease correlates.

Prerequisites: Restricted to students with a major or minor in Medical Lab Science or Medical Lab Science Degree Completion, or permission of the instructor; C or better in BIOL 250 and BIOL 251 or an approved equivalent (BIOL 240/241 respectively)

Corequisites: MLS 310

MLS 319 Medical Bacteriology Methods (2 Credit Hours)

Laboratory methods emphasizing isolation, identification and media requirements for pathogenic microorganisms.

Prerequisites: Limited to students in the Medical Laboratory Science major or minor; must be fully declared in degree program

Pre- or corequisite: MLS 309

MLS 324 Clinical Chemistry I (3 Credit Hours)

This course covers the theory of operation of instrumentation used in the clinical chemistry laboratory. Methodologies discussed include (but not limited to): atomic absorption spectrometry, automation, blood gas instrumentation, chromatography, electrochemistry, electrophoresis, fluorometry, immunochemistry, luminometry, mass spectrometry, nephelometry, osmometry, POCT, spectrophotometry, and turbidimetry. Clinical chemistry principles of proteins, enzymes, therapeutic drug monitoring, and electrolytes are discussed. Basic laboratory mathematics applicable to serial and compound dilutions, conversion between metric units, and determination of analyte concentration are presented. Statistical applications for quality control data analysis are introduced.

Prerequisites: Limited to students in the Medical Laboratory Science major or minor, the Medical Laboratory Science Degree Completion major, or Biomedical Engineering minor; must be fully declared into degree program; C or better in CHEM 211 or CHEM 321 and C or better in MATH 102M, or permission of the instructor

Pre- or corequisite: MLS 325

MLS 325 Clinical Chemistry I Methods (1 Credit Hour)

A laboratory course designed for students entering the clinical laboratory field. The course includes the instrumental and data processing techniques required for the clinical analysis of body fluids, as well as statistical techniques applied to the interpretation of laboratory data, method comparison studies, quality control, calibration, maintenance, and troubleshooting of clinical chemistry analytics.

Prerequisites: Limited to students in the Medical Laboratory Science major or minor, the Medical Laboratory Science Degree Completion major, or the Biomedical Engineering minor; must be fully declared in degree program; grades of C or better in MATH 102M, CHEM 121N, CHEM 122N, CHEM 123N, CHEM 124N, and CHEM 211

Pre- or corequisite: MLS 324

MLS 326 Immunohematology (3 Credit Hours)

The study of the identification of blood group antigens and antibodies, standard testing procedures, decision criteria for component selection, and regulations of blood banks and transfusion services.

Prerequisites: Limited to Medical Laboratory Science majors or minors, or Medical Laboratory Science Degree Completion majors; must be declared in degree program; C or better in MLS 330 and MLS 331 or permission of the instructor

Pre- or corequisite: MLS 311, MLS 312, and MLS 336

MLS 328 Advanced Hematology and Hemostasis (2 Credit Hours)

The microscopic study of blood cells in blood and body fluids, emphasizing morphologic identification and correlation of laboratory data in order to identify specific disease states. Fundamentals of hemostasis, emphasizing principles, evaluation techniques, and diagnostic applications.

Prerequisites: Limited to students in the Medical Laboratory Science major or minor, or the Medical Laboratory Science Degree Completion major; must be fully declared in degree program

Pre- or corequisite: MLS 311 and MLS 312

MLS 330 Clinical Immunology/Serology (2 Credit Hours)

The study of the body's immune response, its cellular and non-cellular components, in-vitro manifestations, diagnostic techniques and interpretations related to the investigation and diagnosis of infectious and non-infectious disease states.

Prerequisites: Limited to students in the Medical Laboratory Science major or minor, or the Medical Laboratory Science Degree Completion major; must be fully declared in degree program

Pre- or corequisite: MLS 331

MLS 331 Clinical Immunology/Serology Laboratory (1 Credit Hour)

Laboratory methods emphasizing in-vitro antigen and antibody reactions used to aid in the diagnosis of infectious and non-infectious disorders.

Prerequisites: Limited to students in the Medical Laboratory Science major or minor; must be fully declared in a degree program

Pre- or corequisite: MLS 330

MLS 336 Immunohematology Laboratory (1 Credit Hour)

Laboratory methods emphasizing procedures that lead to the identification of blood group antigens and antibodies and the selection of therapeutic components necessary for making transfusion-related decisions.

Prerequisites: Admission to the major or minor in Medical Laboratory Science; must be fully declared in a degree program

Pre- or corequisite: MLS 326

MLS 339 Medical Parasitology and Mycology Laboratory (1 Credit Hour)

Laboratory methods emphasizing the identification of medically relevant parasites and fungi.

Prerequisites: Admission to the major or minor in Medical Laboratory Science (intended or declared)

Pre- or corequisite: MLS 340

MLS 340 Medical Parasitology, Mycology, and Virology (1 Credit Hour)

A study of the medically important parasites, fungi, and viruses, and their medical significance.

Prerequisites: Limited to students in the Medical Laboratory Science major or minor, or the Medical Laboratory Science Degree Completion major (intended or declared)

Pre- or corequisite: MLS 307 and MLS 308

MLS 351 Clinical Chemistry II (3 Credit Hours)

An introduction to the applications of biochemistry and clinical testing in the diagnosis of human disease. Practice is given in the interpretation of laboratory data in the areas of carbohydrates, lipids, genetic disorders, liver, renal, pancreatic, G.I., cardiac testing, acid-base physiology, tumor markers, endocrinology, pharmacokinetics, and molecular diagnostics. Special emphasis on specimen collecting, pre- and post-analytical variables, and case studies.

Prerequisites: Limited to students in the Medical Laboratory Science major or minor, or the Medical Laboratory Science Degree Completion major; must be fully declared in degree program; grades of C or better in BIOL 250, BIOL 251, CHEM 211, CHEM 212, and MLS 324 or permission of the instructor

Pre- or corequisite: MLS 325

MLS 401 General Pathology (3 Credit Hours)

This course is an overview of general disease processes and causes in the human. All body systems will be covered including respiratory, gastrointestinal, circulatory, nervous, reproductive, and urinary. Aging, dietary, and stress factors will be discussed in the disease process. Bacteria, fungi, and viruses will be discussed in general and for each body system. Neoplasms will be covered for each body site. This course will be of benefit to anyone interested in diseases of the human body or entering the medical field. (cross listed with CYTO 404) Pre- or

Prerequisites: junior standing

Corequisites: BIOL 250 and BIOL 251 or equivalent

MLS 402 Survey of Clinical Molecular Techniques (2 Credit Hours)

A brief review of nucleic acid chemistry, followed by discussion of clinical applications of FDA approved assays used to detect pathogens for which testing algorithms include molecular based testing.

Prerequisites: Limited to Medical Laboratory Science Degree Completion majors (intended or declared)

MLS 403W/503 Management in the Clinical Setting (3 Credit Hours)

A course concerned with organization and management in the clinical setting including personnel supervision, planning, equipment justification, quality assurance, data processing, budgeting, fiscal techniques, marketing, regulatory agencies, educational methodologies, current issues, as well as legal and ethical considerations. This is a writing intensive course.

Prerequisites: Junior standing and a grade of C or better in ENGL 110C and ENGL 211C or ENGL 231C; Restricted to Cytology, Medical Lab Science, Medical Lab Science Degree Completion, and Pre-Clinical Studies majors, Administrative Leadership and Ethics for Professional Roles Interdisciplinary minor or permission of the instructor

MLS 404 Clinical Hematology Practicum (4 Credit Hours)

Direct clinical experience offered in automated and manual hematology procedures used in distinguishing blood dyscrasias and coagulation abnormalities. Qualifies as a CAP experience. MLS 311, MLS 312, and MLS 328, or permission of the program director.

Prerequisites: Limited to declared Medical Laboratory Science majors

MLS 406 Clinical Microbiology Practicum (5 Credit Hours)

Direct clinical experience offered in isolating and identifying human pathogens such as bacteria, fungi, and parasites from various clinical specimens.

Prerequisites: Limited to declared Medical Laboratory Science majors; grades of C or better in MLS 307, MLS 308, MLS 309, MLS 319, MLS 339, and MLS 340

MLS 420/520 Blood Collection Techniques (2 Credit Hours)

Laboratory methods in the procurement of blood by capillary, venipuncture and arterial draws, analytical variables, special phlebotomy tests, isolation techniques, safety, forensic, molecular, legal and ethical implications, pediatric, geriatric, and compromised patient concerns. All students must submit to venipuncture by fellow students.

Prerequisites: Limited to students in the Medical Laboratory Science major or minor (must be fully declared into degree program); C or better in BIOL 250 and BIOL 251 or equivalent (BIOL 240 and 241) or permission of the instructor

MLS 440/540 Statistical Applications and Data Analysis in the Clinical Laboratory (3 Credit Hours)

Topics include review of basic statistics used in the laboratory; use of statistics for quality control, reference range determination, method comparisons, test utility assessment, techniques for searching the literature and assessing quality and applicability of published studies; and data organization and retrieval via queries. Students will perform projects, preferably using actual laboratory data, that relate to lecture topics.

Prerequisites: Limited to Medical Laboratory Science or Medical Laboratory Science Degree Completion majors (may be intended or declared) or permission of instructor; C or better in STAT 130M

MLS 441 Clinical Hematology Competencies (1 Credit Hour)

Demonstration of stated clinical laboratory competencies within the discipline of hematology.

Prerequisites: Limited to declared Medical Laboratory Science Degree Completion majors

Pre- or corequisite: MLS 328

MLS 442 Clinical Microbiology Competencies (1 Credit Hour)

Demonstration of stated clinical laboratory competencies within the discipline of clinical microbiology.

Prerequisites: Limited to declared Medical Laboratory Science Degree Completion majors; grades of C or better in MLS 309 and MLS 340 or permission of the instructor

MLS 443 Clinical Chemistry Competencies (1 Credit Hour)

Demonstration of stated clinical laboratory competencies within the discipline of clinical chemistry.

Prerequisites: Limited to declared Medical Laboratory Science Degree Completion majors; grades of C or better in MLS 324 and MLS 351 or permission of the instructor

MLS 444 Clinical Blood Bank Competencies (1 Credit Hour)

Demonstration of stated clinical laboratory competencies in the discipline of blood banking.

Prerequisites: Limited to declared Medical Laboratory Science Degree Completion majors; grades of C or better in MLS 326 and MLS 330 or permission of the instructor

MLS 452 Clinical Biochemistry Practicum (5 Credit Hours)

Direct clinical experience offered in automated and manual clinical chemistry determinations with emphasis on the principles, instrumentation, interpretation, and diagnostic significance. MLS 324, MLS 325, and MLS 351, or permission of the program director.

Prerequisites: Limited to declared Medical Laboratory Science majors

MLS 454 Clinical Blood Bank Practicum (4 Credit Hours)

Direct clinical experience offered in the theories and principles of blood banking with emphasis on the instruction of technical procedures used in an AABB approved blood bank. MLS 311, MLS 312, MLS 326, and MLS 336, or permission of the program director.

Prerequisites: Limited to declared Medical Laboratory Science majors

MLS 457 Medical Laboratory Science Seminar (1 Credit Hour)

In-depth review for Medical Laboratory Scientist (MLS) certification exam.

Prerequisites: Limited to declared Medical Laboratory Science or Medical Laboratory Science Degree Completion majors

MLS 468/568 Phlebotomy Internship (2 Credit Hours)

A 120-hour clinical internship for those desiring to qualify for the ASCP certification exam in phlebotomy.

Prerequisites: C or better in MLS 420

MLS 495/595 Special Topics in Medical Laboratory Science (1-3 Credit Hours)

The advanced study of selected topics within the medical field.

Prerequisites: Limited to Medical Laboratory Science or Medical Laboratory Science Degree Completion majors (intended or declared) or permission of the program director

MLS 497/597 Directed Study in Medical Laboratory Science (1-3 Credit Hours)

Supervised experience in medical laboratory science specialties, allowing students to pursue areas of interest under faculty direction.

Prerequisites: Limited to Medical Laboratory Science or Medical Laboratory Science Degree Completion majors (intended or declared) or permission of the program director

MLS 498 Directed Research in Medical Laboratory Science (1-6 Credit Hours)

Supervised research on a specific problem in Medical Laboratory Science. Regular meetings with faculty and a written/oral report are required.

Prerequisites: Limited to MLS or MLS degree completion majors or permission of the instructor or program director

MSCM - Maritime and Supply Chain Management

MSCM 368 Maritime and Supply Chain Internship (1-3 Credit Hours)

Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures. Available for pass/fail grading only. May be repeated for credit. Approval for enrollment and allowable credit is determined by the department in the semester prior to enrollment.

Prerequisites: MSCM 370 and MSCM 441, and a declared major in the University or permission of the Dean's Office

MSCM 370 International Shipping (3 Credit Hours)

The course examines international freight transportation and terms for movement of international trade. It discusses processes and concepts involved in international ocean and intermodal transportation. It shows how shipping companies enter into foreign markets and participate in international trade. It also covers operational issues such as payment, commercial documents, insurance; customs and clearance; shipping organizations and societies, and shipping law.

Prerequisites: junior standing or permission of the instructor

MSCM 415 Maritime Security and Risk Analysis (3 Credit Hours)

An overview of international and U.S. initiatives to ensure the security of vessels, cargo, people, and infrastructure within the maritime domain. In addition to the impacts of regulatory requirements on maritime commerce, the course also addresses maritime threats to the international economy (including maritime piracy and maritime terrorism), maritime coalitions, and state-of-the-art techniques and tools for safeguarding ocean-borne commerce.

Prerequisites: MSCM 370

MSCM 430/530 Strategic Sourcing and Purchasing Management (3 Credit Hours)

An overview of the strategic sourcing of materials and services in the organization and its role in the supply chain. Topics include sourcing decisions, price/cost analysis, quality issues, purchasing, supplier selection, legal and ethical issues, third party logistics, freight forwarding, and acquisition of services and capital assets.

Prerequisites: ACCT 202, BNAL 206, OPMT 303, and a declared major in the University or permission of the Dean's Office

MSCM 439 Quality Management (3 Credit Hours)

This course examines the application of quality principles to the management of manufacturing and service organizations. Topics include fundamentals of quality management, Six Sigma, statistical process control, process capability and reliability.

Prerequisites: OPMT 303 and a declared major in the University or permission of the Strome College of Business Dean's Office

MSCM 441 Supply Chain Management and Logistics (3 Credit Hours)

Supply chain management integrates all activities associated with the flow of materials and information from product start to customers. Examples include order processing, warehousing, inventory management, transportation and logistics, and the costs and information systems supporting these activities. Particular application is made to global logistics systems supporting port and maritime activities. Supply chain relationships can be improved through effective integration of management and via such technologies as the World Wide Web, electronic data exchange, and enterprise resource planning (ERP). (cross-listed with BNAL 441)

Prerequisites: OPMT 303, and a declared major in the University or permission of the Dean's Office

MSCM 445 Marine Insurance (3 Credit Hours)

An introduction to the fundamentals of cargo, hull, protection and indemnity insurance. Topics include insurance markets, agents, underwriters, forms of policies, valuation, Total Loss, Particular Average, General Average, insured perils, war risks, subrogation, reinsurance and insurers of pollution liabilities.

Prerequisites: MSCM 370

MSCM 468/568 Distribution Center and Material Handling Management (3 Credit Hours)

This course is designed to investigate the strategic role of distribution center and material management in the supply chain. Course content includes the analysis of distribution center operations through the study of design, system selection, and layout configuration as well as the evaluation of material handling and inventory management options.

Prerequisites: OPMT 303

MSCM 471 Shipping Management (3 Credit Hours)

Examines the management of freight shipping organizations involved in the transport of cargo by ship. Key topics are managing ships and ship space; shipping markets, operations, costs, investment, insurance, claims, and regulation; and ship types, cargoes, safety, flagging, pollution, and chartering and purchase.

Prerequisites: For MSCM majors, the prerequisite is MSCM 370; for other business majors, the prerequisites are ECON 201S and ECON 202S; for nonbusiness majors, the prerequisites are ECON 201S and ECON 202S or permission of the instructor; all students must have a declared major or permission of the College of Business dean's office

MSCM 472 Port Management (3 Credit Hours)

Examines the management of seaports in the movement of cargo throughput. It presents concepts related to design, organization, administration, and operation of ports. It discusses issues involved in planning, investment, communication systems, congestion, pollution, safety, security; intermodal transportation; water and land accessibility; and port competition and cooperation to improve customer service.

Prerequisites: For MSCM majors, the prerequisite is MSCM 370; for other business majors, the prerequisites are ECON 201S and ECON 202S; for nonbusiness majors, the prerequisites are ECON 201S and ECON 202S or permission of the instructor; all students must have a declared major or permission of the College of Business dean's office

MSCM 473 Inland Waterway and Intermodal Transportation (3 Credit Hours)

This course is designed to explore and analyze the current condition of inland waterways both throughout the United States and around the globe with an emphasis on the creation of intermodal transportation networks. It will include an overview of existing infrastructure as well as financing mechanisms, national and international competitive strategies, risk management (public safety and emergency preparedness), and the environmental benefits as well as consider current legislation.

Prerequisites: MSCM 370

MSCM 494 Entrepreneurship in Maritime and Supply Chain Management (3 Credit Hours)

This course is designed to help students enhance their personal and professional development through innovation guided by faculty members and professionals. The course offers students an opportunity to integrate disciplinary theory and knowledge through developing a supply chain process, product, business, or other initiative. The real-world experiences that entrepreneurship provide will help students understand how academic knowledge leads to transformations, innovations, and solutions to different types of problems.

Prerequisites: MSCM 370 and OPMT 303

MSCM 495/595 Topics in Maritime and Supply Chain Management (3 Credit Hours)

A study of selected topics within Maritime and Supply Chain Management designed to provide an in-depth exploration of current issues.

Prerequisites: permission of the instructor, and a declared major in the University or permission of the College of Business Dean's Office

MSCM 497 Independent Study (3 Credit Hours)

Affords students the opportunity to undertake independent study under the direction of a faculty member.

Prerequisites: permission of the department, and a declared major in the University or permission of the College of Business Dean's Office

MSIM - Modeling and Simulation

MSIM 406/506 Introduction to Distributed Simulation (3 Credit Hours)

An introduction to distributed simulation. Topics include motivation for using distributed simulation, distributed simulation architectures, time management issues, and distributed simulation approaches. Current standards for distributed simulation are presented.

Prerequisites: MSIM 331 or ECE 348

MSIM 408/508 Introduction to Game Development (3 Credit Hours)

An introductory course focused on game development theory and modern practices with emphasis on educational game development. Topics include game architecture, computer graphics theory, user interaction, audio, high level shading language, animation, physics, and artificial intelligence. The developed games can run on a variety of computer, mobile, and gaming platforms.

Prerequisites: CS 361 or MSIM 331 or ECE 348

MSIM 410/510 Model Engineering (3 Credit Hours)

The goal of this course is to develop understanding of the various modeling paradigms appropriate for capturing system behavior and conducting digital computer simulation of many types of systems. The techniques and concepts discussed typically include UML, concept graphs, Bayesian nets, Markov models, Petri nets, system dynamics, Bond graphs, etc. Students will report on a particular technique and team to implement a chosen system model.

Prerequisites: MSIM 205 or ECE 306

Pre- or corequisite: MSIM 320 or ECE 320

MSIM 416/516 Cyber Defense Fundamentals (3 Credit Hours)

This course focuses on cybersecurity theory, information protection and assurance, and computer systems and networks security. The objectives are to understand the basic security models and concepts, learn fundamental knowledge and tools for building, analyzing, and attacking modern security systems, and gain hands-on experience in cryptographic algorithms, security fundamental principles, and Internet security protocol and standards.

Prerequisites: ECE 355 or MSIM 470

MSIM 419/519 Cyber Physical Systems Security (3 Credit Hours)

Cyber Physical Systems (CPS) integrate computing, networking, and physical processes. The objectives of this course are to learn the basic concepts, technologies and applications of CPS, understand the fundamental CPS security challenges and national security impact, and gain hands-on experience in CPS infrastructures, critical vulnerabilities, and practical countermeasures. Cross-listed with ECE 419/CYSE 419.

Prerequisites: CS 150 or ENGN 150

MSIM 441/541 Computer Graphics and Visualization (3 Credit Hours)

The course provides a practical treatment of computer graphics and visualization with emphasis on modeling and simulation applications. It covers digital image and signal processing basics such as sampling and discrete Fourier transform, computer graphics fundamentals, visualization principles, and software architecture for visualization in modeling and simulation. Written communication and information literacy skills are stressed in this course. (Offered fall).

Prerequisites: a grade C or better in CS 361, ECE 348, or MSIM 331

MSIM 451/551 Analysis for Modeling and Simulation (3 Credit Hours)

An introduction to analysis techniques appropriate to the conduct of modeling and simulation studies. Topics include input modeling, random number generation, output analysis, variance reduction techniques, and experimental design. In addition, techniques for verification & validation are introduced. Course concepts are applied to real systems and data.

Prerequisites: MSIM 205 or ECE 306 and STAT 330 or ECE 304

MSIM 462/562 Introduction to Medical Image Analysis (3 Credit Hours)

Introduction to basic concepts in medical image analysis. Medical image registration, segmentation, feature extraction, and classification are discussed. Basic psychophysics, fundamental ROC analysis and FROC methodologies are covered. Cross-listed with ECE 462/ECE 562.

Prerequisites: Junior standing

MSIM 463/563 Design and Modeling of Autonomous Robotic Systems (3 Credit Hours)

This course focuses on autonomous robotics systems with emphasis on using modeling and simulation (M&S) for system level design and testing. Fundamental concepts associated with autonomous robotic systems are discussed. Course topics include: robotic control, architectures, and sensors as well as more advanced concepts such as error propagation, localization, mapping and autonomy. Design strategies that leverage M&S to accelerate the development and testing of sophisticated autonomous robotic algorithms for individual or teams of robots are covered.

Prerequisites: CS 150 or ENGN 150

MSIM 470/570 Foundations of Cyber Security (3 Credit Hours)

Course provides an overview of theory, tools and practice of cyber security and information assurance through prevention, detection and modeling of cyber attacks and recovery from such attacks. Techniques for security modeling, attack modeling, risk analysis and cost-benefit analysis are described to manage the security of cyber systems. Fundamental principles of cyber security and their applications for protecting software and information assets of individual computers and large networked systems are explored. Anatomy of some sample attacks designed to compromise confidentiality, integrity and availability of cyber systems are discussed.

Prerequisites: CS 150 or ENGN 150 and junior standing

MSIM 474/574 Transportation Data Analytics (3 Credit Hours)

This course presents the basic techniques for transportation data analytics. It will discuss statistical modeling, prominent algorithms, and visualization approaches to analyze both small- and large-scale data sets generated from transportation systems. Practices of using different data for various real-world traffic/transportation applications and decision making will also be discussed., (STAT 330 or ECE 304); any programming language such as C, Python or Java is beneficial but not required.

Prerequisites: Basic probability and statistics (e.g

MSIM 480/580 Introduction to Artificial Intelligence (3 Credit Hours)

Introduction to concepts, principles, challenges, and research in major areas of artificial intelligence. Areas of discussion include: natural language and vision processing, machine learning, machine logic and reasoning, robotics, expert and mundane systems. Laboratory work required.

Prerequisites: Instructor approval

MSIM 495/595 Topics in Modeling and Simulation Engineering (1-3 Credit Hours)

Special topics of interest with emphasis placed on recent developments in modeling and simulation engineering.

Prerequisites: permission of the instructor

MSIM 496/596 Topics in Modeling and Simulation Engineering (1-3 Credit Hours)

Special topics of interest with emphasis placed on the recent developments in modeling and simulation engineering.

Prerequisites: permission of the instructor

MSIM 497/597 Independent Study in Modeling and Simulation Engineering (3 Credit Hours)

Individual analytical, computational, and/or experimental study in an area selected by the student. Supervised and approved by the advisor.

Prerequisites: Instructor approval

MSL - Military Science and Leadership

MSL 101+ Introduction to ROTC (1 Credit Hour)

Learn fundamental concepts of leadership in a profession in both classroom and outdoor laboratory environments. Examines organization, customs and courtesies of the Army and ROTC with emphasis on career opportunities for ROTC graduates. Studies the military profession, lifestyle, and historical growth development of the Army. Increase self-confidence through team study and activities in basic drill, physical fitness, rappelling, leadership reaction course, first aid, making presentations and basic marksmanship. Participation in physical fitness program highly encouraged; required if contracted. Participation in one overnight adventure training exercise is highly encouraged; required if contracted.

MSL 102+ Introduction to Leadership (1 Credit Hour)

Learn/apply principles of effective leadership. Reinforce self-confidence through participation in physically and mentally challenging exercises with upper-division ROTC students. Develop communication skills to improve individual performance and group interaction. Relate organizational ethical values to the effectiveness of a leader. Introduction to development of military tactical knowledge and technical skills. Students will gain a basic knowledge of land navigation, military geography and the use of maps and aerial photographs. Participation in physical fitness program highly encouraged; mandatory if contracted. Participation in one overnight adventure training exercise is highly encouraged; mandatory if contracted.

Prerequisites: MSL 101+ or MSL 195, or departmental approval

MSL 195 Independent Study of Selected Military Topics (1 Credit Hour)

A study of selected topics within military science designed to accommodate special cadet's educational and commissioning requirements. Participation in physical fitness program highly encouraged. Participation in one overnight adventure training exercise is highly encouraged.

Prerequisites: departmental approval

MSL 196 Independent Study of Selected Military Topics (1 Credit Hour)

A study of selected topics within military science designed to accommodate special cadet's educational and commissioning requirements. Participation in physical fitness program highly encouraged. Participation in one overnight adventure training exercise is highly encouraged.

Prerequisites: departmental approval

MSL 201+ Leadership Skills II (1 Credit Hour)

Course is designed to refine and continue to develop knowledge of basic military skills. Learn/apply ethics-based leadership skills that develop individual abilities and contribute to the building of effective teams of people. Develop skills in oral presentations, writing concisely, planning of events, coordination of group efforts, advanced first aid, land navigation and basic military tactics. Learn fundamentals of ROTC's Leadership Development Program. Participation in physical fitness program highly encouraged; required if contracted. Participation in one overnight adventure training exercise is highly encouraged; required if contracted.

Prerequisites: MSL 101+/MSL 102+ or MSL 195/MSL 196, or departmental approval

MSL 202+ Foundations of the Military Profession (1 Credit Hour)

Continued development of leadership ability through active participation as junior leaders at the small unit level. Students are given increased leadership opportunities, which sharpen interpersonal communication skills and expand capabilities for future advancement in a military career. Introduction to individual and team aspects of military tactics in small unit operations. Practical exercises with upper division ROTC students. Instruction will build on fundamentals of land navigation, individual soldier skill and rifle marksmanship. Participation in physical fitness program highly encouraged; required if contracted. Participation in one overnight adventure training exercise is highly encouraged; required if contracted.

Prerequisites: MSL 201+ or MSL 295, or departmental approval

MSL 250+ Alternate Summer Training Program: Leaders Training Course (LTC) (6 Credit Hours)

Course consists of five weeks of intensive and challenging military training at Fort Knox, Kentucky. Permits students to satisfy all requirements for entry into Advanced Course. Students are paid approximately \$650 (food, lodging, transportation provided).

Prerequisites: departmental approval

MSL 251+ Optional Summer Training Program: Airborne School (2 Credit Hours)

A three-week course conducted at Fort Benning, Georgia, which focuses on parachute operations, individual and group parachute jumps, equipment orientation, and physical training. Award of the Army Airborne Badge upon course completion. Travel, lodging and most meal costs are defrayed by the U.S. Army.

Prerequisites: departmental approval

MSL 252+ Optional Summer Training Program: Air Assault School (2 Credit Hours)

A two-week course conducted at various locations. Training in the techniques, skills and procedures used in air assault operations, including basic and advanced rappelling, helicopter rappelling, troop leader procedures, pathfinder techniques, and rigging and slingloading skills. Award of the Army Assault Badge upon course completion. Travel, lodging and most meal costs are defrayed by the U.S. Army.

Prerequisites: departmental approval

MSL 295 Independent Study of Selected Military Topics (1 Credit Hour)

A study of selected topics within military science designed to accommodate special successful progression through military cadet educational and commissioning requirements. Participation in physical fitness program required. Participation in one overnight adventure training exercise is required.

Prerequisites: departmental approval

MSL 296 Independent Study of Selected Military Topics (1 Credit Hour)

A study of selected topics within military science designed to accommodate special successful progression through military cadet educational and commissioning requirements. Participation in physical fitness program required. Participation in one overnight adventure training exercise is required.

Prerequisites: departmental approval

MSL 301 Advanced Leadership Skills (3 Credit Hours)

Course teaches decision making and problem solving skills. Students learn to plan, direct and coordinate individual and group efforts toward task accomplishment. Field exercises afford practical opportunities for the students to apply instruction. Cadets are evaluated against 16 leadership dimensions, including decisiveness, delegation, influence, problem analysis, planning, technical competence, and communication. Participation in physical fitness program required.

Prerequisites: MSL 201+/MSL 202+, or MSL 295/MSL 296, or MSL 250+ or departmental approval

Corequisites: MSL 311+

MSL 302 Applied Leadership (3 Credit Hours)

Course presents increasingly intense and complex situations in which students apply military skills and leadership to solve tactical problems. Students develop leadership proficiency in all basic military technical and tactical skills, including basic rifle marksmanship, day and night land navigation, physical training, and small/large unit tactics. Field training exercises afford opportunities to apply military leadership and management skills. Cadets are evaluated using 16 leadership dimensions. Participation in physical fitness program required.

Prerequisites: MSL 301 or MSL 395

Corequisites: MSL 312+

MSL 311+ Advanced Leadership Skills III Lab (1 Credit Hour)

Practical application of individual and leadership skills in simulated tactical environments of increasing complexity and intensity. Includes weekend training in basic rifle marksmanship, day and night land navigation, and small unit tactics. Affords students opportunities to apply leadership skills to plan, direct, and coordinate the activities of others to accomplish a mission. Mandatory physical fitness training 3 times a week to build stamina and physical condition to lead from the front. Participation in overnight adventure training exercises during semester is required.

Prerequisites: departmental approval

Corequisites: MSL 301

MSL 312+ Applied Leadership Lab (1 Credit Hour)

Practical application of individual and leadership skills in simulated tactical environments of increasing complexity and intensity. Includes weekend training in basic rifle marksmanship, day and night land navigation, and small unit tactics. Affords students opportunities to apply leadership skills to plan, direct, and coordinate the activities of others to accomplish a mission. Mandatory physical fitness training 3 times a week to build stamina and physical condition to lead from the front. Participation in overnight adventure training exercises during semester is required.

Prerequisites: departmental approval

Corequisites: MSL 302

MSL 315+ Summer Training Program - Cadet Summer Training (CST) (6 Credit Hours)

A five-week summer camp conducted at Fort Knox, Kentucky. The student will receive pay. Travel, lodging and most meal costs are defrayed by the U.S. Army. The camp environment is highly structured and demanding, stressing leadership at the small unit level under varying, challenging conditions. The leadership and skills evaluations at the camp weigh heavily in the subsequent selection process that determines the type of commission and career field assigned to the student upon graduation from ROTC and the University.

Prerequisites: MSL 301/MSL 302 or MSL 395/MSL 396

MSL 317+ Cadet Troop Leadership Training (3 Credit Hours)

A two- to four-week training program designed to introduce junior officers to responsibilities of commissioned lieutenants. Stateside or overseas programs are available. Travel, lodging and most meals are defrayed by the U.S. Army.

Prerequisites: departmental approval

MSL 395 Independent Study (3 Credit Hours)

A study of selected topics within military science designed to accommodate special cadet educational and commissioning requirements. Participation in a one-hour physical fitness session is mandatory.

Prerequisites: departmental approval

MSL 396 Independent Study (3 Credit Hours)

A study of selected topics within military science designed to accommodate special cadet educational and commissioning requirements. Participation in a one-hour physical fitness session is mandatory.

Prerequisites: departmental approval

MSL 401 Military Leadership and Management (3 Credit Hours)

Class teaches the Army's training management system, leadership theories, staff planning and coordination, and counseling skills. Simultaneously, students in the course will assume leadership responsibilities in the ROTC battalion, affording practical opportunities to apply skills learned in the classroom. At the end of the semester, students will possess the fundamental skills, attributes, and abilities to operate as competent leaders in the cadet battalion and confidently shoulder the responsibilities entrusted to them.

Prerequisites: MSL 301/MSL 302, MSL 395/MSL 396, or departmental approval

Corequisites: MSL 411+

MSL 402 Officership (3 Credit Hours)

Final preparation for commissioning as a Lieutenant. Course emphasizes effective communications skills gained through individual presentations and by leading and influencing groups within the Cadet Battalion. Students also examine topics in military law and explore practical and ethical challenges of military leadership as they relate to personnel management, logistics, training, and operations. Students are the primary instructors and leaders within the Cadet Battalion.

Prerequisites: MSL 401 or departmental approval

Corequisites: MSL 412+

MSL 411+ Senior Military Leadership and Management Laboratory (1 Credit Hour)

Practical application of individual and leadership skills in simulated tactical environments of increasing complexity and intensity. Includes weekend training in basic rifle marksmanship, day and night land navigation, and small unit tactics. Affords students opportunities to apply leadership skills to plan, direct, and coordinate the activities of others to accomplish a mission. Mandatory physical fitness training 3 times a week to build stamina and physical condition to lead from the front. Participation in an overnight adventure training exercise during the semester is required.

Prerequisites: departmental approval

Corequisites: MSL 401

MSL 412+ Senior Leadership Laboratory (1 Credit Hour)

Practical application of individual and leadership skills in simulated tactical environments of increasing complexity and intensity. Includes weekend training in basic rifle marksmanship, day and night land navigation, and small unit tactics. Affords students opportunities to apply leadership skills to plan, direct, and coordinate the activities of others to accomplish a mission. Mandatory physical fitness training 3 times a week to build stamina and physical condition to lead from the front. Participation in an overnight adventure training exercise during the semester is required.

Prerequisites: departmental approval

Corequisites: MSL 402

MSL 495 Independent Study (3 Credit Hours)

A study of selected topics within the military science program designed to accommodate special cadet education and commissioning requirements. Participation in a one-hour physical fitness session is mandatory.

Prerequisites: departmental approval

MSL 496 Independent Study (3 Credit Hours)

A study of selected topics within the military science program designed to accommodate special cadet education and commissioning requirements. Participation in a one-hour physical fitness session is mandatory.

Prerequisites: departmental approval

MUSA - Music, Applied

MUSA 130 Half-Hour Applied Secondary Instrument/Voice Lesson (1 Credit Hour)

This 30-minute applied lesson is for instrumentalists/vocalists interested in pursuing applied lessons on a secondary instrument/voice. Refer to the DSoM Student Handbook for additional information and requirements related to this course.

Prerequisites: Restricted to Music Majors/Minors AND Instructor Permission Only

MUSA 131 Half-Hour Applied Secondary Instrument/Voice Lesson (1 Credit Hour)

This 30-minute applied lesson is for instrumentalists/vocalists interested in pursuing applied lessons on a secondary instrument/voice. Refer to the DSoM Student Handbook for additional information and requirements related to this course.

Prerequisites: Restricted to Music Majors/Minors; MUSA 130; AND Instructor Permission Only

MUSA 139 Half-Hour Lesson (1 Credit Hour)

Applied lesson.

Prerequisites: permission of the faculty

MUSA 140 Half-Hour Lesson (1 Credit Hour)

Half-hour applied lesson.

Prerequisites: permission of the faculty and MUSA 139

MUSA 141 Hour Lesson (2 Credit Hours)

One hour applied lesson. One or more lecture-performances at Student Performance Hours or equivalents thereof are required.

Prerequisites: Permission of faculty

MUSA 142 Hour Lesson (2 Credit Hours)

One hour applied lesson. One or more lecture-performances at Student Performance Hours or equivalents thereof are required.

Prerequisites: Permission of faculty

MUSA 151 Hour Lesson - Performance Major (3 Credit Hours)

One hour performance level applied lesson. One or more lecture-performances at Student Performance Hours or equivalents thereof are required.

Prerequisites: Permission of faculty

MUSA 152 Hour Lesson - Performance Major (3 Credit Hours)

One hour performance level applied lesson. One or more lecture-performances in Area Studio Class or Student Performance Hours or equivalents thereof are required.

Prerequisites: Permission of faculty

MUSA 161 Hour Lesson - SRT Major (2 Credit Hours)

One hour applied lesson for students in the Bachelor of Music with an Emphasis in Sound Recording Technology. One or more lecture-performances at Student Performance Hours or equivalents thereof are required.

Prerequisites: Restricted to Music Majors AND Instructor Permission Only

MUSA 162 Hour Lesson - SRT Major (2 Credit Hours)

One hour applied lesson for students in the Bachelor of Music with an Emphasis in Sound Recording Technology. One or more lecture-performances at Student Performance Hours or equivalents thereof are required.

Prerequisites: Restricted to Music Majors/Minors; MUSA 161; AND Instructor Permission Only

MUSA 210 Hour Lesson - Music Minor (2 Credit Hours)

One-hour applied lesson for music minors.

Prerequisites: Permission of instructor

MUSA 211 Hour Lesson - Music Minor (2 Credit Hours)

One-hour applied lesson for the music minor.

Prerequisites: Permission of instructor

MUSA 230 Half-Hour Applied Secondary Instrument/Voice Lesson (1 Credit Hour)

This 30-minute applied lesson is for instrumentalists/vocalists interested in pursuing applied lessons on a secondary instrument/voice. Refer to the DSoM Student Handbook for additional information and requirements related to this course.

Prerequisites: Restricted to Music Majors/Minors; MUSA 130 and/or MUSA 131; AND Instructor Permission Only

MUSA 232 Hour Lesson - Applied Composition (3 Credit Hours)

One hour lesson in composition.

Prerequisites: MUSC 222

MUSA 239 Half-Hour Lesson (1 Credit Hour)

One half-hour applied lesson.

Prerequisites: MUSA 140 and permission of the faculty

MUSA 240 Half-Hour Lesson (1 Credit Hour)

One half-hour applied lesson.

Prerequisites: MUSA 239 and permission of the faculty

MUSA 241 Hour Lesson (2 Credit Hours)

One hour applied lesson. One or more lecture-performances in Area Studio Class, Student Performance Hours, and/or equivalents thereof are required.

Prerequisites: Permission of faculty

MUSA 242 Hour Lesson (2 Credit Hours)

One hour applied lesson. One or more lecture-performances in Area Studio Class, Student Performance Hours, and/or equivalents thereof are required.

Prerequisites: Permission of faculty

MUSA 251 Hour Lesson - Performance Major (3 Credit Hours)

One hour performance level applied lesson. One or more lecture-performances in Area Studio Class, Student Performance Hours, and/or equivalents thereof are required.

Prerequisites: Permission of faculty

MUSA 252 Hour Lesson - Performance Major (3 Credit Hours)

One hour performance level applied lesson. One or more lecture-performances in Area Studio Class, Student Performance Hours, and/or equivalents thereof are required. Completion of this level requires a half hour public recital for instrumental area students.

Prerequisites: Permission of faculty

MUSA 261 Hour Lesson - SRT Major (2 Credit Hours)

One hour applied lesson for students in the Bachelor of Music with an Emphasis in Sound Recording Technology. One or more lecture-performances at Student Performance Hours or equivalents thereof are required.

Prerequisites: Restricted to Music Majors; MUSA 162; AND Instructor Permission Only

MUSA 262 Hour Lesson - SRT Major (2 Credit Hours)

One hour applied lesson for students in the Bachelor of Music with an Emphasis in Sound Recording Technology. One or more lecture-performances at Student Performance Hours or equivalents thereof are required.

Prerequisites: Restricted to Music Majors; MUSA 261; AND Instructor Permission Only

MUSA 310 Hour Lesson - Music Minor (2 Credit Hours)

One-hour applied lesson for the music minor.

Prerequisites: Permission of instructor

MUSA 311 Hour Lesson - Music Minor (2 Credit Hours)

One-hour applied lesson for the music minor.

Prerequisites: Permission of instructor

MUSA 331 Hour Lesson - Applied Composition (3 Credit Hours)

One hour composition lesson. Original work in composition starting with the smaller forms in both the vocal and the instrumental fields. At least one 10-minute lecture-performance at Student Performance Hours or an equivalent thereof is required.

Prerequisites: MUSA 232

MUSA 332 Hour Lesson - Applied Composition (3 Credit Hours)

One hour composition lesson. Original work in composition starting with the smaller forms in both the vocal and the instrumental fields. At least one 10-minute lecture-performance at Student Performance Hours or an equivalent thereof is required.

Prerequisites: MUSA 331

MUSA 339 Hour Lesson - Applied Composition (2 Credit Hours)

Hour lesson in composition for minors and non-majors.

Prerequisites: permission of instructor

MUSA 340 Hour Lesson - Applied Composition (2 Credit Hours)

Hour lesson in composition for minors and non-majors.

Prerequisites: MUSA 240 and permission of faculty

MUSA 341 Hour Lesson (2 Credit Hours)

One hour applied lesson. One or more lecture-performances in Area Studio Class, Student Performance Hours, and/or equivalents thereof are required.

Prerequisites: Permission of faculty

MUSA 342 Hour Lesson (2 Credit Hours)

One hour applied lesson. One or more lecture-performances in Area Studio Class, Student Performance Hours, and/or equivalents thereof are required.

Prerequisites: Permission of faculty

MUSA 351 Hour Lesson - Performance Major (3 Credit Hours)

One hour performance level applied lesson. One or more lecture-performances in Area Studio Class, Student Performance Hours, and/or equivalents thereof are required. Successful completion of a half hour recital is also required for vocal students only.

Prerequisites: Permission of faculty

MUSA 352 Hour Lesson - Performance Major (3 Credit Hours)

One hour performance level applied lesson.

Prerequisites: Permission of faculty

MUSA 361 Hour Lesson - SRT Major (2 Credit Hours)

One hour applied lesson for students in the Bachelor of Music with an Emphasis in Sound Recording Technology. One or more lecture-performances at Student Performance Hours or equivalents thereof are required.

Prerequisites: Restricted to Music Majors; MUSA 262; AND Instructor Permission Only

MUSA 362 Hour Lesson - SRT Major (2 Credit Hours)

One hour applied lesson for students in the Bachelor of Music with an Emphasis in Sound Recording Technology. One or more lecture-performances at Student Performance Hours or equivalents thereof are required.

Prerequisites: Restricted to Music Majors; MUSA 361; AND Instructor Permission Only

MUSA 410 Hour Lesson - Music Minor (2 Credit Hours)

One-hour applied lesson for the music minor.

Prerequisites: Permission of instructor

MUSA 411 Hour Lesson - Music Minor (2 Credit Hours)

One-hour applied lesson for the music minor.

Prerequisites: Permission of instructor

MUSA 431 Hour Lesson - Applied Composition (3 Credit Hours)

One hour composition lesson. Original composition in larger forms. One or more lecture-performances at Student Performance Hours or equivalents thereof are required.

Prerequisites: MUSA 332

MUSA 432 Hour Lesson - Applied Composition (3 Credit Hours)

One hour composition lesson. Original composition in larger forms.

Prerequisites: MUSA 431

MUSA 439 Hour Lesson - Applied Composition (2 Credit Hours)

One hour composition lesson for minors and non-majors.

Prerequisites: MUSA 340 and permission of faculty

MUSA 440 Hour Lesson - Applied Composition (2 Credit Hours)

One hour composition lesson for minors and non-majors.

Prerequisites: MUSA 439 and permission of faculty

MUSA 441 Hour Lesson (2 Credit Hours)

One hour applied lesson. Satisfaction of a degree requirement on this level includes successful performance of a one-half hour private or, at faculty discretion, public recital.

Prerequisites: permission of faculty

MUSA 442 Hour Lesson (2 Credit Hours)

One hour applied lesson. Satisfaction of a degree requirement on this level includes successful performance of a one-half hour private or, at faculty discretion, public recital. Numbers may be repeated.

Prerequisites: permission of faculty

MUSA 445 Advanced Electronic Composition I (2 Credit Hours)

This course is designated only for music majors and/or minors. Music hardware and software to be studied includes, but is not limited to: K2500 Mackie 1604 VLZ 2 pro, Opcode MIDI 96 and Digital.

Prerequisites: MUSC 335T and MUSC 336 or equivalent experience

MUSA 446 Advanced Electronic Composition II (2 Credit Hours)

This course is designated for music majors and and/or minors. Music hardware and software to be studied includes, but is not limited to: K2500, Sound Designer, Oro Tools, and Finale. The participants are expected to compose a medium-length work (at least 4-5 minutes) using the above equipment. Grading is based on the knowledge of the electronic equipment and the quality of composing.

Prerequisites: MUSA 445

MUSA 451 Hour Lesson - Performance Major (3 Credit Hours)

One hour performance level lesson.

Prerequisites: Permission of faculty

MUSA 452 Hour Lesson - Performance Major (3 Credit Hours)

One hour performance level lesson. Completion of this level includes successful performance of a one-hour public, lecture-style recital.

Prerequisites: Permission of faculty

MUSA 460 Applied Sound Recording Technology Mentorship (2 Credit Hours)

Each student will receive personalized mentorship, career guidance, and detailed project feedback in an applied lesson studio setting. Emphasizing the creation of a professional portfolio serving as a culminating project or experience, these individualized lessons ensure students are prepared for success in this competitive industry. These advanced projects, developed with faculty advisors, include (but not limited to) producing new songs and film scores, mixing an album, entrepreneurship, and/or conducting original research.

Prerequisites: MUSC 415

MUSA 461 Hour Lesson - SRT Major (2 Credit Hours)

One hour applied lesson for students in the Bachelor of Music with an Emphasis in Sound Recording Technology. One or more lecture-performances at Student Performance Hours or equivalents thereof are required.

Prerequisites: Restricted to Music Majors; MUSA 362; AND Instructor Permission Only

MUSA 462 Hour Lesson - SRT Major (2 Credit Hours)

One hour applied lesson for students in the Bachelor of Music with an Emphasis in Sound Recording Technology. One or more lecture-performances at Student Performance Hours or equivalents thereof are required.

Prerequisites: Restricted to Music Majors; MUSA 461; AND Instructor Permission Only

MUSA 463 Hour Lesson - SRT Major - Secondary Instrument (2 Credit Hours)

One hour applied lesson on a secondary instrument/voice for students in the Bachelor of Music with an Emphasis in Sound Recording Technology. One or more lecture-performances at Student Performance Hours or equivalents thereof may be required.

Prerequisites: Restricted to Music Majors; MUSA 261; AND Instructor Permission Only

MUSA 464 Hour Lesson - SRT Major - Secondary Instrument (2 Credit Hours)

One hour applied lesson on a secondary instrument/voice for students in the Bachelor of Music with an Emphasis in Sound Recording Technology. One or more lecture-performances at Student Performance Hours or equivalents thereof may be required.

Prerequisites: Restricted to Music Majors; MUSA 261; AND Instructor Permission Only

MUSC - Music

MUSC 101 Beginning Piano Class (1 Credit Hour)

Introduction, practical training, and development of basic piano skills, including the playing of scales, arpeggios, chords, and simple songs; sight reading, transposition, harmonization of melodies, and improvisation. (For music majors only)

Prerequisites: Permission of instructor

MUSC 102 Beginning Piano Class (1 Credit Hour)

Introduction, practical training, and development of basic piano skills, including the playing of scales, arpeggios, chords, and simple songs; sight reading, transposition, harmonization of melodies, and improvisation. (For music majors only)

Prerequisites: MUSC 101

MUSC 103 Intermediate Piano Class (1 Credit Hour)

Continued practical training and development of basic piano skills. (For music majors only)

Prerequisites: MUSC 102 or permission of the instructor

MUSC 107 Beginning Voice Class (1 Credit Hour)

Introduction, practical training, and development of basic singing skills.

Prerequisites: Music major or permission of the instructor

MUSC 113 Live Audio Engineering (3 Credit Hours)

This course covers fundamentals of live audio engineering, rudimentary acoustics, auditory perception and psychoacoustical concepts. Students will learn to assemble sound reinforcement systems for small and large ensembles and examine how sound is perceived by the human ear. Topics such as signal flow, cabling, mixing, busing and monitoring will be addressed. Sound Recording Technology majors must earn a grade of C or better to progress to MUSC 115.

Prerequisites: Bachelor of Music, with emphasis in Sound Recording Technology major, or permission of the instructor

MUSC 120 The Fundamentals of Music Theory (3 Credit Hours)

This course is designed specifically for non-music majors and focuses on the fundamentals of music theory. It introduces the basics of music – such as rhythm, melody, and harmony – and may progress into intermediate topics such as chord progressions and aural skill development.

MUSC 121 Musicianship Fundamentals (3 Credit Hours)

This course provides the knowledge of and skills in music theory fundamentals necessary to prepare for upper levels of music theory. Non-music majors may take the course if there is room and with the permission of the instructor.

Prerequisites: Permission of the instructor

MUSC 126A Honors: Music in History and Culture (3 Credit Hours)

A survey of major composers and their works in the historical context of different style periods, including a discussion of the central philosophical and cultural issues of each period. Students will be required to attend at least three musical events and turn in written critiques.

Prerequisites: Honors college students only

MUSC 130 Functional Piano Skills (1 Credit Hour)

Practical training and development of piano skills needed in the elementary, secondary choral, and private vocal studio setting. Focus will be placed on preparing for the piano barrier exam for music education majors (including technical skills, rehearsal skills, and sight reading). (For Music Education vocal/guitar/keyboard majors only.)

Pre- or corequisite: MUSC 101, MUSC 102, or permission of instructor

MUSC 150 Freshman Seminar for Music Students (1 Credit Hour)

This course is designed to help students make the most out of their experience as a student at ODU, create a sense of community among music students, and prepare students for the expectations of being a college student in the Diehn School of Music. Musicians' health topics, among others, will be presented to enhance student rehearsal and performance practices.

MUSC 160 Music and Ideas (1 Credit Hour)

This course is designed to cultivate a nuanced comprehension of the intellectual dimensions of music, equipping students with the analytical skills essential for critical engagement with diverse musical genres and concepts. Through the development of critical thought and the utilization of scholarly tools, students will explore intriguing questions, laying a foundation upon which they will construct additional musical knowledge and expertise during their tenure at the Diehn School of Music.

Prerequisites: Music major, music minor, or permission of instructor

MUSC 221 Music Theory 1 (2 Credit Hours)

Music Theory 1 is a foundational course and topics within this course include the basics of music notation, clefs, simple and compound meters, major and minor scales and keys signatures, modes, intervals, triads, seventh chords, inversions, Roman numerals, and an introduction to species counterpoint. This course includes discussions of the pedagogy of music fundamentals.

Prerequisites: Only Music Majors/Minors are permitted to take this course, OR instructor permission

Corequisites: MUSC 223

MUSC 222 Music Theory 2 (2 Credit Hours)

Topics for this course include functionalizing two-part counterpoint, introduction to SATB part-writing, function theory, cadences, and connecting the tonic and dominant areas. Other topics include chordal harmonies, realizing figured bass, the submediant and mediant harmonies, motives and motivic analysis, twelve-bar blues, popular song forms/chord symbols/chord extensions/harmonic schemas, and an introduction to jazz theory.

Prerequisites: Music majors or music minors and completion of Music Theory placement test or MUSC 221 with a grade of C or higher

Corequisites: MUSC 224

MUSC 223 Aural Skills 1 (1 Credit Hour)

Aural Skills 1 introduces melodic, rhythmic, and harmonic dictation. Other topics and skills that are both introduced and developed throughout the course include sight-singing, solfege, aural recognition, and writing of various intervals and chords.

Corequisites: MUSC 221

MUSC 224 Aural Skills 2 (1 Credit Hour)

Aural Skills 2 continues to develop melodic, rhythmic, and harmonic dictation as well as sight-singing/solfege, aural recognition, and writing of various intervals and triads.

Prerequisites: MUSC 223 and music major or minor, or permission of instructor

Corequisites: MUSC 222

MUSC 230 Jazz Keyboard Techniques (2 Credit Hours)

This course introduces jazz piano technique and performance. The learning and application of chord voicings, chord progressions, accompanying style and the interpretation of lead sheets is presented and developed.

Prerequisites: MUSC 101 and MUSC 102 or permission of the instructor

MUSC 264A Music in History and Culture (3 Credit Hours)

This course is designed to be an introduction to the appreciation and understanding of music through music listening activities and a survey of music history. Basic principles and elements of music are discussed in relation to contexts within a variety of musical styles including classical, jazz, popular, and world music. Regular and repeated listening is an important part of the course in addition to required concert attendance.

MUSC 266 Music in World Cultures (1 Credit Hour)

Required for music majors. Available to qualified non-majors. Exploration of music and cultures of the world in terms of function, style, genre, instruments, performers, and individual works. This course offers an exploration of the global mosaic of musical expressions.

Prerequisites: Music major, music minor, or permission of instructor

MUSC 295 Topics (1-3 Credit Hours)

Special topics.

Prerequisites: Permission of instructor

MUSC 300 Foundations of Music Education (3 Credit Hours)

This course will introduce the historical, philosophical, and sociological foundations and contemporary issues of American public education. Also included is an introduction to music education methods and learning theories as they relate to PreK-12 music education, the study of the Virginia Standards of Learning, the National Core Arts Standards for Music and an investigation into teaching for musical understanding, designing musical problems, lesson planning and assessment. In addition, the course will include reading and writing assignments and discussion with teachers and young musicians. All students will complete a 30-hour observation experience in an appropriate PreK-12 setting specific to music education. In order to receive the required school observation placement, students must complete the ODU Teacher Education background check/clearance process prior to the beginning of this course and register for the observation placement on the Teacher Education web pages. See the advisor for more information. Students are expected independently to register for and take the Praxis Core examination or equivalent while enrolled in this course.

Prerequisites: Music majors only and sophomore standing; must successfully pass the background check process as outlined on the College of Education and Professional Studies' website

MUSC 301 Music Education: High Brass Class (1 Credit Hour)

Required of all instrumental music education students. Designed to develop basic skills of playing and teaching the trumpet and F horn. (offered fall semesters)

Prerequisites: students must display the ability to read music; open to music education majors only or with permission of the instructor

MUSC 302 Music Education: Low Brass Class (1 Credit Hour)

Required of all instrumental music education students. Designed to develop basic skills of playing and teaching trombone, euphonium, and tuba. (offered spring semesters)

Prerequisites: MUSC 301; open to music education majors only or with permission of the instructor

MUSC 303 Music Education: Clarinet and Oboe Class (1 Credit Hour)

Required of all instrumental music education students. Designed to develop basic skills of playing and teaching the clarinet and oboe, which serves as a foundation for the other woodwind instruments (offered fall semesters).

Prerequisites: Open to music education majors only or with permission of the instructor

MUSC 304 Music Education: Woodwind Class (1 Credit Hour)

Required of all instrumental music education students. Designed to develop basic skills of playing and teaching flute, bassoon, and saxophone (offered spring semesters).

Prerequisites: MUSC 303; open to music education majors only or with permission of the instructor

MUSC 305 Music Education: Upper Strings Class (1 Credit Hour)

Required of all instrumental music education students. Designed to develop basic skills of playing and teaching the violin and viola and to explore instructional materials used with these instruments. (offered fall semesters)

Prerequisites: Open to music education majors only or with permission of the instructor

MUSC 306 Music Education: Lower Strings Class (1 Credit Hour)

Required of all instrumental music education students. The course is designed to develop basic skills of playing and teaching cello and string bass and to evaluate instructional materials used with these instruments. Introduces heterogeneous teaching and rehearsal techniques using all four stringed instruments. (offered spring semesters)

Prerequisites: MUSC 305; open to music education majors only or with permission of the instructor

MUSC 307 Music Education: Percussion Class I (1 Credit Hour)

Required of all instrumental music education students. Class lessons on all percussion instruments and the study of teaching methods for these instruments. (offered spring semesters)

Prerequisites: Open to music education majors only or with permission of the instructor

MUSC 308 Music Education: Music for the Elementary Classroom Teacher (3 Credit Hours)

Students gain skills and experience related to the use of music in elementary school.

Prerequisites: junior standing

MUSC 309 Principles of Conducting (1 Credit Hour)

The development of basic skills and techniques necessary for conducting choral and instrumental ensembles.

Prerequisites: MUSC 224, MUSC 322, or permission of the instructor

MUSC 310 Music Education: Percussion Class II (1 Credit Hour)

Required of all instrumental music education students. Class lessons on all percussion instruments and the study of teaching methods for these instruments. (offered fall semesters)

Prerequisites: MUSC 307; open to music education majors only or with permission of the instructor

MUSC 311+ Recital Attendance (0 Credit Hours)

This course is required of all music majors and music minors for six semesters of their enrollment as a music major or a music minor. The successful completion of the course requires attendance at a specified number of approved recitals, concerts, and events each semester.

Prerequisites: Music major, music minor or permission of instructor

MUSC 315 Digital Audio Workstation Essentials (3 Credit Hours)

This course covers the fundamentals of Digital Audio Workstations (DAWs) with a focus on Pro Tools. Students will learn basic editing techniques and gain proficiency in creating, arranging and comping tracks, workflow optimization through shortcuts, and basic mixing techniques. Additionally, the course delves into the fundamentals of microphone choices and placement. This course emphasizes basic signal flow, the recording process, and troubleshooting skills necessary for a successful audio recording session.

Prerequisites: MUSC 335T

MUSC 316 Popular Songwriting Techniques (3 Credit Hours)

This course focuses on the craft of songwriting. Covering contemporary song forms, techniques of lyric and melody writing as well as popular harmony and analysis, the course prepares students to write hit songs. Students will learn how to effectively demo their own songs, successfully collaborate, write jingles and copyright their own material.

Prerequisites: MUSC 221

MUSC 320 Studio Recording Principles (3 Credit Hours)

Expanding on the digital audio workstation skills gained in MUSC 315, this course introduces the student to modern multitrack recording techniques. Topics include microphone choice and placement, recording studio signal flow, the use of a large-format console, precise and creative audio editing, file structure and organization, and the basics of signal processing. Students apply this knowledge through guided in-class activities and practical group studio sessions designed to enhance their problem-solving, communication, and critical listening skills. This course is for Bachelor of Music with Emphasis in Sound Recording Technology majors only.

Prerequisites: MUSC 315; Bachelor of Music with Emphasis in Sound Recording Technology majors only

MUSC 321 Music Theory 3 (2 Credit Hours)

Music Theory 3 further develops skills learned previously in the theory sequence and introduces new topics including: writing and identifying diatonic sequences, spelling and resolving secondary dominants and leading-tone chords of V and scale degrees other than V, modulatory techniques (sequences, pivot chord, direct, common-tone), common-tone chords, NS chromatic modulations. Musical forms including binary, ternary, variation, Baroque forms, Sonata Form, etc. will be introduced and identification skills developed.

Prerequisites: MUSC 222 or placement test

Corequisites: MUSC 323

MUSC 322 Advanced Music Theory and Post-Tonal Compositional Techniques (2 Credit Hours)

Topics explored in this course include: part-writing advanced chromatic harmonies and modulations, altered and extended chords, twentieth-century rhythmic techniques, pitch-class sets, analyzing with modes, scales, collections, and set theory, primitivism, basics of twelve-tone theory, and composing with twelve tones. Other topics explored include theoretical elements of composing after 1945, such as graphic and text notation, chance and indeterminacy, minimalism, post-modern music, and more recent trends.

Prerequisites: MUSC 321 or completion of music theory placement test or permission of instructor

MUSC 323 Aural Skills 3 (1 Credit Hour)

A continuation of MUSC 224 and in close connection with topics covered in MUSC 321. Topics covered include chordal and chromatic harmony as well as written and keyboard work emphasizing skill development in harmonic modulation.

Prerequisites: MUSC 224 or permission of instructor

Corequisites: MUSC 321

MUSC 324 Advanced Aural Skills - Tonal and Beyond (1 Credit Hour)

A continuation of MUSC 323; recommended in conjunction with MUSC 322. Further development of skills learned in MUSC 323 with an additional focus on post-tonal techniques.

Prerequisites: MUSC 323 or permission of the instructor

MUSC 326 Jazz Theory and Aural Skills (3 Credit Hours)

This course introduces melody, rhythm, and harmony in the context of jazz music. Students will analyze music and develop music theory and aural skills with specific focus on the jazz genre.

Prerequisites: MUSC 321, MUSC 323, or permission of the instructor

MUSC 333 Music Business and Entrepreneurship (3 Credit Hours)

Musicians in the twenty-first century must be equipped to meet the ever-changing demands of the contemporary music industry through the development of an entrepreneurial mindset and the utilization of both musical and extra-musical skills, which will allow them to create and build sustainable careers. This course offers a foundation upon which students can develop the musical careers they seek and provides first-hand experience with some of the basic tools modern musicians need to succeed.

Prerequisites: Music majors or minors or permission of the instructor

MUSC 335T Music Technology Survey (3 Credit Hours)

This introductory course will explore the impact of technology on music performance, composition, and education through in-class lecture, hands-on demonstration, and lab projects. Topics covered include but are not limited to: basic acoustics, basic audio signal flow for live performance and recording, microphone basics for live performance and recording, an introduction to sequencing and recording software and Digital Audio Workstations, MIDI and synthesis, basics of mixing, editing, an introduction to music notation software and uses, creation of 'music minus one' projects for pedagogical purposes, and an exploration of common file formats for distribution and publication.

Prerequisites: Music major or minor or permission of the instructor; Sound Recording Technology majors must earn a grade of C or better to progress to MUSC 113

MUSC 336 Electronic Music (3 Credit Hours)

This introductory course is designed to give students a historical overview of mechanical and electronic music through topical study and listening examples. Additionally, students will create their own electronic music compositions using analog, digital and virtual hardware/software.

Prerequisites: Music major or permission of the instructor

MUSC 337 Jazz Improvisation I (2 Credit Hours)

This course will introduce students to the basic concepts of Jazz improvisation, including harmonic and melodic implications.

Prerequisites: MUSC 221 or permission of the instructor

MUSC 338 Jazz Improvisation II (2 Credit Hours)

This course is a continuation of MUSC 337, and will delve further into more advanced techniques used in Jazz improvisation.

Prerequisites: MUSC 337 or permission of the instructor

MUSC 340 Synthesis and Sound Design Techniques for Music Production (3 Credit Hours)

An introduction to the fascinating world of sound synthesis and sound design through practical hands-on assignments using industry-standard techniques and by exploring the technology and historical evolution. The course will focus on subtractive synthesis; a core knowledge for creating one's own sounds to use in music.

Prerequisites: MUSC 335T or permission of the instructor

MUSC 344 Introduction to Film Music (3 Credit Hours)

This course is designed for music and non-music majors interested in the fascinating world of film scoring. Through a combination of historical exploration and in-depth analysis of musical and narrative elements, students will gain a comprehensive understanding of how music enhances storytelling in the world of film and television.

Prerequisites: ENGL 110C

MUSC 345 Diction for Singers (1 Credit Hour)

An introductory course dealing with correct principles of effective diction essential to the singing of English and Italian songs. (offered every fall)

Prerequisites: vocal music major, vocal music minor, or permission of the instructor

MUSC 346 Diction for Singers (1 Credit Hour)

An introductory course dealing with correct principles of effective diction essential to the singing of German and French songs. (offered every spring)

Prerequisites: MUSC 345

MUSC 350 Music Notation (3 Credit Hours)

This course is designed to introduce students to the art of music notation through exploring the history of music engraving practices, hands-on experience writing music manuscript (hand-written) and the use of modern notation software (Finale, Sibelius, etc.) with MIDI implementation.

Prerequisites: MUSC 221

MUSC 352 Critical Listening in Audio Production (3 Credit Hours)

Students develop critical listening skills through aural analysis, ear training, drill and practice, and comparative analyses. Topics covered include spectral balance and equalization, spatial attributes and reverberation, dynamic range control, distortion and noise, audio clip edit points, analysis of sound, frequencies, effects and processing, delays and decays, and master frequencies. Students are expected to identify frequency ranges, specific audio signatures, distortion, edits, and digit manipulation through aural examinations.

Prerequisites: MUSC 335T

MUSC 355 Music Production I (3 Credit Hours)

This course is designed to give students hands-on experience working with both hardware and software in the modern MIDI Production studio. Topics covered include MIDI recording, sequencing, editing, and playback techniques, virtual instruments and hardware synthesizers, tracking and mixing in a DAW, and file formats and distribution.

Prerequisites: MUSC 335T

MUSC 361 History of Western Art Music from Ancient through Baroque (3 Credit Hours)

A survey of the development of western art music, from Ancient Greece through the Baroque, highlighting the influence of historical events upon musical developments.

Prerequisites: MUSC 264A, or MUSC 160 and MUSC 266, and MUSC 222, or permission of instructor

MUSC 362W History of Western Art Music from Classical through Modern (3 Credit Hours)

A survey of the development of western art music, from Classical through Modern, showing the influence of historical events upon musical development. This is a writing intensive course.

Prerequisites: grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C; MUSC 261 and MUSC 262 or MUSC 264A or MUSC 126A, and MUSC 222 or permission of instructor

MUSC 368 Music Industry Internship (3 Credit Hours)

An opportunity to integrate service and applied learning experience with music industry perspectives.

Prerequisites: Permission of instructor

MUSC 370 Jazz Combo (1 Credit Hour)

This ensemble will explore Jazz literature, focusing primarily on the small group format. Previous experience with improvisation is necessary for all participants.

Prerequisites: Permission of the instructor

MUSC 371+ Ensemble (1 Credit Hour)

One to three rehearsal periods per week, depending on the ensemble.

Students will participate in rehearsals and public performances.

Prerequisites: by audition only, or permission of instructor; must have a significant background in performing

MUSC 372+ Ensemble (1 Credit Hour)

Studio class ensemble for strings. Meets once a week.

Prerequisites: By audition only, or permission of instructor; must have a significant background in performing

MUSC 375+ Opera and Musical Theater Production and Performance (1 Credit Hour)

This course is designed to produce operas and musical theatre shows.

Students will not only be a part of the cast and/or crew, but they will also learn other applicable skills including but not limited to how to prepare for a role, effective practice techniques, acting and movement for musical theatre/opera, and production etiquette.

Prerequisites: Permission of instructor

MUSC 376+ F. Ludwig Diehn Chorale (0 Credit Hours)

This is a performance-based course. It is designed to train music majors and non-majors in small ensemble choral techniques. This choral ensemble is an audition-only group.

Prerequisites: Audition or permission of instructor

MUSC 377 Extracurricular Studies (1-6 Credit Hours)

Extracurricular activities may be approved for credit based on objectives, criteria, and evaluative procedures as formally determined by the department and the student prior to the semester in which the activity is to take place. Credit is subject to review by the provost.

Prerequisites: Approval by the department chair in accordance with the policy on granting credit for extracurricular activities

MUSC 378 Extracurricular Studies (1-6 Credit Hours)

Extracurricular activities may be approved for credit based on objectives, criteria, and evaluative procedures as formally determined by the department and the student prior to the semester in which the activity is to take place. Credit is subject to review by the Provost.

Prerequisites: Approval by the department chair in accordance with the policy on granting credit for extracurricular activities

MUSC 380 Symphonic Band (1 Credit Hour)

Symphonic Band is a large ensemble for woodwind, brass and percussion players open to all university students with an audition for ensemble seating. Students will participate in rehearsals and concerts.

Prerequisites: Students must successfully perform on a standard concert band instrument or concert percussion, be able to read music, and permission of the instructor

MUSC 381+ Concert Choir (1 Credit Hour)

Participation in rehearsals and public performances of the Concert Choir.

Prerequisites: Ability to read music; audition required

MUSC 382+ Wind Ensemble (1 Credit Hour)

Participation in rehearsals and public performances of the band. Three rehearsal periods per week.

Prerequisites: ability to read music and/or permission of the instructor

MUSC 383+ Symphony Orchestra (1 Credit Hour)

Participation in rehearsals and public performances of the University Symphony Orchestra. Rehearsals two days per week and dress rehearsals TBA.

Prerequisites: by audition or permission of the instructor

MUSC 384+ Jazz Orchestra (1 Credit Hour)

This instrumental group will explore and perform standard jazz literature for the Jazz Ensemble and the contemporary Jazz Orchestra.

Prerequisites: Audition for the instructor required at the beginning of each semester

MUSC 385+ Monarch Basketball Band (1 Credit Hour)

Basketball band performs at all home Men's and Women's basketball games and selected tournament performances.

Prerequisites: Ability to read music, play an applicable instrument at the requisite level, and/or permission of the instructor

MUSC 386+ Jazz Choir (1 Credit Hour)

Vocal jazz ensemble, performing standard jazz choir literature.

Prerequisites: ability to read music and permission of the instructor

MUSC 387+ Collegium Musicum (1 Credit Hour)

Early music instrumental ensemble.

Prerequisites: permission of the instructor

MUSC 388+ Madrigal Singers (1 Credit Hour)

Small vocal ensemble focusing on a cappella classical music.

Prerequisites: permission of the instructor

MUSC 389+ Brass Choir (1 Credit Hour)

Brass Ensemble consisting of trumpets, horns, trombones, euphoniums, and tubas. Performing works written for brass as well as arrangements of choral, orchestral, jazz, pop, and show music.

Prerequisites: ability to read music and/or permission of the instructor; audition required

MUSC 390 Monarch Marching Band (1 Credit Hour)

The Monarch Marching Band will meet only during the fall semester and perform at all home and some away football games and other selected events. Students will participate in rehearsals and performances.

Prerequisites: Successful playing audition, the ability to read music and permission of the instructor; students accepted to participate must attend summer training camp prior to classes beginning in the fall

MUSC 391+ Commercial Music Ensemble (1 Credit Hour)

An ensemble comprised of a rhythm section and a few vocalists. Students will play musical covers and original songs in weekly rehearsals, and performs a live concert and/or records in the studio. Can be taken a maximum of 2 times for credit.

Prerequisites: Auditions required

MUSC 395 Topics in Music (1-3 Credit Hours)

A study of selected topics designed for nonmajors, or for credit within a major. These courses will appear in the course schedule. Course descriptions and prerequisites for each course may be found in information distributed to all academic advisors.

Prerequisites: junior standing or permission of the instructor

MUSC 396 Topics in Music (1-3 Credit Hours)

A study of selected topics designed for nonmajors, or for credit within a major. These courses will appear in the course schedule. Course descriptions and prerequisites for each course may be found in information distributed to all academic advisors.

Prerequisites: junior standing or permission of the instructor

MUSC 397 Tutorial Work in Special Topics in Music (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: junior standing and approval of the department chair

MUSC 398 Tutorial Work in Special Topics in Music (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: junior standing and approval of the department chair

MUSC 401 Music Education: Elementary Vocal and General Methods (2 Credit Hours)

Required prior to student teaching for all students in music education. Focuses on materials and methods of vocal and general instruction for elementary music classrooms. (offered fall semesters)

Prerequisites: MUSC 300

Pre- or corequisite: MUSC 402

MUSC 402 Music Education: Practicum (Elementary Vocal and General) (1 Credit Hour)

Required prior to the Teacher Candidate Internship (student teaching) for all students in music education. Enables students to observe master classroom teachers and to test accumulated teaching practices in elementary school vocal and general classroom settings. 20 hours of music classroom observation required. Also, in order to receive the required school practicum placement, students must have completed the ODU Office of Clinical Experiences background check/clearance process prior to the beginning of this course. The clearance process takes eight weeks. Students must register for the practicum placement on the Office of Clinical Experiences web pages prior to the course drop/add deadline. Students should contact their advisor for more information. (offered fall and spring semesters)

Prerequisites: MUSC 300; admission to the Teacher Education program, including meeting minimum Virginia Board of Education testing requirements and minimum GPA of 2.75 overall, in the Music Education major, and Professional Education courses required

Pre- or corequisite: MUSC 401

MUSC 403 Music Education: Secondary Vocal Methods (2 Credit Hours)

Required prior to the Teacher Candidate Internship (student teaching) for all students in music education with voice, keyboard or guitar concentration. Focuses on methods of vocal instruction, materials and rehearsal methods for secondary vocal classroom settings. (offered spring semesters)

Prerequisites: MUSC 300 (or TLED 301 completed prior to fall 2015)

Pre- or corequisite: MUSC 404

MUSC 404 Music Education: Practicum (Secondary Vocal) (1 Credit Hour)

Required prior to student teaching for all students in music education with voice, keyboard or guitar concentration. Enables students to observe master teachers and to test accumulated teaching practices in secondary school vocal classroom settings. 20 hours of observation required. Passing score of 160 on the Praxis Subject assessment, music content knowledge examination (formerly Praxis II) and passing scores on the VCLA are requirements of this course. Also, in order to receive the required school practicum placement, students must have completed the ODU Office of Clinical Experiences background check/clearance process prior to the beginning of this course. The clearance process takes eight weeks. Students must register for the practicum placement on the Office of Clinical Experiences web pages prior to the course drop/add deadline. Students should contact their advisor for more information. (offered fall and spring semesters).

Prerequisites: MUSC 300; admission to the Teacher Education program, including meeting minimum Virginia Board of Education testing requirements and minimum GPA of 2.75 overall, in the Music Education major, and Professional Education courses required

Pre- or corequisite: MUSC 403

MUSC 407 Music Education: Secondary Instrumental Methods (2 Credit Hours)

Required prior to the Teacher Candidate Internship (student teaching) for all students in music education with an instrumental music concentration. Focuses on methods of instruction, materials and rehearsal methods for secondary instrumental classrooms. (offered spring semesters)

Prerequisites: MUSC 300

Pre- or corequisite: MUSC 408

MUSC 408 Music Education: Practicum (Secondary Instrumental) (1 Credit Hour)

Required prior to the Teacher Candidate Internship (student teaching) for all students in music education with instrumental music concentration. Enables students to observe master teachers and to test accumulated teaching practices in secondary school instrumental classrooms. Passing score of 160 on the Praxis Subject assessment, music content knowledge examination (formerly Praxis II) and passing scores on the VCLA are requirements of this course. Also, in order to receive the required school practicum placement, students must have completed the ODU Office of Clinical Experiences background check/clearance process prior to the beginning of this course. The clearance process takes eight weeks. Students must register for the practicum placement on the Office of Clinical Experiences web pages prior to the course drop/add deadline. Students should contact their advisor for more information. Offered fall and spring semesters.

Prerequisites: MUSC 300; admission to the Teacher Education program, including meeting minimum Virginia Board of Education testing requirements and minimum GPA of 2.75 overall, in the Music Education major, and Professional Education courses required

Pre- or corequisite: MUSC 407

MUSC 409 Music Education: Instrumental Techniques (1 Credit Hour)

Required prior to the Teacher Candidate Internship (student teaching) for all students in music education with the vocal, keyboard and guitar concentration. Focuses on development of vocal majors' ability to read instrumental scores; provides vocal majors an understanding of families of instruments.

Prerequisites: vocal music education majors or permission of the instructor

MUSC 410/510 Psychology of Music (3 Credit Hours)

This course is designed to assist students in enhancing their understanding of the aesthetic response to music in various settings. Students will learn to integrate their understanding of musical aptitude as it relates to human growth and development. In addition, students will study the psychological implication of personality types as they develop, implement, and assess their pedagogical approach.

Prerequisites: Junior standing or permission of instructor

MUSC 413 Advanced Choral Conducting (2 Credit Hours)

Course deals with the analysis, interpretation, and conducting of varied choral literature.

Prerequisites: MUSC 309 or permission of instructor

MUSC 414 Advanced Instrumental Conducting (2 Credit Hours)

Course deals with the analysis, interpretation, and conducting of varied instrumental literature.

Prerequisites: MUSC 309 or permission of instructor

MUSC 415 The Art and Craft of Mixing (3 Credit Hours)

In this course, students learn how to mix music that supports the emotion of the song and engages listeners. Topics include effective session preparation, advanced editing techniques, musical balancing, creative use of audio effects, and automation techniques. Students will work with pre-recorded multitracks, completing numerous mixes using plug-ins and outboard signal processors, and will receive in-depth critical feedback from their instructor and peers. Through this process, students will develop the critical listening and technical skills to confidently creatively shape sound. This course is for Bachelor of Music with Emphasis in Sound Recording Technology majors only.

Prerequisites: MUSC 320; Bachelor of Music with Emphasis in Sound Recording Technology majors only

MUSC 416 Arranging for the Contemporary Musician and Producer (3 Credit Hours)

Students learn how to arrange music for rhythm sections, vocals, and diverse ensembles, including brass, woodwinds and strings. This course uniquely addresses the evolving landscape of modern music production, bridging the gap between virtual instruments and recording musicians in the studio. As the recording process evolves, so do the demands on musical arrangement and orchestration. This course provides students with the essential tools and techniques to adapt their arrangements to meet the needs of contemporary recording processes.

Prerequisites: MUSC 461 and MUSC 316

MUSC 417 Jazz Pedagogy and Conducting (2 Credit Hours)

This course will present rehearsal and conducting techniques, and methods for directing instrumental and vocal jazz ensembles. A focus on ensemble set-up, style, articulation, intonation, phrasing, balance, blend, and ensemble literature will be presented. The relationship between jazz history, jazz music, and jazz performance practice will be emphasized. Effective ensemble rehearsal and communication techniques will be modeled.

Prerequisites: MUSC 326 or permission of the instructor

MUSC 418 Jazz Arranging (2 Credit Hours)

This course will facilitate the learning and application of music arranging techniques for instrumental and vocal jazz ensembles. Past and present arranging practices will be reviewed and applied to student arrangements.

Prerequisites: MUSC 326 or permission of the instructor

MUSC 419 Jazz Performance Practice Workshop (2 Credit Hours)

This course will introduce the elements of various jazz, Afro-Cuban, Brazilian, and other world musical styles as applied to jazz performance practice. Multiple styles and rhythmic elements will be demonstrated; students will learn how to incorporate the styles in their own performances.

Prerequisites: MUSC 337 or permission of the instructor

MUSC 420 Music Production Techniques (3 Credit Hours)

This course provides a comprehensive exploration of record production, focusing on creative and technical aspects. Topics include pre-production, song arrangement choices, collaboration with artists, and advanced mixing skills. The final project involves planning, producing, and presenting a complete music production project, with peer feedback and analysis. Students in this course will develop essential skills for successful music careers, emphasizing creativity and technical proficiency.

Prerequisites: MUSC 415; Bachelor of Music with Emphasis in Sound Recording Technology majors only

MUSC 421 Counterpoint (2 Credit Hours)

A study of the contrapuntal techniques of sixteenth century composers and their influence upon composers of the eighteenth through twentieth centuries. (offered fall, even years)

Prerequisites: MUSC 221 or permission of instructor

MUSC 422/522 Form and Analysis (2 Credit Hours)

Aural analysis study and analysis of the principal traditional musical forms. Stylistic and harmonic analysis as it related to score study will be discussed. (offered spring, even years)

Prerequisites: MUSC 322 and MUSC 324 or permission of the instructor

MUSC 424 Orchestration (2 Credit Hours)

A study of the range, musical functions, and technical characteristics of the instruments and their color possibilities in various combinations. Practical experience in scoring for small and large ensembles. (offered fall, odd years)

Prerequisites: MUSC 321 or permission of instructor

MUSC 425 Vocal Arranging (2 Credit Hours)

This course covers basic arranging techniques for traditional vocal ensembles. Students will develop the ability to reshape pre-existing melodies and chord progressions into successful arrangements for various groups.

Prerequisites: MUSC 222 or permission of instructor

MUSC 426/526 Marching Band Techniques and Arranging (2 Credit Hours)

Students will learn how to chart and arrange music for the marching band. In addition, basic vocal arranging techniques will be discussed. Students will be required to observe different styles of school marching bands.

Prerequisites: Music Education major or permission of instructor

MUSC 435 Music Production II (3 Credit Hours)

This course builds upon the fundamentals experienced in the introductory MIDI course. Topics include: advanced sequencing techniques, looping, editing, data manipulation, patch and control changes through real-time recording, patch editing, storage and retrieval, incorporation of external hardware, sampling, and an introduction to the incorporation of digital audio.

Prerequisites: MUSC 335T

MUSC 440/540 Scoring for Film (3 Credit Hours)

This is a hands-on course in the art of film composition. Students will analyze iconic film scores from Bernard Herrmann to John Powell, exploring music's narrative impact, gain insight into the modern composer's workflow and diverse skill sets, and apply the techniques learned in practical projects, transitioning from sketch to demo using a DAW. The course culminates in a recording session for the final project. This projects allows students to practice film spotting, thematic writing, sketch to demo production, arranging and music preparation for a live recording experience. Students elevate their skills in writing music that uniquely supports and enhances visual storytelling.

Prerequisites: MUSC 335T, MUSC 221, or permission of the instructor

MUSC 445/545 Applied Music Pedagogy (1 Credit Hour)

Teaching techniques, literature in the performing area. Seminar deals with resource materials. Laboratory: observation and teaching under supervision.

Prerequisites: music major senior standing or permission of the department

MUSC 446 Applied Music Literature (1 Credit Hour)

Teaching techniques, literature in the performing area. Seminar portion of the course deals with resource materials. Laboratory portion of the course includes observation and teaching under supervision.

Prerequisites: music major senior standing or permission of the department

MUSC 460/560 History of Jazz (3 Credit Hours)

This course will study the historical development of jazz as an American art form. The emotion and meaning of this style will be investigated as well as the historical and contemporary aesthetic response. Emphasis will include the defining role of African American artists. The influence of jazz on the development of contemporary American music will be discussed. Written critiques of live performances will be required.

Prerequisites: junior standing or permission of the instructor

MUSC 461/561 History of Recorded Music (3 Credit Hours)

The course covers how music has co-evolved with technology, the entertainment business, and cultural trends. The main theme is how recording technology has evolved, and with it, the music making and music listening experiences. Students will expand their musical vocabulary through the study of numerous musical genres, listening to and discussing the essential elements of impactful records, and learning about key artists, composers, producers, engineers, and other music professionals (both past and present). Students will gain a better understanding of the role music plays in the entertainment industry, including with film, TV, games, social media, live events, and more.

Prerequisites: ENGL 110C

MUSC 462/562 Hip-Hop Music and Culture (3 Credit Hours)

Hip-hop, from local roots to global dominance, has sparked extensive journalistic and academic exploration primarily focused on its social and cultural impacts. This course delves into the historical factors shaping hip-hop's origin and evolution, examines its global success and translation both musically and linguistically, and engages in contemplation regarding the essence and direction of hip-hop. No prior musical experience or knowledge of music notation is required, but students will develop a basic set of skills for discussing the structure and function of hip-hop songs.

Prerequisites: MUSC 221, MUSC 222, MUSC 361, and MUSC 362W, or permission of instructor

MUSC 466/566 Music of the 20th Century to the Present (3 Credit Hours)

A study of the techniques and styles in music in the twentieth and twenty-first century (offered spring).

Prerequisites: MUSC 222, MUSC 361, and MUSC 362W, or permission of the instructor

MUSC 471/571 Musicians' Health: Music and Medicine (3 Credit Hours)

This course is designed to assist music students to enhance their understanding of musicians' health issues in order to prepare them to achieve their desired performance potential.

Prerequisites: Junior standing or permission of Instructor

MUSC 491/591 Music History from the Ancient to Baroque Era (3 Credit Hours)

Study of music history (specific topics vary) including historical perspective in relation to style and development of music, and the function of music in society and culture. Topics will be from the Ancient through the Baroque era (offered fall semester).

Prerequisites: MUSC 221, MUSC 222, MUSC 361 and MUSC 362W, or permission of instructor

MUSC 492/592 Music History from the Classical through Modern Era (3 Credit Hours)

Study of music history (specific topics vary) including historical perspective in relation to style and development of music, and the function of music in society and culture. Topics will be from the Classical through Modern era.

Prerequisites: MUSC 221, MUSC 222, MUSC 361 and MUSC 362W, or permission of instructor

MUSC 494/594 Music in the Romantic Era (3 Credit Hours)

A study of music history from the late works of Beethoven to Mahler and Strauss. A discussion of musical style within the context of cultural history. (spring semesters, even years)

Prerequisites: MUSC 221, MUSC 222, MUSC 361, and MUSC 362W, or permission of instructor

MUSC 495/595 Topics in Music (1-3 Credit Hours)

These courses will appear in the course schedule. Course descriptions and prerequisites for each course may be found in information distributed to all academic advisors.

Prerequisites: junior standing or permission of the instructor

MUSC 496/596 Topics in Music (1-3 Credit Hours)

These courses will appear in the course schedule. Course descriptions and prerequisites for each course may be found in information distributed to all academic advisors.

Prerequisites: junior standing or permission of the instructor

MUSC 497 Tutorial Work in Special Topics in Music (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: senior standing and approval of the department chair

MUSC 498 Tutorial Work in Special Topics in Music (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: senior standing and approval of the department chair

MUSE - Music Education

MUSE 141 Music Education Applied Piano Lesson (2 Credit Hours)

This course is designed to support the continued training and development of piano skills needed in the elementary, secondary choral, and private vocal studio setting. This course is only for Bachelor of Music, Music Education majors in the Vocal, Guitar, or Keyboard concentration.

Prerequisites: MUSC 130

MUSE 150 Freshman Seminar 1 for Music Education Students (1 Credit Hour)

This course is designed to help students make the most out of their experience as a student at ODU, create a sense of community among music education majors, and prepare students for the expectations of being a college student in the Diehn School of Music.

MUSE 151 Freshman Seminar II for Music Education Students (1 Credit Hour)

This course provides a professional community for emerging music educators. Discussion and fieldwork will focus on the application of instructional and learning strategies for guiding critical and creative music thinking, teaching and learning in a variety of music educational contexts.

Prerequisites: MUSE 150 or MUSC 150

NAVS - Naval Science

NAVS 101 Introduction to Naval Science (2 Credit Hours)

General introduction to the naval service. Particular emphasis placed on the mission, organization, regulations and broad warfare components of the Navy and Marine Corps. Includes customs, discipline, courtesies, leadership, core values and shipboard nomenclatures.

NAVS 102 Naval Sea Power and Maritime Affairs (3 Credit Hours)

The study of the evolution of the major world naval and maritime nations. The role of American naval and maritime affairs in the rivalries of the great world powers during the colonial period, the spread of revolutionary movements, and the era of civil and international conflicts in the 19th and 20th centuries.

NAVS 111+ Naval Laboratory I (1 Credit Hour)

Covers basic military formations, drill movements, commands, customs, courtesies, honors and inspection. Lecture and discussion topics include security, equal opportunity and military justice. First year Naval Science students only.

Prerequisites: departmental permission

NAVS 112+ Naval Laboratory I (1 Credit Hour)

Continues basic military formations, drill movements, commands, customs, courtesies, honors and inspections. Lecture and discussion topics include cruise preparation, safety education, administration, security, equal opportunity and military justice. First year Naval Science students only.

Prerequisites: departmental permission

NAVS 201 Naval Ships Systems I (3 Credit Hours)

Familiarizes students with types, structure and purpose of naval engineering systems, propulsion systems, auxiliary power systems, electrical systems and ship control. Ship design and stability characteristics are examined.

NAVS 202 Naval Ships Systems II (3 Credit Hours)

Introduction to theory and principles of operation of naval weapons systems. Covers types of weapons and fire control systems, capabilities/limitations, theory of target acquisition, identification and tracking, trajectory principles and basics of naval ordnance.

Pre- or corequisite: NAVS 201

NAVS 211+ Naval Laboratory II (1 Credit Hour)

Covers military formations, drill movements, commands, customs, courtesies, honors and inspections. Lecture/discussion topics include cruise preparation/evaluation, security, administration and military justice. Second year Naval Science students only.

Prerequisites: departmental permission

NAVS 212+ Naval Laboratory II (1 Credit Hour)

Military formations, drill movements, commands, customs, courtesies, honors and inspections. Lecture and discussion topics include cruise preparation and evaluation, safety, administration, security, equal opportunity and military justice. Second year Naval Science students only.

Prerequisites: departmental permission

NAVS 301 Navigation and Naval Operations I (3 Credit Hours)

In-depth study of piloting including theory, principles and procedures. Includes use of charts, visual and electronic aids, and theory and operation of compasses. Other topics include tides, currents, effects of wind and weather, and nautical rules of the road.

Prerequisites: departmental permission

NAVS 302 Navigation and Naval Operations II (3 Credit Hours)

Relative motion vector-analysis theory, relative motion problems, formation tactics, and ship employment. Also includes an introduction to naval operations and operations analysis, ship behavior and characteristics in maneuvering, applied aspects of ship handling, and afloat communications. Concepts in naval leadership and naval operations reinforced through case studies.

Prerequisites: departmental permission

Pre- or corequisite: NAVS 301

NAVS 310 Evolution of Warfare (3 Credit Hours)

Explores the basic concepts for understanding the operational art of warfare from the beginning of recorded history to the present.

Prerequisites: departmental permission

NAVS 311+ Naval Laboratory III (1 Credit Hour)

Military formations, drill movements, commands, customs, courtesies, honors and inspections. Lecture/discussion topics include cruise preparation and evaluation, security and military justice. Third year Naval Science students only.

Prerequisites: departmental permission

NAVS 312+ Naval Laboratory III (1 Credit Hour)

Military formations, drill movements, commands, customs, courtesies, honors and inspections. Lecture and discussion topics include cruise preparation and evaluation, safety, administration, security, equal opportunity and military justice. Third year Naval Science students only.

Prerequisites: departmental permission

NAVS 395 Topics (3 Credit Hours)

Study of selected topics.

Prerequisites: departmental permission

NAVS 401 Leadership and Management I (3 Credit Hours)

The fundamentals of the managerial process (planning, organization, directing, and controlling) are considered in their relationship to the effectiveness of naval organization and readiness. Coverage includes human resources management, naval personnel management, material management and administration of division discipline.

Prerequisites: NROTC Sophomore Midshipman or STA-21/MECEP; departmental permission required for non-ROTC students

NAVS 402 Leadership and Ethics (3 Credit Hours)

Capstone course, designed to equip the student with the critical thinking skills to address moral and ethical dilemmas frequently faced by naval officers.

Prerequisites: completion of all previous NAVS courses

NAVS 410 Fundamentals of Maneuver Warfare (3 Credit Hours)

Broad aspects of warfare and their interactions with maneuver warfare doctrine. Focus on the United States Marine Corps as the premier maneuver warfare fighting institution. Historical influences on current tactical, operational, and strategic implications of maneuver warfare practices. Case studies. Enrollment preference to NROTC students.

Prerequisites: departmental permission

NAVS 411+ Naval Laboratory IV (1 Credit Hour)

Covers military formations, drills, commands, customs, courtesies, honors and inspections. Lecture/discussion topics include precommissioning preparation, administration, equal opportunity, safety and military justice. Fourth year Naval Science students only.

Prerequisites: departmental permission

NAVS 412+ Naval Laboratory IV (1 Credit Hour)

Military formations, drill movements, commands, customs, courtesies, honors and inspections. Lecture and discussion topics include precommissioning preparation, safety, administration, security, equal opportunity and military justice. Fourth year Naval Science students only.

Prerequisites: departmental permission

NMED - Nuclear Medicine Technology

NMED 300 Medical Terminology (3 Credit Hours)

A course designed to cover the terminology and abbreviations used in the clinical sciences.

Prerequisites: ENGL 110C or equivalent

NMED 331 Fundamental Concepts in Nuclear Medicine Technology (4 Credit Hours)

A course designed to cover the physical principles related to nuclear medicine technology. The methods and mathematics of radioactive decay, types of radiation, radiation interactions, origins of radionuclides, including SPECT and PET/CT radionuclides also presented.

Prerequisites: PHYS 101N and PHYS 102N or equivalent

NMED 332 Nuclear Instrumentation (4 Credit Hours)

This course is designed to familiarize the student with the theory, operation and quality assurance associated with the instrumentation found in a typical nuclear medicine department. The course also covers the instrumentation of PET/CT scanners as well as the common radiopharmaceuticals, imaging protocols, and radiation safety currently employed in diagnostic PET/CT imaging practice.

Prerequisites: NMED 331 or permission of program director

NMED 335 Radiation Health (3 Credit Hours)

Discussions of radiation effects on cellular systems as well as guidelines for radiation protection and safe handling of radioactive materials in the nuclear medicine clinical setting.

Prerequisites: NMED 331 or permission of the instructor

NMED 401 Nuclear Medicine Technology I (4 Credit Hours)

A course designed to cover the nuclear medicine procedures and protocols of the gastrointestinal, genitourinary, central nervous, skeletal systems. Other current or emerging clinical nuclear medicine procedures are also covered.

Prerequisites: BIOL 240 or BIOL 250 and BIOL 241 or BIOL 251 and admission to the nuclear medicine program

NMED 402 Nuclear Medicine Technology II (4 Credit Hours)

A course designed to cover the nuclear medicine protocols and procedures of the respiratory, cardiovascular, endocrine, infection/inflammation and lymphatic systems. Other current and emerging clinical nuclear medicine procedures and protocols are also presented.

Prerequisites: NMED 401 or permission of the program director

NMED 403 Radiopharmacy (3 Credit Hours)

This course is designed to cover the concepts and techniques related to the field of radiopharmacy for nuclear medicine technology practice. The production, preparation, uses and quality assurance of radiopharmaceuticals are presented. Interventional and adjunctive pharmaceutical agents used in nuclear medicine will be covered.

Prerequisites: NMED 331, CHEM 105N-CHEM 106N and CHEM 107N-CHEM 108N or higher or permission of the program director

NMED 410 Nuclear Medicine and Molecular Imaging (3 Credit Hours)

This course covers the concepts, instrumentation and procedures pertaining to molecular imaging as related to nuclear medicine. Topics include: advanced Positron Emission Tomography (PET), Computed Tomography (CT), PET/CT, Magnetic Resonance Imaging (MRI), nuclear cardiology, theranostics, and other emerging technologies. Cross-sectional anatomy and radionuclide therapy, including monoclonal antibodies are also discussed. Review of all content for board examinations.

Prerequisites: NMED 401 and NMED 402

NMED 440 Clinical Nuclear Medicine Technology I (3-8 Credit Hours)

Clinical instruction in patient care, radiation safety, radiopharmaceutical administration, imaging and non-imaging techniques and quality assurance procedures, including PET/CT.

Prerequisites: admission to the program and permission of the program director

NMED 450 Clinical Nuclear Medicine Technology II (8 Credit Hours)

Continued clinical instruction in diagnostic and therapeutic nuclear medicine procedures. The correlation of nuclear medicine procedures is also presented. Clinical experiences include patient care, radiation safety, radiopharmaceutical administration, imaging and non-imaging techniques and quality assurance procedures.

Prerequisites: NMED 440 and permission of the program director

NMED 460 Clinical Nuclear Medicine Technology III (8 Credit Hours)

Advanced clinical instruction in diagnostic and therapeutic nuclear medicine procedures, including PET/CT. The correlation of nuclear medicine procedures is also presented.

Prerequisites: NMED 450 and permission of the program director

NMED 475W Administration and Management in Nuclear Medicine Technology (3 Credit Hours)

This writing intensive, capstone course is designed to provide a review of the administration, management, policies, and practices relevant to nuclear medicine technology. The leadership, legal, ethical and planning aspects of operating a nuclear medicine department are covered.

Prerequisites: Admission to the NMED program and a grade of C or better in ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C

NMED 495 Special Topics in Nuclear Medicine Technology (1-3 Credit Hours)

A study of selected current topics in nuclear medicine technology.

Prerequisites: permission of the program director

NMED 497 Directed Study in Nuclear Medicine Technology (1-3 Credit Hours)

Directed study in a topic relevant to nuclear medicine technology.

Prerequisites: Permission of the program director

NMED 498 Directed Research in Nuclear Medicine Technology (1-6 Credit Hours)

Supervised research on a specific problem in Nuclear Medicine Technology. Regular meetings with faculty and a written/oral report are required.

Prerequisites: instructor permission required

NURS - Nursing

NURS 304 Principles of Practice: Foundations of Health Assessment (3 Credit Hours)

This didactic and laboratory course emphasizes the assessment phase of the nursing process. Supervised practice, faculty demonstration, and self-paced learning in the audio-visual laboratory, simulation laboratory and selected clinical sites facilitate skill acquisition in health assessment and health history interviewing. Pre- or

Prerequisites: Admission to the BSN program

Corequisites: NURS 316 and NURS 317

NURS 305 Health Assessment (3 Credit Hours)

This course emphasizes the physical assessment phase of the nursing process. For registered nurse students only.

Prerequisites: Admission to the BSN program

NURS 306 Theoretical Foundation of Professional Nursing Practice (3 Credit Hours)

This course focuses on selected nursing models, concepts, and theories as supporting frameworks for professional nursing practice. Emphasis is placed on the utilization of nursing theory as a methodology for improving nursing practice in various client situations and practice settings. For registered nurse students only.

Prerequisites: Admission to the BSN program

Pre- or corequisite: NURS 401

NURS 310 Principles of Practice: Introduction to Nutrition/Normal Nutrition (1 Credit Hour)

This course focuses on concepts of normal nutrition. Emphasis is placed on understanding the impact of various nutrients on the body.

Prerequisites: Admission to the BSN program

NURS 311 Principles of Practice: Nutrition of Nursing Practice (1 Credit Hour)

This course builds upon NURS 310 and introduces the student to selected therapeutic diets. Emphasis is placed on specific diets associated with selected alterations in adaptation and the adult with behavioral issues.

Prerequisites: NURS 310

NURS 314 Principles of Practice: Foundational Concepts (3 Credit Hours)

Emphasis is on concepts and theories that are fundamental to professional nursing practice, the nursing process, and therapeutic nurse-patient communication.

Prerequisites: Admission to the BSN program

NURS 316 Principles of Practice: Foundations of Practice (3 Credit Hours)

This course focuses on concepts and theories underlying professional clinical nursing practice. This course also includes laboratory application of health assessment skills, the nursing process, and clinical nursing techniques.

Prerequisites: Admission to the BSN program

Pre- or corequisite: NURS 304

NURS 317 Principles of Practice: Clinical Foundations of Practice (1 Credit Hour)

This clinical course focuses on the assessment and basic care of the hospitalized adult client. Application of the nursing process, health assessment, and clinical nursing techniques are implemented using concepts and theories that underlie professional nursing practice.

Prerequisites: admission to the BSN program

Pre- or corequisite: NURS 304 and NURS 316

NURS 322 Health Continuum: Adult Health I (4 Credit Hours)

This lecture course focuses on the adult who is experiencing selected alterations and/or adaptations in organ system function such as elimination, immune system/cellular regulation, hematological system, fluid balance, temperature regulation and nutritional balances. Focus is also on the adult experiencing pain, inflammation and other selected system alterations. Emphasis is on the use of the nursing process to assist adult patients to adapt to alterations/adaptations in function of systems.

Prerequisites: NURS 304, NURS 316 and NURS 317

Pre- or corequisite: NURS 323 and NURS 373

NURS 323 Health Continuum: Clinical Management Adult Health I (2 Credit Hours)

This clinical course focuses on the nursing process with adult clients experiencing alterations/adaptations in bodily defense mechanisms. The concepts inclusive in the didactic component will be actualized in general medical surgical units and oncology units.

Prerequisites: NURS 304, NURS 316, and NURS 317

Pre- or corequisite: NURS 322 and NURS 373

NURS 332 Health Continuum: The Growing Family (2 Credit Hours)

This lecture course focuses on the theoretical and applied concepts related to the care of families experiencing pregnancy and childbirth. Emphasis is on the dynamic familial, societal, psychological and physiological changes that occur in this stage of family and personal development. The assistive role of the nurse and as a family-centered provider of care is a major focus.

Prerequisites: NURS 322 and NURS 323

Pre- or corequisite: NURS 333

NURS 333 Health Continuum: Clinical Management of the Growing Family (1 Credit Hour)

This clinical course provides the opportunity for planning and provision of nursing care to the childbearing family. Emphasis is on the use of the nursing process to plan, provide and coordinate quality care. Students are expected to demonstrate responsibility and accountability for personal actions as well as a respect for families and clients.

Prerequisites: NURS 322 and NURS 323

Pre- or corequisite: NURS 332

NURS 352 Health Continuum: Behavioral Issues, Altered Cognition and Coping (2 Credit Hours)

This lecture course focuses on psychotherapeutic processes across the lifespan. Building on foundations from the social and behavioral sciences, emphasis is on the use of the nursing process in providing care to clients with acute and chronic illness in a variety of psychiatric settings.

Prerequisites: NURS 304, NURS 316 and NURS 317

Pre- or corequisite: NURS 353

NURS 353 Clinical Management of Patients with Behavioral Issues, Altered Cognition and Coping (1 Credit Hour)

This clinical course provides a mechanism for students to perform mental health assessments, plan nursing care, practice therapeutic communication techniques and observe group processes in both inpatient and outpatient settings.

Prerequisites: NURS 304, NURS 316 and NURS 317

Pre- or corequisite: NURS 352

NURS 355 Genetics in Nursing (2 Credit Hours)

Emphasis is placed on current information and research findings about the role of genetics in health. Students completing this course will be better prepared to incorporate genetic information and technology when providing care to clients. A student receiving credit for NURS 355 cannot receive credit for NURS 455.

Prerequisites: Admission to the prelicensure BSN program

NURS 356 Global Health Perspectives (2 Credit Hours)

This introductory course to global health emphasizes the major underlying determinants of poor health and the relationship between health and political, social, and economic development. Students will be introduced to global effects on the health of populations worldwide, current and future challenges to global health and the role of primary health care providers in meeting that challenge. (A student receiving credit for NURS 356 cannot receive credit for NURS 456.)

Prerequisites: admission to the prelicensure BSN program

NURS 357 Palliative Care in Nursing (2 Credit Hours)

This course provides an overview of the need to improve end of life care and the role of nursing as a member of the interdisciplinary team in providing quality care. Basic principals of palliative care are presented within a quality of life (QOL) framework. Palliative care nursing care combines caring, communication, knowledge, and skill. Clinical issues to include expert assessment skills and aggressive pain and symptom management as well as the psychological, social, and spiritual care of patients and families experiencing a life threatening progressive illness will be discussed. Caring for the dying means not only "doing for" but also "being with". Students will be provided the opportunity to use introspection to clarify their own feelings related to the dying process. A student receiving credit for NURS 357 cannot receive credit for NURS 457.

Prerequisites: Admission to the prelicensure BSN program

NURS 358 Studies in Professional Nursing (2 Credit Hours)

The study of selected topics in professional nursing practice; designed to provide an in-depth exploration of current nursing issues.

Prerequisites: Admission to BSN program

NURS 363 Principles of Practice: Research as Foundation for Practice (3 Credit Hours)

This course focuses on the theories and concepts utilized in the scientific investigation of nursing practice. Content emphasizes the development of skills necessary to be a consumer of nursing research.

Prerequisites: Admission to BSN program

Pre- or corequisite: STAT 130M

NURS 369 Practicum: Studies in Clinical Nursing Practice (1-3 Credit Hours)

The study of selected clinical practice applications in professional nursing practice; designed to provide an in-depth practicum in selected nursing practice areas. Students must have specific practicum arrangements (ex: externship) prior to registration.

Prerequisites: admission to BSN program and permission of undergraduate program director or chief departmental advisor

NURS 373 Principles of Practice: Pharmacology for Nursing Practice I (2 Credit Hours)

This course is designed to involve the student in the application of the nursing process to clinical situations involving drug therapy.

Prerequisites: NURS 304, NURS 316 and NURS 317

Pre- or corequisite: NURS 322 and NURS 323

NURS 376 Principles of Practice: Pharmacology Across the Continuum (1 Credit Hour)

This course is designed to involve nursing students in the practical application of the nursing process in clinical pharmaco-therapeutics related to selected concepts.

Prerequisites: NURS 373

NURS 380 Clinical Nursing Concepts 1 (9 Credit Hours)

This is an advanced placement course for nursing students concurrently enrolled in level 1 nursing coursework with an approved partner nursing program. After successful completion of the didactic coursework and clinical requirements at the partner institution, the student will be awarded experiential learning credits.

Prerequisites: Admission to the BSN program

NURS 381 Clinical Nursing Concepts 2 (9 Credit Hours)

This is an advanced placement course for nursing students concurrently enrolled in level 2 nursing coursework with an approved partner nursing program. After successful completion of the didactic coursework and clinical requirements at the partner institution, the student will be awarded experiential learning credits.

Prerequisites: Admission to the BSN program

NURS 382 Clinical Nursing Concepts 3 (9 Credit Hours)

This is an advanced placement course for nursing students concurrently enrolled in level 3 nursing coursework with an approved partner nursing program. After successful completion of the didactic coursework and clinical requirements at the partner institution, the student will be awarded experiential learning credits.

Prerequisites: Admission to the BSN program

NURS 383 Clinical Nursing Concepts 4 (9 Credit Hours)

This is an advanced placement course for nursing students concurrently enrolled in level 4 nursing coursework with an approved partner nursing program. After successful completion of the didactic coursework and clinical requirements at the partner institution, the student will be awarded experiential learning credits. Proof of licensure as a registered nurse is required prior to awarding the level 4 experiential learning credits.

Prerequisites: Admission to the BSN program

NURS 387 Principles of Practice: Research as Foundation for Practice (3 Credit Hours)

This course focuses on the theories and concepts utilized in the scientific investigation of nursing practice. Content emphasizes the development of skills necessary to be a consumer of nursing research. Open to Honors Program students only.

Prerequisites: Admission to the BSN program

Pre- or corequisite: STAT 130M

NURS 393 Clinical Skills for Nonnursing Majors (2 Credit Hours)

Focuses on basic hygiene, comfort and safety skills required of health professionals providing diagnostic and/or supportive therapies to clients in a health care facility. May not be taken as required elective by nursing majors. Open to nuclear medicine technology students only.

Prerequisites: junior standing and permission of the instructor

NURS 395 Topics (1-3 Credit Hours)

Selected health-related topics of interest. Course descriptions and prerequisites are available from the chief academic advisor.

Prerequisites: permission of the School of Nursing

NURS 396 Independent Study (1-3 Credit Hours)

Nursing majors only. Selected health-related topics of interest to nursing majors. Course descriptions and prerequisites are available from the chief academic advisor.

Prerequisites: Permission of the School of Nursing

NURS 397 Independent Study (1-3 Credit Hours)

Independent study of selected topics.

Prerequisites: permission of the School of Nursing

NURS 398 Clinical Nursing Concepts I (17 Credit Hours)

This advanced placement credit is awarded to the registered nurse who has demonstrated knowledge of selected basic clinical nursing concepts for the provision of nursing care to individuals experiencing health deviations. Awarded upon completion of 14 credits in major. Registered nurse students only.

Prerequisites: Admission to the BSN program

NURS 401 Introduction to Professional Development for Baccalaureate Nursing Practice (4 Credit Hours)

This course focuses on basic skills required for success in the post-licensure baccalaureate nursing program. Emphasis is placed on professional development for baccalaureate nursing practice. Selected skills to be acquired include introduction to the development of a professional portfolio, APA professional writing format, information literacy in nursing literature and professional communication strategies. For registered nurse students only.

Prerequisites: Admission to the BSN program

NURS 402 Role Development for the Baccalaureate Nurse as Educator (3 Credit Hours)

This course focuses on further development of the baccalaureate nursing student with an emphasis on expanding critical thinking skills, teaching-learning theories and application, professional resume development and exploration of nursing specialties and practice roles. For registered nursing students only.

Prerequisites: NURS 401

NURS 403 Transition to Baccalaureate Nursing Practice (4 Credit Hours)

This course facilitates the completion of a professional portfolio for the post-licensure baccalaureate nursing student. Emphasis is on advanced professional communication strategies and reflective processes for professional role expansion and development. For registered nurse students only. NURS 403 may only be taken in the final semester of the nursing curriculum.

Prerequisites: NURS 402

Pre- or corequisite: NURS 305, NURS 306, NURS 363, NURS 401, NURS 412, NURS 417, NURS 490W, and NURS 492

NURS 405 Interprofessional Study Abroad on Global Health (1-3 Credit Hours)

This study abroad service learning course will introduce the student to the political, social, cultural, and ethical issues involved in prevention and health promotion globally. Students will travel to another country and learn the incidence/prevalence, morbidity/mortality, and identified public health problems in specific regions and countries.

Prerequisites: ENGL 110C

NURS 410 Health Continuum: Adult Health II (4 Credit Hours)

This lecture course focuses on the adult experiencing multisystem alterations/adaptations. Emphasis is on the use of the nursing process to assist adult clients to adapt to multisystem alterations/adaptations related insults.

Prerequisites: NURS 322 and NURS 323

Pre- or corequisite: NURS 453 and NURS 474

NURS 412 Ethics, Law, Economics & Health Policy: Application to Quality Nursing Practice (2 Credit Hours)

This course examines ethics, law, economics and health policy that influence nursing practice, the health care system, and quality patient care.

Prerequisites: Admission to the BSN program

NURS 417 Nursing Informatics (2 Credit Hours)

This course focuses on information management and the utilization of patient care technologies to improve the patient experience of care (quality, satisfaction, safety), improve the health of populations, and reduce cost. Students will develop knowledge, skills and attitudes related to nursing informatics through readings, online discussions, case studies and exploration and use of electronic modalities.

Prerequisites: Admission to the BSN program

NURS 421 Health Continuum: Clinical Management of Children of the Family (2 Credit Hours)

This clinical course emphasizes the provision of nursing care to infants and children suffering from acute and chronic illnesses. Through the use of the nursing process, students provide and coordinate care, serving as client advocates. Students are expected to demonstrate responsibility for personal actions related to the practice of nursing.

Prerequisites: NURS 322 and NURS 323

Pre- or corequisite: NURS 422

NURS 422 Health Continuum: Children of the Family (2 Credit Hours)

This lecture course provides a basis for understanding the nursing care of children of various ages. Emphasis is on the use of the nursing process to assist children as they encounter acute and chronic illnesses. The nurse's communication with and education of the family and child as individuals or as part of a group are discussed as a means of achieving the goal of comprehensive individualized child care in the home and health care settings.

Prerequisites: NURS 322 and NURS 323

Pre- or corequisite: NURS 421

NURS 430/530 Principles of Practice: Contemporary Issues in Nursing Care of the Older Adult (2 Credit Hours)

This course focuses on the nursing needs of the well gerontological client. Emphasis is on the multi-complex needs of the older adult.

Prerequisites: Admission to the BSN program

NURS 440 Health Continuum Recovery (2 Credit Hours)

This course introduces the theoretical and applied concepts necessary to assist individuals with potential or actual disabilities prevent further functional dependence or restore maximum levels of function.

Prerequisites: NURS 322, NURS 323, and NURS 373

Pre- or corequisite: NURS 441

NURS 441 Health Continuum: Clinical Management of Recovery (2 Credit Hours)

This clinical course focuses on using the nursing process to assist the recovery of individuals with disabilities prevent further functional dependence or restore maximum levels of function. Collaborative team approaches are stressed.

Prerequisites: NURS 322, NURS 323 and NURS 373

Pre- or corequisite: NURS 440

NURS 453 Health Continuum: Clinical Management Adult Health Nursing II (2 Credit Hours)

This clinical course emphasizes the provision of nursing care to clients who are experiencing alterations/adaptations in organ system functions. Through the use of the nursing process, students will provide and coordinate care and serve as client advocates in a variety of settings.

Prerequisites: NURS 322 and NURS 323

Pre- or corequisite: NURS 410 and NURS 474

NURS 454 Critical Care Nursing (2 Credit Hours)

This elective clinical and didactic course is designed for final semester prelicensure students who are requesting adult critical care (CC) or emergency department (ED) Role Transition preceptorship placement.

Prerequisites: NURS 410 and NURS 453 and permission of the instructor

NURS 455 Genetics in Nursing (3 Credit Hours)

Emphasis is placed on current information & research findings about the role of genetics in health. Students completing this course will be better prepared to incorporate genetic information and technology when providing care to clients. A student receiving credit for NURS 355 cannot receive credit for NURS 455.

Prerequisites: Admission to the postlicensure BSN program

NURS 456 Global Health Perspectives (3 Credit Hours)

This introductory course to global health emphasizes the major underlying determinants of poor health and the relationship between health and political, social, and economic development. Students will be introduced to global effects on the health of populations worldwide, current and future challenges to global health and the role of primary health care providers in meeting that challenge. (A student receiving credit for NURS 456 cannot receive credit for NURS 356.)

Prerequisites: permission of the instructor

NURS 457 Palliative Care (3 Credit Hours)

This course provides an overview of the need to improve end of life care and the role of nursing as a member of the interdisciplinary team in providing quality care. Basic principles of palliative care are presented within a quality of life (QOL) framework. Palliative care nursing care combines caring, communication, knowledge, and skill. Clinical issues to include expert assessment skills and aggressive pain and symptom management as well as the psychological, social, and spiritual care of patients and families experiencing a life threatening progressive illness will be discussed. Caring for the dying means not only "doing for" but also "being with". Students will be provided the opportunity to use introspection to clarify their own feelings related to the dying process. A student receiving credit for NURS 357 cannot receive credit for NURS 457.

Prerequisites: Admission to the postlicensure BSN program

NURS 458 Studies in Professional Nursing (3 Credit Hours)

The study of selected topics in professional nursing practice; designed to provide an in-depth exploration of current nursing issues.

Prerequisites: admission to B.S.N. program or permission of instructor

NURS 459 Concepts in Primary Care (3 Credit Hours)

In this course, students learn to improve the health of individuals, families, and communities in primary care settings. Emphasis is on health education, health promotion and disease prevention, and management of chronic illnesses, especially for underserved populations and veterans.

Prerequisites: Junior standing or permission of the instructor

NURS 462 Nursing in the Health Care System Community I (1 Credit Hour)

This course focuses on family and community health nursing. Content emphasizes concepts and themes of families and communities and the use of the nursing process to assist in promoting and maintaining health. Application of course concepts through experience and interactions with health care coalition groups is emphasized.

Prerequisites: NURS 322 and NURS 323

Pre- or corequisite: NURS 463

NURS 463 Nursing in the Health Care System: Community Interactions I (1 Credit Hour)

This clinical course provides opportunity for application of concepts and themes of families and communities through experience and interactions with health care coalition groups.

Prerequisites: NURS 322 and NURS 323

Pre- or corequisite: NURS 462

NURS 472 Nursing in the Health Care System: Community II (1 Credit Hour)

This course focuses on the continued development of concepts related to family and community health nursing. Content emphasizes development of strategies to facilitate application of concepts and themes of families and communities. The nursing process is used to assist in promoting and maintaining health.

Prerequisites: NURS 462 and NURS 463

Pre- or corequisite: NURS 473

NURS 473 Nursing in the Health Care System: Community Interactions II (1 Credit Hour)

Application of course concepts through experience and interactions with healthcare coalition groups are emphasized.

Prerequisites: NURS 462 and NURS 463

Pre- or corequisite: NURS 472

NURS 474 Principles of Practice: Pharmacology for Nursing Practice II (2 Credit Hours)

This course is designed to involve nursing students in the practical application of the nursing process in clinical pharmacotherapeutics related to selected concepts.

Prerequisites: NURS 376

Pre- or corequisite: NURS 410 and NURS 453

NURS 480W Nursing in the Health Care System: Leadership (3 Credit Hours)

This course focuses on utilization of strategies from leadership, management systems and change theories to facilitate professional nursing practice. Emphasis is placed on the professional nurse as a leader in the health care system. The influence of organizational behavior, professional image and case management on nursing practice is examined. This is a writing intensive course.

Prerequisites: Completion of ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C with a grade of C or better

NURS 481 Principles of Practice: Role Transition (5 Credit Hours)

This capstone course is a practicum experience in which students apply theoretical, conceptual and psychomotor learning in a structured clinical environment under the supervision of a staff preceptor. The experience is designed to assist the student to facilitate the transition to the role of the baccalaureate generalist nurse.

Prerequisites: NURS 317, NURS 323, NURS 333, NURS 353, NURS 421, NURS 441, and NURS 453

Pre- or corequisite: Senior standing in the curriculum

NURS 490W Nursing Leadership (3 Credit Hours)

This course focuses on utilization of strategies from leadership, management, systems and change theories to facilitate professional nursing practice. Emphasis is placed on the professional nurse as a leader in the health care system. The influence of organizational behavior, proactive political action, professional image and case management on nursing practice is examined. For registered nurse students only. This is a writing intensive course.

Prerequisites: Admission to the BSN program and completion of ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C with a grade of C or better

Pre- or corequisite: NURS 401

NURS 491 Principles of Practice: Role Transition (5 Credit Hours)

This capstone course is a practicum experience in which students apply theoretical, conceptual and psychomotor learning in a structured clinical environment under the supervision of a staff preceptor. The experience is designed to assist the student to facilitate the transition to the role of the baccalaureate generalist nurse.

Prerequisites: NURS 317, NURS 323, NURS 333, NURS 353, NURS 421, NURS 441, and NURS 453

Pre- or corequisite: Senior standing in the program

NURS 492 Community Health Nursing (3 Credit Hours)

This course focuses on professional nursing practice with families and communities as clients. Emphasis is on community wellness, interaction with political influences and epidemiological principles. For registered nurse students only.

Prerequisites: Admission to the BSN program

Pre- or corequisite: NURS 401

NURS 495/595 Topics in Nursing (1-3 Credit Hours)

The study of selected topics that may not be offered regularly. Special topics will appear in the schedule of classes each semester.

Prerequisites: Permission of the instructor

NURS 498 Clinical Nursing Concepts II (16 Credit Hours)

This advanced placement credit is awarded to the registered nurse who has demonstrated knowledge of selected complex nursing concepts for the provision of nursing care to individuals and families experiencing health deviations. Awarded upon completion of 26 credits in the major. For registered nurse students only.

Prerequisites: Admission to the BSN program

NURS 499 Clinical Nursing Concepts III (33 Credit Hours)

This is an advanced placement course for registered nurse students. After verification of registered nurse licensure, the student will be awarded 33 experiential learning credits.

Prerequisites: Admission to the BSN program

OEAS - Ocean and Earth Sciences

OEAS 106N Introductory Oceanography (4 Credit Hours)

Introductory course emphasizing the geology, chemistry, physics and biology of the oceans. Laboratory emphasizes practice of basic scientific methods. Knowledge of the metric system, scientific notation, ratio and proportion, and graphing is required. Field trip required.

OEAS 108N Understanding Global Climate Change (4 Credit Hours)

What is the science behind global climate change? How reliable are forecasts of future global warming? This course examines these questions to evaluate the likelihood and potential severity of anthropogenic climate change in the coming centuries. It includes an overview of the physics of the greenhouse effect, an overview of the global carbon cycle and its role as a global thermostat; an examination of predictions and reliability of model forecasts of future climate change; and examination of local impacts of global climate change (e.g., sea level rise in the Tidewater area).

OEAS 110N Earth Science (4 Credit Hours)

This is an introductory course in geological sciences. The course relates the principles of natural science to Earth as a planet, its resources, and its environment. The effects of geologic processes on the environment are stressed. A student receiving credit for OEAS 110N cannot receive credit for OEAS 111N.

OEAS 111N Physical Geology (4 Credit Hours)

This course introduces the student to the study of the materials, structures, and processes of the Earth. Present terrestrial resources are interpreted in terms of the internal and surface processes that formed them. A student receiving credit for OEAS 111N cannot receive credit for OEAS 110N.

OEAS 112N Historical Geology (4 Credit Hours)

The evolution of the continents, ocean basins, mountain chains, and the major life forms throughout Earth's history are studied chronologically and are related to the physical and biological changes that have caused them.

Prerequisites: OEAS 110N or OEAS 111N

OEAS 126N Honors: Introductory Oceanography (4 Credit Hours)

Open only to students in the Honors College. Special honors section of OEAS 106N. In addition to broad coverage of the geology, chemistry, physics and biology of the ocean, students will read scientific papers with current environmental problems. There will be several field trips to nearby ecosystems.

OEAS 130G Research Skills and Information Literacy for the Natural Sciences (3 Credit Hours)

This course is designed to introduce students to a range of research and information literacy skills necessary for natural scientists. The course will introduce students to the wide range of research being undertaken in the natural sciences (e.g., oceanography, geology, physics, biology, and chemistry). The course involves directed reading, exercises in information retrieval, and the synthesis of information from a range of sources into scientific essays and oral presentations.

OEAS 195 Topics (1-4 Credit Hours)

Special topics in physical, geological, chemical or biological oceanography.

OEAS 197 Undergraduate Research Experience in Ocean and Earth Sciences (0 Credit Hours)

Student participation in a supervised, undergraduate research experience for which credit will not apply to the degree. Experience must be related to the student's major, minor or career area of interest.

Prerequisites: permission of the instructor

OEAS 220T Introduction to Meteorology (3 Credit Hours)

This course is an introduction to the basic principles governing both day-to-day weather and the average of weather, or climate. Specific focus will be given to the tools used to measure weather and the ways in which these tools have impacted our understanding of weather in the past and present. Links will be made between the technology-based improvements of our understanding of weather and the impact on the lives of humans throughout recent history. Students will learn about how weather forecasts are made, and how the quality of these forecasts affects our lives.

OEAS 250N Natural Hazards and Disasters (4 Credit Hours)

This course introduces the science behind some of Earth's natural phenomena that can, and often do, result in major loss of life or catastrophic damage to property. It includes an overview, with relevant case studies, of earthquakes, tsunamis, landslides, volcanic eruptions, tropical cyclones (hurricanes), tornadoes, floods, droughts, and space weather. The impact of global climate change and sea level rise on vulnerable populations is examined and current risk assessment and mitigation practices are discussed.

OEAS 295 Special Topics (3 Credit Hours)

An investigation of a selected problem in physical, geological, chemical, or biological oceanography.

Prerequisites: sophomore standing or permission of the instructor

OEAS 302 Environmental Geology (3 Credit Hours)

Geologic resources and processes that limit human activities and pose significant hazards. Does not satisfy OEAS major degree or minor requirements.

Prerequisites: Junior standing and an 8-hour sequence in a General Education science course

OEAS 303 Paleontology (3 Credit Hours)

This course introduces the concepts of paleontology, focusing on the relationship between the evolution of life (particularly invertebrates) and the development of Earth. Field work will also include studies in paleoecology and sedimentary facies. Two field trips are recommended.

Prerequisites: OEAS 111N and OEAS 112N

OEAS 306 Oceanography (3 Credit Hours)

General survey of physical, geological, chemical and biological oceanography. The application of skills from mathematics, geology, physics, biology and chemistry for the solution of oceanographic problems.

Prerequisites: MATH 211 or MATH 205, BIOL 121N or BIOL 136N and BIOL 122N or BIOL 137N, CHEM 121N-CHEM 122N, OEAS 111N, and PHYS 111N or PHYS 231N

OEAS 307 Research Experience in Oceanography (3 Credit Hours)

In this course-based undergraduate research experience, students perform field and laboratory experiments designed to complement topics presented in the Oceanography lecture course, OEAS 306. Students taking OEAS 306 are strongly encouraged to take this laboratory class concurrently with OEAS 306. Ocean and Earth Science majors are required to take this class.

Prerequisites: BIOL 122N or BIOL 137N, BIOL 124N, CHEM 122N, CHEM 124N, and OEAS 111N

Pre- or corequisite: OEAS 306

OEAS 310 Global Earth Systems (4 Credit Hours)

Core course for ocean and earth sciences majors that examines the processes linking the Earth's atmosphere, lithosphere, and hydrosphere into an interactive system.

Prerequisites: BIOL 121N or BIOL 136N, BIOL 122N or BIOL 137N, CHEM 121N, CHEM 122N, MATH 205 or MATH 211, and OEAS 111N, all with a grade of C or better

OEAS 315 Minerals and Rocks (4 Credit Hours)

The course introduces the main igneous, sedimentary and metamorphic rocks and their mineral composition. Laboratory exercises include mineral identification by physical and microscopic optical properties, the identification of rocks in hand samples, and basic training with the Brunton compass. Field work includes training in introductory facies analysis, and the analysis of sedimentary rock structures, unconformities, volcanic, plutonic, and metamorphic rock units, clastics and carbonates.

Prerequisites: OEAS 111N, OEAS 112N, CHEM 121N, and CHEM 122N

OEAS 320 Sedimentology and Stratigraphy (4 Credit Hours)

The origin, transport, and deposition of sediments with emphasis on interpretation of sediment sequences, principles and methods of correlation. Laboratory exercises involve field sampling, textural analyses, and sedimentary structures. Field trip required.

Prerequisites: OEAS 110N or OEAS 111N

OEAS 344W Geomorphology (3 Credit Hours)

Geologic processes that shape the earth's surface. Laboratory studies involve interpretation of topographic maps, soil maps, and aerial photographs. Field trip required. This is a writing intensive course.

Prerequisites: OEAS 320 AND either ENGL 211C or ENGL 221C or ENGL 231C with a grade of C or better; or permission of instructor

OEAS 350 Where Rivers Meet the Sea: Ecology and Climate (3 Credit Hours)

This course is designed to introduce students to the highly productive ecosystems of estuaries that result from the interactions of fresh and oceanic waters. The course includes exploration, evaluation, and analysis of the factors that allow construction of realistic conceptual models of an important Earth system.

Prerequisites: ENGL 110C

OEAS 367 Cooperative Education (1-3 Credit Hours)

Available for pass/fail grading only. Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures as formally determined by the department and the Career Management program prior to the semester in which the experience is to take place.

Prerequisites: junior standing and permission of the department

OEAS 368 Internship in Ocean and Earth Sciences (1-3 Credit Hours)

Available for pass/fail grading only. Students gain on the job work experience related to their undergraduate curriculum.

Prerequisites: junior standing, permission of department and a 3.00 grade point average

OEAS 369 Practicum (1-3 Credit Hours)

Field experience in ocean, earth and atmospheric sciences. (qualifies as a CAP experience)

Prerequisites: junior standing, permission of department and must have declared ocean and earth sciences major or minor

OEAS 395 Special Topics (1-4 Credit Hours)

Lectures, field and laboratory studies. An investigation of a selected problem in physical, geological, chemical, or biological oceanography.

Prerequisites: permission of the instructor

OEAS 402/502 Field Experiences in Oceanography for Teachers (3 Credit Hours)

Field and laboratory experiences in oceanography including hands-on experience using equipment and methods suitable for middle and secondary education professionals. Course will provide understanding of oceanic processes using simple field and laboratory experiments. Not available for credit for OES majors and minors.

Prerequisites: background in K-12 Education

OEAS 403W/503 Aquatic Pollution (3 Credit Hours)

This course will present basic ecological principles relevant to water pollution and ecotoxicology. Topics will include runoff, eutrophication, water and sewage treatment, industrial waste, oil pollution, pesticides, and plastics in the sea. Case studies provide focal points for consideration of issues in making decisions and setting policy. This is a writing intensive course. Pre- or

Prerequisites: grade of C or better in ENGL 211C, ENGL 221C, or ENGL 231C

Corequisites: a grade of C or better in OEAS 306

OEAS 405/505 Physical Oceanography (3 Credit Hours)

Physics of the ocean: properties of seawater and their distribution; water mass formation; mass and energy flows; waves; tides; models; estuarine and coastal processes. An elective for science and engineering majors.

Prerequisites: C or better in MATH 211 and either PHYS 232N or two semesters of hydraulics

OEAS 406/506 Matlab (1 Credit Hour)

This course is designed to introduce students to Matlab programming and to develop skills utilizing this program for data analysis

Prerequisites: Junior standing or permission of instructor

OEAS 410/510 Chemical Oceanography (3 Credit Hours)

Chemical composition of the ocean and the chemical, biological, geological and physical processes controlling it.

Prerequisites: CHEM 121N-CHEM 122N and CHEM 123N-CHEM 124N, OEAS 306 or consent of instructor

OEAS 412/512 Global Environmental Change (3 Credit Hours)

An examination of the development of the earth as a habitable planet, from its origin to human impacts on global biogeochemical cycles on land, and in the oceans and atmosphere.

Prerequisites: OEAS 306 and OEAS 310

OEAS 413/513 Environmental Geochemistry (3 Credit Hours)

This course examines geochemical processes at and near the Earth's surface, focusing on the concentration, speciation and reactivity of elements in soils, waters, sediments and the atmosphere. The course examines both the thermodynamic and kinetic controls on these processes, and the role of biology as a mediator (or facilitator) of these processes. Anthropogenic impacts on natural geochemical processes are also examined.

Prerequisites: CHEM 121N-CHEM 122N and CHEM 123N-CHEM 124N, OEAS 111N and OEAS 310

OEAS 415/515 Waves and Tides (3 Credit Hours)

Causes, nature, measurement and analysis of water waves and tides.

Mathematical and graphical application to wave and tide problems.

Prerequisites: C or better in MATH 212 and PHYS 232N or permission of the instructor

OEAS 416/516 Electronics and Oceanographic Instrumentation (3 Credit Hours)

The course will consist of brief lectures and hands-on laboratory exercises, in which students will learn to build, use, and debug electronic devices relevant to ocean and earth science applications. Topics covered will include circuit theory, power supplies and budgets, transducers and amplifiers, computerized data acquisition, instrument control, signal conditioning and resolution.

Prerequisites: PHYS 232N or 112N, OEAS 306, OEAS 310, STAT 310 or STAT 330

OEAS 418/518 Limnology: Biogeochemistry of Lakes (3 Credit Hours)

Chemical cycling in lakes and reservoirs, and interactions with biological and physical processes; quantitative modeling of lake geochemistry.

Prerequisites: OEAS 306

OEAS 419/519 Spatial Analysis of Coastal Environments (3 Credit Hours)

The course integrates remotely sensed and field techniques for scientific investigation and practical management of coastal environmental systems. Spatial modeling of coastal processes and management tools using geographic information system (GIS).

Prerequisites: GEOG 300, GEOG 402 or GEOG 502, or permission of instructor

OEAS 420/520 Hydrogeology (3 Credit Hours)

Topics covered will include the occurrence and movement of surface and subsurface water, the nature and distribution of permeable rocks and strata, field techniques used in ground-water studies, and the flow of ground-water to wells.

Prerequisites: OEAS 320 or OEAS 344W and MATH 205 or MATH 211; or permission of the instructor

OEAS 425 Marine Geology (3 Credit Hours)

Survey of marine geology and geophysics; plate tectonics and basin formation; seafloor volcanic activity; marine sediments and sediment dynamics; coastal processes; geologic time in the marine record.

Prerequisites: OEAS 306 or OEAS 310 or permission of instructor

OEAS 426/526 Concepts in Oceanography for Teachers (3 Credit Hours)

This web-based course will provide a practical introduction to oceanography for earth science teachers. It is particularly aimed at current science teachers attempting to become certified in earth science education. Topics will include discussions of geological, biological, physical and chemical oceanography. Not available for credit for OEAS majors and minors.

Prerequisites: junior standing or permission of the instructor

OEAS 430/530 Introduction to Geophysics (3 Credit Hours)

Introduction to the physics of the earth, including plate tectonics, volcanism, earthquakes and seismology, gravity, the Earth's magnetic field, geophysical remote sensing, and mantle convection.

Prerequisites: OEAS 111N, MATH 211, and PHYS 111N-PHYS 112N or PHYS 231N-PHYS 232N

OEAS 434/534 Geodynamics (3 Credit Hours)

A qualitative and quantitative description of physical processes in the Earth and environmental sciences. Topics include stress and strain, plate elasticity and flexure, heat flow, fluid mechanics, material rheology, and groundwater flow. Emphasis will be placed on developing an understanding of Earth dynamics using real-world examples, including numerical exercises.

Prerequisites: OEAS 111N, MATH 211, MATH 212, and PHYS 231N

Corequisites: PHYS 232N

OEAS 435 Introduction to Ocean Modeling and Prediction (3 Credit Hours)

Introduction to concepts and theories of numerical ocean circulation models and their applications in physical oceanography, computational fluid dynamics, environmental problems and ocean forecast systems.

Prerequisites: OEAS 405 or OEAS 306; permission of instructor or CEE 330

OEAS 440/540 Biological Oceanography (4 Credit Hours)

Marine organisms and their relationship to physical and chemical processes in the ocean. Laboratory study of local marine organisms, marine ecosystem and sampling techniques. Includes identification, data analysis and field trips.

Prerequisites: OEAS 306 and STAT 130M or STAT 310

OEAS 441 Ocean and Earth Sciences Field Study I (3 Credit Hours)

Interdisciplinary investigation of selected sites in Southeast Virginia that includes field sampling, sample analyses, data interpretation and integration, and group report preparation and presentations. Focuses on development of research questions and site selection, field sampling, sample analyses and interpretation. Oral presentations of results will be made by each student.

Prerequisites: OEAS 306 and OEAS 310; CHEM 123N and CHEM 124N, BIOL 123N or OEAS 303; PHYS 112N or PHYS 232N; MATH 212; STAT 310; all prerequisite courses must be passed with a grade of C or better

OEAS 442W Ocean and Earth Sciences Field Study II (3 Credit Hours)

Interdisciplinary investigation of selected sites in Southeast Virginia that includes field sampling, sample analyses, data interpretation and integration, and group report preparation and presentations. Focuses on site selection and evaluation mapping, sampling, and sample analyses. Oral presentations of results will be made by each student. This is a writing intensive course.

Prerequisites: a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C; OEAS 441

OEAS 444 Communicating Ocean Science to Informal Audiences (3 Credit Hours)

Communicating Science to Informal Audiences (CoSIA) is designed for students interested in improving their ability to communicate scientific knowledge by presenting information and activities in an informal learning environment. The course combines instruction in inquiry-based science teaching with practical experience presenting to guests of all ages at the Virginia Aquarium. Students will practice communicating knowledge and receive mentoring on how to improve their presentations. CoSIA provides future scientists and educators with a background in current learning theory and applies it through practical experiences to empower them to meet communication challenges they will encounter in their careers.

Prerequisites: OEAS 306 or OEAS 310

OEAS 445 Communicating Ocean Science to Informal Audiences (3 Credit Hours)

This course provides Earth Science Education students with instruction on presenting scientific information to informal audiences (K through adult). Students will develop more in-depth presentations and extended practice presenting their materials on the Virginia Aquarium floor. For Earth Science Education track students, OEAS 444 and OEAS 445 can replace OEAS 441/OEAS 442W. It is available as an elective for all other students.

Prerequisites: OEAS 444

OEAS 451W/551 Data Collection and Analysis in Oceanography (4 Credit Hours)

This course introduces students to the basic numerical tools used to obtain and analyze information in the ocean and earth sciences. The students will use various oceanographic instruments to obtain data at different locations of the Chesapeake Bay. Data obtained with those instruments will be processed and analyzed using data analysis techniques discussed in class. The data will then be used to answer a particular question related to the temporal and spatial variability in a natural system. This is a writing intensive class.

Prerequisites: STAT 310 and MATH 211 or MATH 205

Pre- or corequisite: OEAS 306

OEAS 452 Microbial Ecology of the Oceans (3 Credit Hours)

Marine microbes thrive in all oceanic habitats including what would be considered extreme environmental conditions. This course studies the role that these microbes play in biogeochemical cycling and food web dynamics in the oceans (the microbial loop). Throughout the course, students will learn about different microbial functional groups and the processes they mediate in marine systems, which include virtually all geochemical reactions occurring in the oceans. Students will learn through lectures, readings written by experts in the field, and class discussions.

Prerequisites: OEAS 306 or OEAS 310 or permission of the instructor

OEAS 453W/553 Marine Molecular Ecology (4 Credit Hours)

This course will explore the ecology of marine organisms using molecular techniques and data. Molecular ecology covers a wide variety of sub-disciplines, including genetics, physiology, ecology, and evolution. The course will explore basic theory in population genetics, ecology, and evolution and cover nucleic acid techniques and their applications. This is a writing intensive course.

Prerequisites: BIOL 291 or BIOL 292 or BIOL 293 or BIOL 294 or BIOL 331 or OEAS 306

OEAS 466W/566 Introduction to Mitigation and Adaptation Studies (3 Credit Hours)

Students will be introduced to the science underpinning mitigation of human-induced changes in the Earth system, including but not limited to climate change and sea level rise, and adaptation to the impacts of these changes. The course will cover the environmental hazards and the opportunities and limitations for conservation, mitigation and adaptation. This is a writing intensive course. Cross listed with BIOL 466W and IDS 466W.

Prerequisites: BIOL 291 or permission of instructor

OEAS 467/567 Sustainability Leadership (3 Credit Hours)

In this class, students will discover what makes a leader for sustainability. They will consider a range of global and local crises from a leadership point of view in the context of sustainability science, which addresses the development of communities in a rapidly changing social, economic, and environmental system-of-systems environment. The course will be based on taking a problem-motivated and solution-focused approach to the challenges considered. The course includes a service learning project focusing on a leadership experience in solving a real-world environmental problem.

Prerequisites: BIOL 466W or OEAS 466W or IDS 466W

OEAS 468W Research Methods in Math and Sciences (3 Credit Hours)

Emphasizes the tools and techniques used to solve scientific problems. Topics include use and design of experiments, use of statistics to interpret experimental results, mathematical modeling of scientific phenomena, and oral and written presentation of results. Students will perform four independent inquiries, combining skills from mathematics and science to solve research problems. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C and OEAS 306 or OEAS 310 and STEM 201

OEAS 470/570 Proxy Reconstruction of Late Cenozoic Climate: Calibrations and Applications (3 Credit Hours)

This course will examine recent developments in paleo-proxy calibration and their application in reconstructing Late Cenozoic climate history. Students will read several papers covering the theoretical basis and empirical evidence supporting some of the most common proxies used in paleoclimatology/paleoceanography each week. Each week will begin with a lecture on the topic, followed by an in-depth discussion. Students will be required to present one of the weekly topics and lead the class discussion.

Prerequisites: CHEM 121N, CHEM 122N, CHEM 123N and CHEM 124N

OEAS 487 Honors Research in Ocean and Earth Sciences (1-3 Credit Hours)

Supervised study in a field of individual interest. Research results are reported in a public oral presentation and a thesis.

Prerequisites: senior standing and admission to the Academic Honors Program

OEAS 490 Paleocceanography (3 Credit Hours)

This course will provide an overview of how marine sediments are used to reconstruct Earth's climate history over the past 600 million years. Students will discuss the factors that control modern climate and explore how these variables led to cycles of Greenhouse and Icehouse worlds in the past. Finally, students will discuss how past and modern climate records can be used to predict future climate change.

Prerequisites: general chemistry, OEAS 111N and OEAS 112N

OEAS 495/595 Special Topics (1-4 Credit Hours)

Lectures, field and laboratory studies. An investigation of a selected problem in physical, geological, chemical, or biological oceanography.

Prerequisites: junior standing and permission of the instructor

OEAS 497 Special Problems and Research (1-3 Credit Hours)

Independent reading and study on a topic to be selected with the direction of an instructor.

Prerequisites: junior standing

OPMT - Operations Management

OPMT 303 Operations Management (3 Credit Hours)

Examines strategic, tactical and operational issues in the planning and control of manufacturing and service delivery systems. This course examines such topics as process design, capacity and materials planning and control, inventory management, facility layout, quality and work management.

Prerequisites: BNAL 206 or STAT 130M; AND a declared major in the University or an intended major in the Strome College of Business or permission of the Dean's Office of the Strome College; AND Junior Standing

OPMT 367 Cooperative Education (1-3 Credit Hours)

Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures. Available for pass/fail grading only. May be repeated for credit.

Prerequisites: junior standing and a declared major in the university or permission of the Dean's Office

OPMT 368 Student Internship (1-3 Credit Hours)

Approval for enrollment and allowable credits is determined by the department in the semester prior to enrollment. Available for pass/fail grading only. (qualifies as a CAP experience)

Prerequisites: junior standing and a declared major in the university or permission of the Dean's Office

OPMT 369 Practicum (1-3 Credit Hours)

Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures. Available for pass/fail grading only. May be repeated for credit.

Prerequisites: OPMT 303 and a declared major in the university or permission of the Dean's Office

OPMT 455 SAP Applications (3 Credit Hours)

This course introduces students to the concept of enterprise resource planning. Students will learn SAP (Systems, Applications and Products in Data Processing) enterprise software to manage business operations and customer relations by analyzing and presenting data stats in an engaging way, and producing meaningful and insightful business solutions.

Prerequisites: OPMT 303, or IT 201, or IT 360T, or instructor's permission

OPMT 495 Selected Topics in Operations Management (3 Credit Hours)

Selected advanced topics in operations management. Taught on an occasional basis. See the course schedule for the particular topic being taught each semester.

Prerequisites: Senior standing and a declared major in the university or permission of the Dean's Office

OPMT 497 Independent Study in Operations Management (1-3 Credit Hours)

Affords students the opportunity to undertake independent study under the direction of a faculty member.

Prerequisites: permission of the department

PAS - Public Affairs and Service

PAS 300 Foundations of Public Service (3 Credit Hours)

An introduction to the study of public service. Emphasis is placed on the history and framework of public service and the study and practice of public administration.

Prerequisites: A declared major in the University or permission of the Dean's Office of the College of Business

PAS 301 Ethics, Governance and Accountability in Public Service (3 Credit Hours)

This course provides an overview of ethics, governance and accountability in public service, with particular emphasis on the linkages between these three concepts. The focus is on the ethical context and implications of public management, governance structures, and public sector accountability, particularly in relation to critical social, political, and economic issues.

Prerequisites: A declared major in the University or permission of the Dean's Office of the College of Business

PAS 368 Internship in Public Service (1-3 Credit Hours)

Student participates in a relevant public service-related work experience. Approval for enrollment and allowable credits is determined by the department in the semester prior to enrollment.

Prerequisites: Departmental approval

PAS 395 Selected Topics in Public Administration (3 Credit Hours)

Designed for the study of selected topics in public administration.

Prerequisites: A declared major in the University or permission of the Dean's Office of the College of Business

PAS 408 Public Service Films (3 Credit Hours)

From the invention of the first simple 'moving pictures' more than 130 years ago to the latest multi-million dollar, high-tech blockbuster, films have served as a vehicle for both political messages and societal critiques. As a unifying theme, we will focus our analysis on the films' implications for the study and practice of public service.

Prerequisites: Junior standing and declared major in the University or permission of College of Business Dean's Office

PAS 409 Leadership and Cultural Competence (3 Credit Hours)

This course focuses on the study of contemporary leadership theory and practice, with particular emphasis on public and non-profit sectors. The critical themes of ethics and cultural competence are woven throughout the course.

Prerequisites: Junior standing and declared major in the University or permission of College of Business Dean's Office

PAS 410 Public and Non-profit Organization (3 Credit Hours)

An introduction to the study and practice of public and non-profit agencies. The course is designed to explore fundamental issues of organizational structure, management, and operations of public and non-profit organizations in modern American society.

Prerequisites: PAS 300 or PAS 301 or permission of the instructor, and a declared major in the University or permission of the Dean's Office of the College of Business

PAS 411 Multi-Sector Partnerships for Public Service (3 Credit Hours)

This course examines the interplay between the public, private, and non-profit sectors. Particular emphasis is placed on the structure and operation of intersectoral partnerships to achieve public goals.

Prerequisites: PAS 300 or PAS 301 or permission of the instructor, and a declared major in the University or permission of the Dean's Office of the College of Business

PAS 412 Public Service Practice (3 Credit Hours)

This course is designed to provide an overview of the essential elements of learning and serving. The course will focus on how to provide meaningful service to a community agency or organization while simultaneously gaining new skills, knowledge, and understanding as an integrated aspect of the student's academic program.

Prerequisites: PAS 300

PAS 413 Public Service Entrepreneurship (3 Credit Hours)

Public service entrepreneurship supports the development of socially aware and responsive students through service and learning. Students will participate in service projects with community partners to recognize and reflect on the social needs of their community. This course will integrate classroom learning with community participation to provide practical experience for students to recognize the rewards of serving.

Prerequisites: PAS 300

PAS 495 Topics in Public Affairs and Service (3 Credit Hours)

This course is designed for the study of selected topics in public affairs and service.

Prerequisites: A declared major in the University or permission of the Dean's Office of the College of Business

PAS 497 Independent Study in Public Service (3 Credit Hours)

Provides students the opportunity to undertake independent study of selected topics/issues in public service under the guidance of a faculty member.

Student and faculty member must complete and agree on a learning contract before study begins. Pass/Fail grading only.

Prerequisites: Departmental approval

PE - Physical Education

PE 101+ Swim Conditioning (1 Credit Hour)

Students will discuss and learn the training process including advantages and benefits of swimming, principles of training, training procedures, evaluation and motivation, and minor annoyances. Stroke mechanics and improvement and information for triathletes.

PE 102+ Beginning Swimming (1 Credit Hour)

Development of the basic water safety skills and knowledge to make one reasonably safe in the water.

PE 103+ Intermediate Swimming (1 Credit Hour)

Instruction in all strokes will be covered.

Prerequisites: must be comfortable in deep water

PE 104+ Lifeguard Training (2 Credit Hours)

Development of the skills and knowledge designed to save the life of another in the event of an emergency in the water. Red Cross certification.

PE 105+ Water Safety Instruction (3 Credit Hours)

This course is designed to provide the student with knowledge and skills in water safety and teaching techniques for certification to teach swimming, lifesaving, rescue and water safety courses. Red Cross Water Safety Instructor Certificate upon successful completion.

Prerequisites: must be at least 17, in sound physical condition, and have the ability to perform skills in the level VI ARC swim course

PE 112+ Yoga (1-2 Credit Hours)

The 1-credit option of this course focuses on yoga postures and breathing exercises. The 2-credit option provides a foundation for the understanding and practice of Hatha yoga in its complete form. Course covers yoga postures, breathing exercises, philosophy, and meditation.

PE 115+ Introduction to Rock Climbing (1 Credit Hour)

This course is designed to guide students through several processes in rock climbing. Students will be able to properly fit a harness, tie in to the system, use passive and active belay devices, and perform basic rescues. The class will also focus on proper climbing technique and injury prevention. Additionally, rock climbing facility administration will be discussed.

PE 117+ Accessible Fitness and Wellness (1-2 Credit Hours)

Designed for students who self-identify as having social, cognitive, emotional, psychological, or physical limitations who would benefit from a small group and/or individualized fitness/nutritional training program. Students will learn the basic principles about cardiovascular/aerobic training and resistance/weight training to increase flexibility, balance and overall fitness. Upon completion, students should be able to plan and implement a personal, lifelong fitness program based on their individual needs, abilities, goals and interests. Course will also include classes on nutrition to increase overall wellness.

PE 118+ Weight Training (1 Credit Hour)

Designed to allow students an individualized weight training program. The program will include use of free weights, universal, and other appropriate tools for the variety of weight training differences.

PE 134+ Beginning Golf (1 Credit Hour)

The fundamentals of golf, stance, grip, swing, rules, and etiquette are presented. Driving range and golf course may be used. Students pay all fees.

PE 140+ Beginning Self-Defense (1 Credit Hour)

The student is introduced to the various practical skills and methods of self-defense. Judo, Aikido, Jujutsu, and Karate are combined to explore the most effective means to defend oneself.

PE 141+ Intermediate Self-Defense (1 Credit Hour)

This course is designed to give the student further instruction and practice in the various practical skills and methods of self-defense.

Prerequisites: PE 140+

PE 142+ Beginning Karate (1 Credit Hour)

This course is designed to give the traditional Karate training ('Art of Empty Hand') to the beginning student. It emphasizes the traditional mode of training with mental and physical discipline. Formal Kata, defensive skills, punches, kicks, and blocking techniques are introduced.

PE 143+ Intermediate Karate (1 Credit Hour)

This course is designed to give the student further instruction and practice in traditional Karate.

Prerequisites: PE 142+

PE 144+ Advanced Karate (1 Credit Hour)

This course is designed to introduce further instruction and practice in traditional martial art aspects of Karate-doh. Philosophical understanding and high level of skill proficiency are emphasized.

Prerequisites: PE 143+

PE 145+ Theory of Advanced Karatedo (1 Credit Hour)

This course is designed to provide the theoretical framework of Karatedo that embodies the higher principle of physical and mental dynamics and aims to achieve the advanced skills in Karatedo.

Prerequisites: PE 142+, PE 143+, PE 144+ and/or equivalent proficiency level

PE 146+ Beginning Aikido (1 Credit Hour)

Course is designed to introduce the fundamental dynamics of Aikido principle. It contains the fundamental skills in body dynamics, body movements, safety landing, defensive pattern drills, and overall understanding of Aikido as a classical art form. Course provide comprehensive information on the philosophical and aesthetic aspects of Aikido.

PE 147+ Intermediate Aikido (1 Credit Hour)

Course is designed to introduce the intermediate level of Aikido dynamics. It contains the basics of fundamental skills in body dynamics, body movements, safety landing, intermediate level of defensive pattern drills, and overall understanding of Aikido as a classical art form.

Prerequisites: PE 146+

PE 148+ Advanced Aikido (1 Credit Hour)

Course is designed to introduce the advanced level of Aikido dynamics. It contains training in advanced skills in body dynamics, body movements, defensive pattern drills, and overall understanding of Aikido theory and application as a classical art form.

Prerequisites: PE 147+

PE 149+ Theory of Advanced Aikido (1 Credit Hour)

This course is designed to provide the theoretical framework of Aikido that embodies the mental and physical dynamics of the martial arts discipline of Aikido.

Prerequisites: PE 146+, PE 147+, and PE 148+

PE 150+ Beginning Judo (1 Credit Hour)

An introduction to Judo including the techniques of throws, holdings, lockings, and pinnings. Philosophy and cultural aspects of Sport Judo are also covered.

PE 151+ Intermediate Judo (1 Credit Hour)

An intermediate course in Sport Judo covering intermediate skills and strategies.

Prerequisites: PE 150+

PE 171+ Physical Conditioning (1 Credit Hour)

This course addresses the basic principles of progressive weight training. Objectives of the course include knowledge of various weight-training systems, proper use of weight-training equipment, and effective record-keeping to monitor individual progress.

PE 174+ Cardio Fitness (1-2 Credit Hours)

This course is designed to introduce the student to a complete physical fitness program that strengthens the heart and lungs, and tones up the muscles.

PE 175+ Zumba (1 Credit Hour)

Zumba is a Latin inspired, dance-fitness class that incorporates Latin and International music with dance movements. It is a high calorie-burning fitness class that features fast and slow rhythms. The student will participate in instructor led routines. This class will include discussion of Zumba's history and basic four rhythms. No dance experience necessary.

PE 176+ Pilates (1 Credit Hour)

Students will understand the basic principles of Pilates and will be able to demonstrate the ability of performing beginning and intermediate Pilates exercises with correct form and technique.

PE 196+ Topics in Health and Physical Education (1-3 Credit Hours)

A variety of new and innovative courses in lifetime physical activities are offered such as advanced theory class in martial arts, advanced Iaido, self defense seminar, yoga, cross country skiing, yacht racing, racquetball, nautilus, swim conditioning, water safety instructor, scuba and aerobic dance.

PE 295 Topics in Physical Education (1-3 Credit Hours)

This course provides an opportunity for in-depth study of selected topics in physical education.

Prerequisites: sophomore standing and approval of program advisor

PE 497/597 Topics in Health and Physical Education (1-3 Credit Hours)

This course provides an opportunity for in-depth study of selected topics in health and physical education.

Prerequisites: junior standing and approval of program advisor

PHIL - Philosophy

PHIL 110P Introduction to Philosophy (3 Credit Hours)

An introduction to basic concepts, methods and issues in philosophy, and a consideration of representative types of philosophical thought concerning human nature, the world, knowledge, and value.

PHIL 120P Logic and Philosophy (3 Credit Hours)

A study of the principles of correct reasoning and the types of fallacious reasoning. Includes an examination of the philosophical and historical context of logic, and the application of logical methods to philosophical questions.

PHIL 126P Honors: Introduction to Philosophy (3 Credit Hours)

Open only to students in the Honors College. A special honors section of PHIL 110P.

PHIL 127P Honors: Life, Death, and Meaning (3 Credit Hours)

Open only to students in the Honors College. An Honors version of PHIL 150P.

PHIL 150P Life, Death, and Meaning (3 Credit Hours)

What is the meaning of life, and what role might the end of life play in living meaningfully? This course provides an introduction to philosophy and religious studies through an investigation of different views on death and the meaning of life from diverse cultures and identities. (Cross-listed with REL 150P)

PHIL 155E Human Nature (3 Credit Hours)

What ways of thinking, feeling, and acting are essentially human? This course focuses on some of the most influential and fascinating philosophical and religious accounts of human nature from diverse cultural perspectives. Topics may include the nature of human beings in relation to God, society, ethics, politics, knowledge, the environment, freedom, evolution, the mind, language, race, gender, and technology. (Cross-listed with REL 155E)

PHIL 160R Raising Moral Issues in STEM (3 Credit Hours)

This course provides training in how to speak up in defense of moral concerns in a STEM organizational context, and how to do so in an effective and productive way.

PHIL 195 Study Abroad: Introduction to Philosophy (3 Credit Hours)

This course is the study abroad equivalent of PHIL 110P, an introduction to basic concepts, methods and issues in philosophy, and a consideration of representative types of philosophical thought concerning human nature, the world, knowledge, and value.

PHIL 202G Information Literacy for Cybersecurity (3 Credit Hours)

This course provides an in-depth introduction to information literacy from library and information science, information ethics, and computer science perspectives along with applications to cybersecurity research and professional activity. This course is aligned with Old Dominion University's general education learning outcomes for information literacy.

Prerequisites: ENGL 110C

PHIL 226E Honors: Love, Sex, and Desire (3 Credit Hours)

Is love universal or culturally bound? Is sexual desire biologically driven or learned? This course provides an introduction to Philosophy and Religious Studies through an investigation of love, sex, and desire vis-a-vis ethical values and societal norms. An Honors version of PHIL 235E/REL 235E.

PHIL 227E Honors: World Religions: Beliefs and Values (3 Credit Hours)

Open only to students in the Honors College. A special Honors section of PHIL 250E.

PHIL 228E Honors: Introduction to Ethics (3 Credit Hours)

Open only to students in the Honors College. A special Honors section of PHIL 230E.

PHIL 230E Introduction to Ethics (3 Credit Hours)

An introduction to the study of ethics through philosophical reflection on a variety of moral issues of contemporary significance. Topics covered will vary by semester and instructor, and may include issues drawn from professional fields such as business, medicine, and information technology, plus matters of public concern like the environment, the treatment of animals, the use of military force, social justice, and civil and human rights.

PHIL 235E Love, Sex, and Desire (3 Credit Hours)

Is love universal or culturally bound? Is sexual desire biologically driven or learned? This course provides an introduction to Philosophy and Religious Studies through an investigation of love, sex, and desire vis-a-vis ethical values and societal norms. (Cross-listed with REL 235E)

PHIL 240 Introduction to the Philosophy of Science (3 Credit Hours)

A survey of philosophical problems common to the sciences, including an analysis of key concepts and an examination of science in its historical and cultural context.

PHIL 250E World Religions: Beliefs and Values (3 Credit Hours)

A comparative and philosophical study of major world religions in the Eastern and Western traditions with particular attention being paid to their views about the basis of right action and the nature of good and evil. Other points of comparison include the foundations of religious knowledge and belief, the meaning of human life, divinity, and death and immortality.

PHIL 270P Truth and Perception (3 Credit Hours)

What is truth? How do we know when something is real or fake? Are you certain that other people perceive the world in the same way you do? In this course we'll try to answer questions like these and more through an exploration of the relationship between our minds, our bodies, and the world around us.

PHIL 290G Philosophy of Digital Culture (3 Credit Hours)

This course provides practical training in information access, critical information assessment, and ethical information use in a theoretically-oriented research context, as well as a theoretical exploration of issues in information literacy, the ethics and politics of online informational spaces, and the philosophy of digital culture.

PHIL 295 Topics in Philosophy (3 Credit Hours)

A study of selected topics designed for non-majors. These courses will appear in the course schedule, and will be more fully described in information distributed to academic advisors.

PHIL 300 Knowledge and Reality (3 Credit Hours)

Metaphysics is the study of the ultimate nature of reality and epistemology is the study of what we can know about reality. This introduction to metaphysics and epistemology will engage with views of what exists and how we can know about it from a diverse collection of traditions and figures.

Prerequisites: ENGL 110C and 3 credit hours in PHIL or REL, or permission of the instructor

PHIL 301 Ethics and Metaethics (3 Credit Hours)

An examination of the philosophical foundations of ethical inquiry from a diverse collection of traditions and figures, including historically marginalized voices. Various ethical systems are considered, and different views of metaethics and moral psychology may be as well.

Prerequisites: ENGL 110C and 3 credit hours in PHIL or REL, or permission of the instructor

PHIL 303E Business Ethics (3 Credit Hours)

A philosophical examination of ethical issues that arise in business and commerce. Topics discussed will vary by semester and instructor, but may include affirmative action, ethical versus unethical sales and marketing techniques, the obligations of business to society (if any), and the moral foundations of capitalism.

Prerequisites: ENGL 110C

PHIL 313 Philosophy of Religion (3 Credit Hours)

An analytical and critical consideration of the philosophical foundations of religion. Such topics as the existence of God, the problem of evil, theism and atheism, prayer, and immortality are discussed.

Prerequisites: Junior standing and three semester hours in philosophy, or permission of the instructor

PHIL 324 Philosophy of Art (3 Credit Hours)

A study of the various theories of art and human creativity in the context of historical and cultural backgrounds.

Prerequisites: Junior standing and three semester hours in philosophy or permission of the instructor

PHIL 330 Ancient Greek Philosophy (3 Credit Hours)

This course is a study of the thought of the classical Greek philosophers from the sixth century B.C.E. to the fifth century C.E.

Prerequisites: ENGL 110C and 3 credit hours in PHIL or REL, or permission of the instructor

PHIL 331 Early Modern European Philosophy (3 Credit Hours)

This course is a survey of the rise of modern philosophy in the 17th and early 18th centuries in Europe.

Prerequisites: ENGL 110C and 3 credit hours in PHIL or REL, or permission of the instructor

PHIL 332 Medieval Philosophy (3 Credit Hours)

This course examines the significant contributions of medieval philosophers to the development of philosophy of religion as well as other fields, including philosophy of language, logic, and ethics. Students examine the writings of medieval philosophers from Jewish, Christian, and Islamic traditions.

Prerequisites: Junior standing and three semester hours in philosophy, or permission of the instructor

PHIL 334 Late Modern European Philosophy (3 Credit Hours)

This course is a survey of modern philosophy in the 18th and 19th centuries in Europe, addressing figures such as Kant, Hegel, Schopenhauer, Marx, Kierkegaard, and Nietzsche.

Prerequisites: ENGL 110C and 3 credit hours in PHIL or REL, or permission of the instructor

PHIL 340 Logic (3 Credit Hours)

A study of the basic concepts and methods of logic as they occur in ordinary language, formal logical arguments, and an elementary logical system. Traditional Logic is emphasized, but some elements of Modern Logic are also introduced.

Prerequisites: junior standing and three semester hours in philosophy, or permission of the instructor

PHIL 344E Environmental Ethics (3 Credit Hours)

An examination of the nature and basis of human obligations for the welfare of the environment with special attention to the foundations of ethical decision making.

Prerequisites: ENGL 110C

PHIL 345E Bioethics (3 Credit Hours)

An examination of the philosophical foundations of ethical decision making in biology, medicine, and the life sciences.

Prerequisites: ENGL 110C

PHIL 353 Asian Religions (3 Credit Hours)

This course introduces students to several key religious traditions originating in Asia, such as Hindu traditions in India; Confucianism, Daoism, and popular religion in China, Buddhism and Shinto in Japan; and Buddhist traditions of China, Tibet, and Mongolia. Students will read and analyze primary sources in English translation. By examining artifacts from literature, art, and poetry, students will also learn about cultural history. Throughout the course, students will employ hermeneutical methods in the field of religious studies, such as methods of comparisons.

Prerequisites: ENGL 110C and 3 credit hours in PHIL or REL, or permission of instructor

PHIL 355E Cybersecurity Ethics (3 Credit Hours)

This course examines ethical issues relevant to computing and information technology, including: privacy; freedom of speech and content control on the Internet; individual and social responsibility; cybersecurity; cybercrimes; social impact of computers and other digital technologies; and ethical obligations of IT professionals. Students will gain a broad understanding of central issues in cyberethics and the ways that fundamental ethical theories relate to these core issues.

Prerequisites: ENGL 110C

PHIL 357E Ethics and Data (3 Credit Hours)

This course explores, from a philosophical perspective, ethical questions arising from collecting, drawing inferences from, and acting on data, especially when these activities are automated and on a large scale. This course will provide students a framework for considering the ethical implications of data usage. Emphasis will be placed on discussing how historic and contemporary examples of potentially unethical practice could be altered to reduce harm and increase equity. Topics to be covered may include, but are not limited to, systematic approaches to assessing ethical issues; privacy and confidentiality; defining research and the responsibilities associated with conducting ethical research; implicit and structural biases in data collection and analysis; freedom of speech; and consent to data collection.

Prerequisites: ENGL 110C

PHIL 364 African-American Philosophy (3 Credit Hours)

This course is a survey introduction to major African-American philosophical thinkers and will address themes such as: What is the nature of race, and what is the nature of racism? What is the nature of the good? What does the good life look like, how should we make sense of beauty, and are those values different for each of us? And how should we make sense of social and civil life and of social and civic obligations in the context of deep and persisting injustice?

Prerequisites: ENGL 110C and 3 credit hours in PHIL or REL, or permission of instructor

PHIL 365 Race & Power (3 Credit Hours)

This course will draw on historical and contemporary scholarship to explore the evolution of the concept of race in relation to different theories of power. Topics may include how to define race, how people are racialized, genocide and social death, the use of racial epithets, cultural appropriation, ally-ship, and the role of activism.

Prerequisites: ENGL 110C and 3 credit hours in PHIL or REL, or permission of instructor

PHIL 368 Internship (1-3 Credit Hours)

A structured work experience using analytical, research, and communication training from philosophy in a relevant industry, such as law, tech, finance, libraries, or in the public or nonprofit sectors. May be paid or unpaid. Criteria for evaluation will be determined by work supervisor and cooperating faculty advisor. May be repeated for credit. Available for pass/fail grading only.

Prerequisites: Available to philosophy majors only; approval of the department chair required

PHIL 369 Practicum (3 Credit Hours)

The course offers three forms of practical experience for philosophy majors: Professional (for students anticipating careers in relevant professions, including philosophy); Classroom (for students anticipating graduate study and a teaching career); Civic/Social Affairs (for students interested in grassroots activism). Consult the department for details and certain specific prerequisites.

Prerequisites: junior standing; minimum of 15 credit hours in philosophy

PHIL 380 Hinduism (3 Credit Hours)

An intensive study of the basic teachings of Hinduism as manifested in its sacred writings.

Prerequisites: ENGL 110C and 3 credit hours in PHIL or REL, or permission of instructor

PHIL 381 Buddhist Traditions (3 Credit Hours)

A study of the origin, historical development, and contemporary status of Buddhism, in terms of its religious and philosophical elements and its influence in Asian cultures.

Prerequisites: ENGL 110C and 3 credit hours in PHIL or REL, or permission of instructor

PHIL 383T Philosophy of Technology (3 Credit Hours)

This course engages in a critical exploration of what technology is as a human practice and how it develops over time in ways that influence and are influenced by society, culture, and human values.

Prerequisites: ENGL 110C

PHIL 395 Topics in Philosophy (3 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major. These courses will appear in the course schedule, and will be more fully described in information distributed to academic advisors.

Prerequisites: Junior standing or approval of the department chair

PHIL 396 Topics in Philosophy (3 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major. These courses will appear in the course schedule, and will be more fully described in information distributed to academic advisors.

Prerequisites: Junior standing or approval of the department chair

PHIL 400/500 Philosophy and Video Games (3 Credit Hours)

An examination of the metaphysical, aesthetic, and ethical philosophical issues that accompany the creation, play, and critique of video games. Students will learn and analyze theories about what games are. They will think about and discuss the aesthetic qualities of video games and critically engage with attempts to fit video games into the larger art world. Students will engage with moral issues that arise from creating and consuming video games with morally problematic content. Finally, students will learn how to think critically about and interpret larger philosophical problems raised by video games and their themes.

Prerequisites: Junior standing and a grade of C or better in PHIL 110P or ENMA 480, or instructor permission

PHIL 401/501 Responsible Innovation and Inclusive Design (3 Credit Hours)

Provides training in inclusive and social-critical technology development and product design methodologies intended to directly transfer to use in industrial and organizational settings. The course's work-based learning is grounded in foundational work in philosophy of technology. Topics covered include SCOT (social construction of technology), ANT (actor-network theory), VSD (value-sensitive design), CBPR (community-based participatory research), and postphenomenological methodologies.

Prerequisites: ENGL 211C, ENGL 221C, or ENGL 231C and 3 credit-hours in PHIL or REL

PHIL 402/502 Gender and Philosophy (3 Credit Hours)

A philosophical survey of approaches to understanding gender and gender differences. The course will also serve as an introduction to feminist philosophy, with a particular emphasis on feminist ethics.

Prerequisites: Junior standing and three semester hours in philosophy, or permission of the instructor

PHIL 404/504 Existentialism and Phenomenology (3 Credit Hours)

This course is an examination of the writings of some of the major philosophers in the Existentialist and Phenomenology movements of the 19th and 20th centuries.

Prerequisites: ENGL 211C and six credit hours in PHIL or REL, or permission of the instructor

PHIL 405/505 American Pragmatist Philosophy (3 Credit Hours)

This course is an examination of the writings of some of the major American philosophers in the Pragmatist tradition.

Prerequisites: ENGL 211C and six credit hours in PHIL or REL, or permission of the instructor

PHIL 406/506 Language and Thought: History of Analytic Philosophy (3 Credit Hours)

This course is a study of the history of the Analytic tradition in philosophy up through the 20th century.

Prerequisites: ENGL 211C and six credit hours in PHIL or REL, or permission of the instructor

PHIL 408/508 20th Century and Contemporary French Philosophy (3 Credit Hours)

This course explores French philosophy from the 20th century to today, examining how geopolitical events, technological change, and social movements have shaped and been shaped by key currents in French philosophical thought. Themes could include technology, biopolitics, deconstruction, feminism, May 1968, secularism, existentialism, postmodernism, and psychoanalysis, with a focus on whether there is a distinct 'French' approach to these topics.

Prerequisites: ENGL 211C/ENGL 221C/ENGL 231C and six credit hours in PHIL or REL or related subjects, or permission of the instructor

PHIL 410/510 Social and Political Philosophy (3 Credit Hours)

A philosophical analysis of the relation between man, society, and the state, studying about a dozen philosophers since Plato on such topics as justice, authority, law, freedom, and civil rights.

Prerequisites: ENGL 211C, ENGL 221C, or ENGL 231C and 6 credit hours in PHIL or REL, or permission of instructor

PHIL 411/511 Post-Modernism and Post-Structuralism (3 Credit Hours)

This course is an examination of intellectual currents in postmodernism and post-structuralism as they pertain to central questions in social and political thought.

Prerequisites: ENGL 211C, ENGL 221C, or ENGL 231C and 6 credit hours in PHIL or REL, or permission of instructor

PHIL 412/512 Philosophy of Law (3 Credit Hours)

An examination of the nature of law and philosophical issues concerning the law.

Prerequisites: ENGL 211C, ENGL 221C, or ENGL 231C and 6 credit hours in PHIL or REL, or permission of instructor

PHIL 414/514 Feminist Philosophy (3 Credit Hours)

This course addresses feminist philosophy as a distinctive field of philosophy, offering a pluralist survey of both analytic and Continental approaches to feminist epistemology, ontology, phenomenology, ethics, and politics. Importantly, students will develop an intersectional lens of analysis to consider the lived reality and politics of gender, race, sexuality, disability, and other entwining marginalized identities.

Prerequisites: ENGL 211C or equivalent

PHIL 425/525 Kant and Hume (3 Credit Hours)

This course is an examination of the philosophical writings of Hume and Kant and their influence.

Prerequisites: ENGL 211C, ENGL 221C, or ENGL 231C, and six credit hours in PHIL or REL, or permission of the instructor

PHIL 430/530 Marx and Hegel (3 Credit Hours)

This course is an examination of the philosophical writings of Hegel and Marx and their influence.

Prerequisites: ENGL 211C and six credit hours in PHIL or REL, or permission of the instructor

PHIL 432/532 Nietzsche and Life Affirmation (3 Credit Hours)

This course is an examination of Nietzsche's attempt to provide a life-affirming philosophy after laying waste to many traditional Western efforts to find life meaningful.

Prerequisites: ENGL 211C/ENGL 221C/ENGL 231C and six credit hours in PHIL or REL, or permission of the instructor

PHIL 434/534 Contemporary Theory of Knowledge (3 Credit Hours)

This course provides students with a problem-oriented, critical, and comparative understanding of problems in contemporary epistemology. Topics include skepticism and responses thereto, analyses of knowledge, the externalist versus internalist debate, foundationalism and coherentism, and social approaches to knowledge including contextualism and feminism.

Prerequisites: Junior standing and three semester hours in philosophy, or permission of the instructor

PHIL 435/535 Philosophy of Psychology (3 Credit Hours)

An examination of various ways in which the mind has been understood in philosophy and in psychology and of the methods that have been used in the study of the mind.

Prerequisites: Junior standing and three semester hours in philosophy, or permission of the instructor

PHIL 440/540 Philosophy of Science (3 Credit Hours)

A study of the concepts and philosophical problems in the sciences: scientific reasoning, confirmation, explanation, laws, meaning, theories, revolutions, progress, and values.

Prerequisites: ENGL 211C, ENGL 221C, or ENGL 231C and 6 credit hours in PHIL or REL, or permission of instructor

PHIL 442E/542 Studies in Applied Ethics (3 Credit Hours)

An intensive examination of ethical issues in a particular field or profession; an emphasis on ethical theory underlying practical decisions.

Prerequisites: ENGL 110C and Junior standing

PHIL 446/546 Artificial Intelligence (AI) Ethics and Policy (3 Credit Hours)

This course explores whether and how ethical AI is possible by examining moral standards as they apply to the various dimensions of AI development and use. It reviews the major ethical theories and discusses how principles such as transparency, privacy, safety, non-discrimination, and sustainability should govern the creation and use of AI technologies. Moreover, it considers how these principles could serve as the ethical framework for the social and policy structures that regulate and shape the future development of these technologies.

Prerequisites: ENGL 211C or equivalent

PHIL 447/547 Philosophy of Information (3 Credit Hours)

An in-depth study of the core topics of philosophy of information, including the nature of information across its primary forms (e.g. semantic, physical, biological, economic), personal and social impacts of information and information transfers, formulation of information as data, theory-ladenness of data, problematics of data analytics, and inferential validity of prior data. Project-based assessment is structured to provide individualized work-based learning.

Prerequisites: ENGL 211C, ENGL 221C, or ENGL 231C and 3 credit-hours in PHIL or REL

PHIL 451/551 Native American Philosophies (3 Credit Hours)

This course will provide students with an introduction to Native American philosophies with a focus on issues of identity, genocide, personhood, gender, sovereignty, and decolonization. Topics will be approached through a consideration of Native American philosophical methodologies and Native views regarding metaphysics, epistemology, and ethics. (Cross-listed with REL 451)

Prerequisites: ENGL 110C and 3 credit hours in PHIL or REL, or permission of instructor

PHIL 482/582 Chinese Religion and Philosophy (3 Credit Hours)

A study of Chinese thought emphasizing Early and Classical Confucianism and Taoism, Chinese Buddhism, and NeoConfucianism. Modern currents of Chinese thought is also discussed.

Prerequisites: Junior standing and three semester hours in philosophy, or permission of the instructor

PHIL 485/585 Japanese Religion and Philosophy (3 Credit Hours)

A study of the religious and philosophical traditions of Japan. Emphasis will be given to Shintoism, Buddhism, and Neo-Confucianism and their contemporary status and influence in Japanese culture.

Prerequisites: junior standing and three semester hours in philosophy or permission of the instructor

PHIL 491W/591 Seminar in Philosophy (3 Credit Hours)

Intensive examination of the thought of one major philosopher or philosophical movement. This is a writing intensive course.

Prerequisites: ENGL 211C/ENGL 221C/ENGL 231C and 6 credit hours in PHIL or REL, or permission of the instructor

PHIL 495/595 Topics in Philosophy (1-3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule, and will be more fully described in information distributed to all academic advisors.

Prerequisites: appropriate survey course or permission of the instructor

PHIL 496/596 Topics in Philosophy (1-3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule, and will be more fully described in information distributed to all academic advisors.

Prerequisites: appropriate survey course or permission of the instructor

PHIL 497/597 Tutorial Work in Special Topics in Philosophy (1-3 Credit Hours)

Independent reading and study of a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: senior standing and approval of the department chair

PHIL 498/598 Tutorial Work in Special Topics in Philosophy (1-3 Credit Hours)

Independent reading and study of a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: senior standing and approval of the department chair

PHYS - Physics

PHYS 101N Conceptual Physics (4 Credit Hours)

An introductory descriptive course which develops and illustrates the concepts of physics in terms of phenomena encountered in daily life. Topics include mechanics, electricity and magnetism. (offered fall, summer)

PHYS 102N Conceptual Physics (4 Credit Hours)

An introductory descriptive course which develops and illustrates the concepts of physics in terms of phenomena encountered in daily life. Topics include sound, light, fluids and heat. (offered spring)

Prerequisites: PHYS 101N

PHYS 111N Introductory General Physics (4 Credit Hours)

Emphasizes mechanics, wave motion and heat and will also cover the needed elements of trigonometry and vectors. Students receiving credit for PHYS 111N cannot receive credit for PHYS 102N either simultaneously or subsequently. (offered fall, spring, summer)

Prerequisites: MATH 102M or MATH 103M or MATH 162M or MATH 166

PHYS 112N Introductory General Physics (4 Credit Hours)

Emphasizes electricity, light, and introduction to modern physics. (offered fall, spring, summer)

Prerequisites: PHYS 111N and MATH 102M (or MATH 103M) or MATH 162M or MATH 166

PHYS 113 Physics Laboratory (1 Credit Hour)

Available for pass/fail grading only. An introductory laboratory covering experiments from mechanics, wave motion, heat and sound.

Prerequisites: written permission of the chief departmental advisor of the Physics Department

PHYS 114 Physics Laboratory (1 Credit Hour)

Available for pass/fail grading only. An introductory laboratory covering experiments from electricity, magnetism, and optics.

Prerequisites: written permission of the chief departmental advisor of the Physics Department

PHYS 120 Physics in the 21st Century (1 Credit Hour)

This seminar will provide students with a broad introduction to the cutting edge of physics research and its applications in diverse areas of contemporary physics. Recommended for incoming students interested in physics and the natural sciences.

PHYS 137T Introduction to Quantum Science and Technology (3 Credit Hours)

Quantum mechanics has had an enormous impact on society since its discovery nearly a century ago and has been instrumental in developing technology such as transistors and lasers. This course will explore the potential benefits of emerging quantum technologies, how they will impact present and future society, and the technical challenges posed in implementing them. Students will develop a conceptual understanding of these technologies and their fundamental underlying principles of superposition, interference, and entanglement. Topics include quantum computing, quantum communications, and quantum sensing. These ideas will be explored quantitatively using basic algebra. It is strongly recommended that students have passed a college-level math class.

PHYS 197 Undergraduate Research Experience in Physics (0 Credit Hours)

Student participation in a supervised, undergraduate research experience for which credit will not apply to the degree. Experience must be related to the student's major, minor or career area of interest.

Prerequisites: permission of the instructor

PHYS 226N Honors: University Physics I (4 Credit Hours)

Open only to students in the Honors College. A special honors version of PHYS 231N. This course also includes a Recitation Section for more in-depth discussion of advanced problems.

Prerequisites: MATH 211 with a grade of C or better

Pre- or corequisite: MATH 212

PHYS 227N Honors: University Physics II (4 Credit Hours)

Open only to students in the Honors College. A special honors version of PHYS 232N, including a recitation section for discussion of advanced problems.

Prerequisites: PHYS 231N or PHYS 226N or PHYS 261N with a grade of C or better, and both MATH 211 and MATH 212 each with a grade of C or better

PHYS 231N University Physics I (4 Credit Hours)

A general introduction to physics in which the principles of classical and modern physics are applied to the solution of physical problems. The reasoning through which solutions are obtained is stressed. Topics include mechanics, fluids, and thermodynamics. This course is designed for majors in the physical sciences, engineering, mathematics, and computational sciences. Students receiving credit for PHYS 231N and PHYS 232N cannot simultaneously or subsequently receive credit for PHYS 101N and PHYS 102N or PHYS 111N and PHYS 112N. (offered fall, spring, summer)

Prerequisites: MATH 211 with a grade of C or better

Pre- or corequisite: MATH 212 or permission of instructor

PHYS 232N University Physics II (4 Credit Hours)

A general introduction to physics in which the principles of classical and modern physics are applied to the solution of physical problems. The reasoning through which solutions are obtained is stressed. This course is designed for majors in the physical sciences, engineering, mathematics, and computational sciences. Topics include electricity and magnetism, and optics. Students receiving credit for PHYS 231N and PHYS 232N cannot simultaneously or subsequently receive credit for PHYS 101N and PHYS 102N or PHYS 111N and PHYS 112N. (offered fall, spring, summer)

Prerequisites: PHYS 231N or PHYS 226N or PHYS 261N with a grade of C or better, and both MATH 211 and MATH 212 with each a grade of C or better

PHYS 261N Advanced University Physics I (4 Credit Hours)

This calculus-based course is the required introductory course for Physics majors. In addition to the physics curriculum of PHYS 231N, this course has a recitation section for advanced problems and additional mathematical preparation for advanced courses in physics.

Prerequisites: MATH 211, with a grade of C or better

Pre- or corequisite: MATH 212

PHYS 262N Advanced University Physics II (4 Credit Hours)

This calculus-based course is the required introductory course for Physics majors. In addition to the physics curriculum of PHYS 232N, this course has a recitation section for advanced problems and additional mathematical preparation for advanced courses in physics.

Prerequisites: PHYS 261N with a grade of C or better; MATH 211 and MATH 212, each with a grade of C or better

PHYS 297 Undergraduate Research I (1-3 Credit Hours)

This course offers students at the Freshman and Sophomore levels their first opportunity to work one-on-one with a research mentor to acquire and develop skills in research techniques, information literacy, research planning, proposal preparation and report writing. Research experiences may include but are not limited to hands-on instrument control to collect and analyze data, including graphical, statistical and error analysis of their data. Students will also be instructed on accepted methods for dissemination of data, including written, oral and poster presentation, as well as procedures for research proposal preparation and submission. Students will be required to deliver to their peers and department faculty at the end of semester an oral and written presentation of their research, as well as a poster presentation at an annual department or university event including the ODU Undergraduate Research Symposium.

Prerequisites: Permission of the instructor

Pre- or corequisite: PHYS 226N or PHYS 231N or PHYS 261N

PHYS 303 Intermediate Experimental Physics (3 Credit Hours)

A laboratory-oriented course designed to provide students with a broad introduction to instrumentation and techniques used in modern physics laboratories. Topics to be covered include: basic electronics with an introduction to diode, transistor and op-amp circuitry, and an introduction to physical computing using LabView and Arduino micro controllers.

Prerequisites: PHYS 232N or PHYS 227N or PHYS 262N

PHYS 309 Physics on the Back of an Envelope (1 Credit Hour)

Physicists should be able to estimate the order-of-magnitude of anything. How many atoms of Julius Caesar do you eat every day? How much waste does a nuclear power plant generate? Will develop concepts, relations and numbers useful for estimation. Will cover little new material, emphasizing already acquired knowledge. Will help students apply physics to real-life questions and understand which physical effects are appropriate on which scales. Seminar course.

Prerequisites: PHYS 102N or PHYS 112N or PHYS 232N or PHYS 227N or PHYS 262N

PHYS 319 Analytical Mechanics (3 Credit Hours)

Fundamentals of Newtonian mechanics. Topics include kinematics, dynamics, energy and momentum, central forces and planetary motion, and resonance phenomena. (Offered Spring)

Prerequisites: PHYS 232N or PHYS 227N or PHYS 262N

Pre- or corequisite: MATH 307 or MATH 280

PHYS 323 Modern Physics (3 Credit Hours)

Introduction to the wave nature of matter, with applications in materials science, atomic, and nuclear physics. Introduction to relativity, including applications in mechanics and electrodynamics. (Offered Fall)

Prerequisites: PHYS 232N or PHYS 227N or PHYS 262N and MATH 212

PHYS 355 Mathematical Methods of Physics (3 Credit Hours)

This course will provide a strong foundation in the mathematical methods and applications necessary for undergraduate study of physics beyond the introductory level. The course contains a mandatory recitation section. (Offered Fall)

Prerequisites: PHYS 232N or PHYS 227N or PHYS 262N and MATH 212

Pre- or corequisite: MATH 312 or MATH 285

PHYS 367 Cooperative Education (1-3 Credit Hours)

May be repeated for credit. Available for pass/fail grading only. Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures as formally determined by the department prior to the semester in which the work experience is to take place.

Prerequisites: Approval by department is required; Additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

PHYS 368 Internship (1-3 Credit Hours)

Available for pass/fail grading only. Academic requirements will be established by the department and will vary with the amount of credit desired. Allows students to gain short duration career-related experience.

Prerequisites: Approval by department is required; additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

PHYS 397 Undergraduate Research II (1-3 Credit Hours)

This course offers students at the Sophomore and Junior levels an opportunity to work one-on-one with a research mentor on a self-designed research project of mutual interest, and typically within the research field of their mentor. The student will demonstrate their knowledge of the research skills covered in PHYS 297 by formulating their own research plan and then collecting and analyzing their data. Students will also be instructed in research publication skills as well as conference standard presentation techniques. Students will be required to attend at least two conferences, within and outside the university.

Prerequisites: PHYS 297, and PHYS 226N or PHYS 231N or PHYS 261N, and permission of instructor

PHYS 411 Introduction to Atomic Physics (3 Credit Hours)

The hydrogen atom, radiative transitions, two-electron systems, many-electron atoms, interaction with external fields, theory of atomic spectra.

Prerequisites: PHYS 452 and MATH 307

PHYS 413/513 Methods of Experimental Physics (3 Credit Hours)

Experiments in classical and modern physics, designed to develop skills in the collection, analysis, and interpretation of experimental data. (Offered Spring)

Prerequisites: PHYS 303 or ECE 287, and PHYS 323

PHYS 415/515 Introduction to Nuclear and Particle Physics (3 Credit Hours)

An introduction to the structure of the atomic nucleus, natural and artificial radioactivity, nuclear decay processes and stability of nuclei, nuclear reactions, properties of nuclear forces, and nuclear models. Also, particle phenomenology, experimental techniques and the standard model. Topics include the spectra of leptons, mesons, and baryons; strong, weak, and electromagnetic interactions.

Prerequisites: PHYS 452

Pre- or corequisite: MATH 307

PHYS 416/516 Introduction to Solid State Physics (3 Credit Hours)

Introduction to solid state physics and materials science, with emphasis placed on the applications of each topic to experimental and analytical techniques. Topics include crystallography, thermal and vibrational properties of crystals and semiconductors, metals and the band theory of solids, superconductivity and the magnetic properties of materials.

Prerequisites: PHYS 452 and MATH 307

PHYS 417/517 Introduction to Particle Accelerator Physics (3 Credit Hours)

Fundamentals of relativistic particle dynamics including particle acceleration; weak and strong focusing; linear beam optics and particle transfer matrices; linear and non-linear synchrotron motion; introduction to the statistical descriptions of particle beams; and radiation production by accelerated relativistic particles. Examples relevant to betatrons, cyclotrons, synchrotrons, and linear accelerators will be given.

Prerequisites: PHYS 319 or MAE 205, and PHYS 425 or ECE 323

PHYS 420/520 Introductory Computational Physics (3 Credit Hours)

Introduction to computationally based problem solving in physics with an emphasis on understanding and applying various numerical algorithms to different types of physics problems. Topics will include numerical integration (quadrature), numerical solution of ordinary differential equations, Runge-Kutta and Numerov methods, polynomial approximations, numerical linear algebra, and Monte-Carlo methods. These computational methods will be applied to problems in classical and quantum mechanics, as well as electromagnetic theory.

Prerequisites: CS 150, CS 151 or CS 153; PHYS 319; PHYS 323; and MATH 212

PHYS 425/525 Electromagnetism I (3 Credit Hours)

A study of the classical theory and phenomena of electricity and magnetism. Topics include the calculation of electric and magnetic fields, magnetic and dielectric properties of matter, and an introduction to Maxwell's equations. The course contains a mandatory recitation section.

Prerequisites: PHYS 232N or PHYS 227N or PHYS 262N and MATH 312 or MATH 285

Pre- or corequisite: PHYS 355

PHYS 451/551 Theoretical Mechanics (3 Credit Hours)

A mathematical study of the concepts of mechanics. Vector calculus methods are used. Topics include mechanics of a system of particles, Lagrangian mechanics, Hamilton's canonical equations, and motion of a rigid body.

Prerequisites: PHYS 319, PHYS 355 and MATH 312

PHYS 452/552 Introduction to Quantum Mechanics (3 Credit Hours)

Introduction to the physical and mathematical structure of quantum theory. Dirac notation, Spin systems, EPR paradox and Bell's inequality. The Schrödinger equation is introduced for simple systems. Quantization of bound states, scattering, and tunneling are introduced for the 1-dimensional square-wave potential. In three dimensions, angular momentum and the harmonic oscillator are developed. The course contains a mandatory recitation section.

Prerequisites: PHYS 319, PHYS 323, and PHYS 355

PHYS 453/553 Electromagnetism II (3 Credit Hours)

A course in electrodynamics developed from Maxwell's Equations. Topics include Maxwell's Equations, Conservation Laws, Electromagnetic Waves, Potentials and Fields, Radiation, and the interplay of electrodynamics and special relativity. The course contains a mandatory recitation section.

Prerequisites: PHYS 425 or ECE 323 and MATH 312

PHYS 454/554 Thermal and Statistical Physics (3 Credit Hours)

A study of the fundamental concepts of thermodynamics, kinetic theory, and statistical mechanics. Topics include the thermodynamics of simple systems, kinetic theory of gases, statistical mechanics of gases and an introduction to quantum statistics.

Prerequisites: PHYS 319 and PHYS 323

PHYS 456/556 Intermediate Quantum Mechanics (3 Credit Hours)

Techniques for solving the Schrödinger equation in one, two, and three dimensions. Solution of the Hydrogen atom, variational techniques, perturbation theory and scattering. The Pauli exclusion principle. Optional topics include atoms in an electromagnetic field (Stark effect, Zeeman effect), spontaneous and stimulated emission, hydrogen molecular ion and helium ground states, Bloch waves and elementary theory of solids.

Prerequisites: PHYS 323 and PHYS 452 or permission of the instructor

PHYS 460 Fundamentals of Accelerator Physics and Technology with Simulations and Measurements Lab (3 Credit Hours)

Explores the historical development of accelerators and their past and present applications. Principles of acceleration, including the physics of linear accelerators, synchrotrons, and storage rings. Magnet design; machine lattice design and particle beam optics. Longitudinal and transverse beam dynamics, including synchrotron and betatron particle motion. Special topics will be reviewed, including synchrotron radiation, injection techniques, and collective effects and beam instabilities.

Prerequisites: PHYS 319 and PHYS 425

PHYS 467 Preparing for the Physics GRE (1 Credit Hour)

This course will review the style and scope of problems likely to be found on the Physics Graduate Record Exam (GRE). Emphasis is on quick solving of problems based on foundational knowledge and intuition. This course is particularly intended for students preparing to apply for graduate school, but may be of interest to all students.

Prerequisites: PHYS 323 and PHYS 319

PHYS 468W Research Methods in Mathematics and Sciences (3 Credit Hours)

Emphasizes the tools and techniques used to solve scientific problems. Topics include use and design of experiments, use of statistics to interpret experimental results, mathematical modeling of scientific phenomena, and oral and written presentation of scientific results. Students will perform four independent inquiries, combining skills from mathematics and science to solve research problems. Required for Physics teaching licensure track; not available as upper-division elective in content area. This is a writing intensive course.

Prerequisites: Admission to the Monarch Teach Program; PHYS 232N or MATH 212; and a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C

PHYS 489W Senior Thesis I (1 Credit Hour)

Part one of a two-semester option for completing the Senior Thesis. This is a writing intensive course. PHYS 489W plus PHYS 490W is equivalent to PHYS 499W.

Prerequisites: permission of the instructor and a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C

PHYS 490W Senior Thesis II (2 Credit Hours)

Part two of a two-semester option for completing the Senior Thesis. PHYS 489W plus PHYS 490W is equivalent to PHYS 499W. This is a writing intensive course.

Prerequisites: PHYS 489W

PHYS 495/595 Special Topics in Physics (1-3 Credit Hours)

In-depth study of a selected topic in physics at the advanced undergraduate level. May include a laboratory or computational component.

Prerequisites: permission of the instructor

PHYS 497/597 Special Problems and Research (1-3 Credit Hours)

These courses afford the student an opportunity to pursue individual study and research.

Prerequisites: senior standing or permission of the instructor

PHYS 499W Senior Thesis (3 Credit Hours)

Each student will undertake a research experience under the supervision of a department faculty member. The experience can be of an experimental, theoretical, or calculational type. A final oral and written report are required. The research may be completed on campus or at one of the department affiliated research organizations. This is a writing intensive course.(offered fall, spring, summer)

Prerequisites: grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C and permission of the instructor

POLS - Political Science

POLS 100S Introduction to International Politics (3 Credit Hours)

This course provides a basic introduction to the study of international politics. It considers some of the more prominent theoretical perspectives in the discipline and examines the major political, economic, social and environmental issues presently facing the global community. The course prepares students for advanced study in international politics.

POLS 101S Introduction to American Politics (3 Credit Hours)

This course introduces students to the political processes and the institutions of American politics. The course examines American political culture, gender and minority rights, citizen participation, national institutions, public policy, and foreign and defense policy.

POLS 102S Introduction to Comparative Government and Politics (3 Credit Hours)

This course introduces basic concepts and methods for the study of comparative politics. It also surveys and compares the political/socioeconomic development, political cultures/ideologies, political institutions, decision-making processes, and public policies of various countries in the world.

POLS 126S Honors: Introduction to American Politics (3 Credit Hours)

Open only to students in the Honors College. A special honors section of POLS 101S.

POLS 127S Honors: Introduction to International Politics (3 Credit Hours)

Open only to students in the Honors College. Special honors section of POLS 100S.

POLS 300 Introduction to Public Policy (3 Credit Hours)

An introduction to various approaches to policy making followed by a detailed study of several of the most important domestic contemporary issues (housing, transportation, education, welfare, etc.).

Prerequisites: Six credits in human behavior

POLS 301W Introduction to Public Law (3 Credit Hours)

Introduces the student to the United States legal system through an examination of its institutions, practitioners, and processes. Assignments explore (1) the anatomy of a law suit, (2) legal education in the United States, (3) basic methods of legal reasoning, writing, and argumentation, and (4) the function of judicial precedent within United States courts. This is a writing intensive course.

Prerequisites: POLS 101S and a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C

POLS 306 Judicial Process and Behavior (3 Credit Hours)

In-depth analysis of the American court system with an emphasis on the political behavior of the system's participants and the procedural dimensions of the court system.

Prerequisites: POLS 101S

POLS 307 Constitutional Criminal Procedure (3 Credit Hours)

Development of criminal procedure under the United States Constitution, with particular emphasis on the Fourth, Fifth, Sixth, Eighth, and Fourteenth Amendments as interpreted by the U.S. Supreme Court.

Prerequisites: POLS 101S

POLS 308 Research Design (3 Credit Hours)

Covers the design and implementation of quantitative and qualitative methods of inquiry in social sciences.

Prerequisites: POLS 100S, POLS 101S and POLS 102S or permission of instructor

POLS 309 Race, Culture and Public Policy (3 Credit Hours)

This course examines the public policy problems of various racial groups in America. It analyzes the extent to which the American political system protects and promotes the concerns of African Americans, Hispanics, Native Americans and Asians.

Prerequisites: Six hours in human behavior

POLS 310 Political Theory (3 Credit Hours)

The study of political theory delves into the central concepts that shape humanity's capacity to think about and practice politics, including justice, liberty, equality, human nature, rights, power, democracy, and the various potential goals of political community. Students will study influential political thinkers such as Plato, Aristotle, Cicero, Augustine of Hippo, Thomas Aquinas, Machiavelli, Hobbes, Locke, Mill, Marx and Rawls.

Prerequisites: POLS 100S or POLS 101S or permission of the instructor

POLS 311 Virginia Politics and Government (3 Credit Hours)

This course is a survey of Virginia state and local government institutions, functions, processes, and behavior of political actors.

Prerequisites: POLS 101S

POLS 312 American Political Thought (3 Credit Hours)

The course considers the origins, evolution, purposes, and relevancy of American political thought. It includes studies in democracy versus elitism; civil disobedience versus revolution; liberalism versus conservatism.

Prerequisites: POLS 101S or permission of the instructor

POLS 313 United Nations Seminar (1 Credit Hour)

An examination of the United Nations and key issues facing the international community. Includes a three-day visit to United Nations headquarters in New York.

Prerequisites: Junior standing or permission of the instructor

POLS 314 European Politics (3 Credit Hours)

Analyzes and compares the major political functions and the social, economic, and cultural bases of European states. Also examines the contemporary movement for European economic, military, and political unity.

Prerequisites: POLS 100S or POLS 102S or permission of the instructor

POLS 316 Politics of Africa (3 Credit Hours)

This course is intended to familiarize students with the struggles, advances, and setbacks of African peoples for state-building and socioeconomic development during the colonial and post-independence eras.

Prerequisites: Junior standing or permission of the instructor

POLS 319 Lobbies and Interest Groups (3 Credit Hours)

A survey of the lobby movement in America, its history and present status, with particular attention to current lobbies and interest groups and their impact on the national government.

Prerequisites: POLS 101S

POLS 320 United Nations (3 Credit Hours)

Since it was established in 1945 the UN has inspired humanity, undertaken many of the world's most difficult jobs, and provided great achievements and disappointments. This course examines the functioning of the UN, what it does best and worst, and the prospects for UN reform.

Prerequisites: POLS 100S or GEOG 100S or permission of the instructor

POLS 321W International Organizations (3 Credit Hours)

What are the roles and capabilities of the international organizations? This course examines the principles behind the world's 300 IOs, including specialized, technical, and regional organizations, as well as alliances and non-governmental organizations. When do they replace states and other actors? When are they essential, when are they helpful adjuncts, and when are they irrelevant? This is a writing intensive course.

Prerequisites: POLS 100S or GEOG 100S and a C or better in English 211C, ENGL 221C or ENGL 231C

POLS 323 International Political Economy (3 Credit Hours)

Introduces students to the primary mechanisms of the global political economy in allocating goods, income, wealth and the means to produce them, with emphasis on the international division of labor.

Prerequisites: Six hours of human behavior

POLS 324 International Relations Theory (3 Credit Hours)

Comparative study of the various theories that attempt to explain the patterns of interactions among the different members of the global community. Draws on historical and modern cases to explain traditional and alternative theories.

Prerequisites: POLS 100S and an additional three hours of human behavior

POLS 325W World Politics (3 Credit Hours)

This course is designed for intermediate students who are interested in the theoretical and systematic study of world politics. The course first introduces students to several major theoretical approaches to the study of world politics, and then applies these approaches to a number of major issues--ranging from conflict and cooperation, arms control, the protection of human rights, international trade, economic development, and environmental preservation. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, six hours of human behavior and junior standing

POLS 326W American Foreign Policy (3 Credit Hours)

This course presents those factors that go into the making and analyzing of American foreign policy, explores their application in decision making, and seeks to test their utilization against contemporary problems. This is a writing intensive course.

Prerequisites: POLS 100S and a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, or permission of the instructor

POLS 327W Politics of National Security (3 Credit Hours)

Examination of issues facing America as it debates the use of international force, including the range of national security choices, defense reform, and the tensions between American resort to warfare and global trends transforming the ability to use violence effectively. This is a writing intensive course.

Prerequisites: POLS 100S or permission of the instructor and a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C

POLS 328 Russian Politics (3 Credit Hours)

Starting with the Soviet communist system, explores Russia's efforts to establish democracy and the rule of law, to fashion a productive, beneficial market economy, to establish viable relationships with the other former republics of the USSR and to craft advantageous foreign and military policies toward the West, Asia, and the developing countries.

Prerequisites: POLS 100S or POLS 102S or GEOG 100S or permission of the instructor

POLS 331 State and Local Government (3 Credit Hours)

This course is a survey of state and local government institutions, functions, processes, and behavior of political actors.

Prerequisites: POLS 101S

POLS 332W Europe in World Affairs (3 Credit Hours)

Analyzes European politics from World War II to the present. Emphasizes the foreign policies of major European states, including policies towards EU and NATO. This is a writing intensive course.

Prerequisites: POLS 100S and ENGL 211C or ENGL 221C or ENGL 231C

POLS 333 Media and Politics (3 Credit Hours)

An examination of the development of the news media and the role of political communication and information in American politics. Analysis of the newsmaking process; media coverage of political campaigns, the President and Congress; the impact of the news media on the American public; and the interaction between public officials and journalists.

Prerequisites: POLS 101S

POLS 334 Electoral Politics (3 Credit Hours)

A survey of electoral politics and behavior, including the structure of the electoral system, contemporary political campaigning, political partisanship, voting behavior, and role of interest groups in the electoral process.

Prerequisites: POLS 100S or POLS 101S or POLS 102S

POLS 335 Environmental Politics (3 Credit Hours)

This course examines the evolution of environmentalism in the United States, including the policy-making process, science and the role played by the public and political institutions.

Prerequisites: POLS 101S

POLS 336 South Asia Since Independence (3 Credit Hours)

This is a comparative study of the main political, economic and social developments in the major countries of South Asia. Themes will include democratization, problems of economic development, the role of caste and religion, the causes of intrastate conflict and interstate conflict and the influence of global forces on the region.

Prerequisites: POLS 100S or POLS 102S

POLS 337 Latin American Politics (3 Credit Hours)

Examines the evolution of Latin American politics, including early colonial and caudillo rule, populism and radicalism, the emergence of military regimes, and the reestablishment of constitutional democracies. Also considers contemporary economic, social, cultural, and environmental issues which condition state-society relations in the region.

Prerequisites: Six hours in human behavior

POLS 338W Politics of East Asia (3 Credit Hours)

This course examines political cultures/traditions, governmental institutions, decision-making processes, public policies, political organizations, and significant socio-political issues of such East Asian countries as China, Japan and Korea. In addition, it explores the collective impact of these countries on world politics and global economy. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C, six hours in human behavior, and junior standing or permission of the instructor

POLS 350T Technology and War (3 Credit Hours)

This course examines the fundamental changes and continuities that the evolution of technology has brought to armed conflict. It explores the historical development of technology and warfare, emphasizing the role of cultural, social and political choice shaping the development of new military technologies and affecting how they are used. What is the future of Western assumptions about technologically dominated warfare?

Prerequisites: POLS 100S or permission of the instructor

POLS 367 Cooperative Education (1-3 Credit Hours)

Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures as formally determined by the department prior to the semester in which the work experience is to take place.

Prerequisites: Approval by department is required; Additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

POLS 368 Internship in Political Science (1-12 Credit Hours)

Individualized practical experience in public bureaucracies, political groups, administrative agencies or law firms. Group seminars are held periodically under the supervision of faculty. Credits are commensurate with the level of the student's involvement.

Prerequisites: Nine hours in political science, 3 of which must be in an upper-level course

POLS 395 Topics in Political Science (1-3 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major. These courses and any additional prerequisites will appear in the course schedule, and will be more fully described in information distributed to all academic advisors.

Prerequisites: Junior standing and permission of the instructor

POLS 396 Topics in Political Science (1-3 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major. These courses and any additional prerequisites will appear in the course schedule, and will be more fully described in information distributed to all academic advisors.

Prerequisites: Junior standing and permission of the instructor

POLS 400 Congress (3 Credit Hours)

This is a detailed study of the institutional and behavioral factors at work in legislative decision making, especially at the national level. Emphases are on the interrelationships among Congress, the Presidency, and the bureaucracy and on learning how to do research on specific legislation.

Prerequisites: POLS 101S or permission of the instructor

POLS 401/501 Global Environmental Policy (3 Credit Hours)

This course analyzes the causes, severity, potential consequences, and proposed solutions regarding global ecological issues with special attention to the scientific debate and the political and policy process. It examines environmental policies of national governments, regional/international organizations, and global conferences.

Prerequisites: GEOG 100S or GEOG 101S or GEOG 102T or POLS 100S or POLS 102S

POLS 402 Sex, Drugs, & Alcohol: The Politics & Policy of Sin (3 Credit Hours)

This course offers a broad overview of Morality Politics in the United States. Morality politics in the most basic definition is the legal sanctioning of right and wrong, or simply, the validation of a particular set of values. This course offers a broad overview of morality politics, as well as an examination of the historical foundations of legislating morality in the United States. Abortion, capital punishment, legalized gambling, same-sex rights, and drug policy are among the most controversial, polarizing, and widely discussed issues facing the public and policymakers in both contemporary and historical contexts. Although we will not examine each area that can be classified as a morality issue, we will focus on the prohibition of alcohol, the war on drugs, and the politics surround sex. We will examine both sides of each of these issues, with arguments being made both for and against each set of policies. Your task is to evaluate and discern between competing arguments based on the evidence presented on both sides.

Prerequisites: POLS 100S or POLS 101S or POLS 102S or junior standing

POLS 403/503 American Constitutional Law: First Amendment (3 Credit Hours)

The course explores the development of conflicting judicial and legal theories arising from Supreme Court enforcement of the First Amendment's protection of speech and religious freedoms. Supreme Court opinions, along with the underlying theories that inform its decisions and rationales, are the focus of the assignments and class discussion.

Prerequisites: POLS 101S or permission of the instructor

POLS 407 American Presidency (3 Credit Hours)

The course covers the development of presidential power and activity, the contemporary operations of the Presidency, and the problems which may confront the institution in the future.

Prerequisites: POLS 101S or permission of the instructor

POLS 408 American Constitutional Law: Individual Rights (3 Credit Hours)

An examination of the vexatious line between the rights of individuals and those of the state in the American democracy, focusing on such major issues as freedom of expression and worship; freedom of the press; separation of church and state; privacy; and racial and gender discrimination.

Prerequisites: POLS 101S

POLS 409 American Constitutional Law: Powers of Government (3 Credit Hours)

An examination of separation of powers, federalism and the democratic process as reflected by Supreme Court decisions. Also, the Supreme Court as a political institution.

Prerequisites: POLS 101S

POLS 410/510 African American Politics (3 Credit Hours)

This course examines the political development of Black people in the United States by focusing on the relationship and processes of the American political system. The political dynamics of Black political thought, the Civil Rights Movement, and Black protest politics are also analyzed.

Prerequisites: Six hours in human behavior and junior standing

POLS 412/512 Politics of the Civil Rights Movement (3 Credit Hours)

Examines the political activities which resulted in the passage of the nation's second Civil Rights policy, the 1960 and 1964 Civil Rights Acts, the 1965 Voting Rights Act and the 1968 Fair Housing Act. The course will analyze the underpinnings, leadership, and political strategies of the Civil Rights Movement.

Prerequisites: Six hours in human behavior and junior standing

POLS 414/514 Politics of Education (3 Credit Hours)

The question of power, often ignored by education policy analysts and researchers, is a principal focus of this seminar. Issues ranging from the role of education in political socialization and the politics of affirmative action and equal opportunity are examined.

Prerequisites: Junior standing or permission of the instructor

POLS 415/515 Women and Politics in America (3 Credit Hours)

Examines women's place in political theory and the practice of politics in the United States. A major focus is to trace the development of women's political rights, the impact of public policy on the lives of American women and to see how women influence and participate in the political process.

Prerequisites: POLS 101S or permission of the instructor

POLS 418 Quantitative Methods (3 Credit Hours)

A survey of and practicum in the basic techniques of quantitative research, including the logic of empirical research, the identification of data sources, and the use of appropriate statistical techniques.

Prerequisites: POLS 101S and a grade of C- or better in POLS 308

Pre- or corequisite: A grade of C- or better in STAT 130M

POLS 419 Jurisprudence: History of Legal Theory (3 Credit Hours)

An examination of the history of legal thought and developments of natural law, as well as an in-depth analysis of legal positivism and realism. Particular attention is paid to American legal philosophy.

Prerequisites: POLS 100S or POLS 101S or POLS 102S

POLS 420W/520 Southern Politics (3 Credit Hours)

This seminar focuses on the politics of the American South from the 1940s to the present. Emphasis is on introducing students to contrasting explanations and analysis about the politics of the American South. This is a writing intensive course.

Prerequisites: POLS 101S and a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, or permission of the instructor

POLS 421/521 International Law (3 Credit Hours)

Surveys major areas of public international law (e.g., laws of warfare, law of the sea, conflict resolution, etc.). Emphasizes the relationship between international law and international politics.

Prerequisites: Six hours in political science or permission of the instructor; POLS 325W is recommended

POLS 424/524 International Organization (3 Credit Hours)

Course provides a basis for understanding the role and importance of international organizations in contemporary international relations. Focuses on development and history of global organizations, with particular emphasis on the United Nations, and regional and functional organizations.

Prerequisites: POLS 100S and POLS 325W and additional internationally-focused course or permission of the instructor

POLS 425W Cybersecurity Strategy and Policy (3 Credit Hours)

This writing intensive course explores cybersecurity policy and strategy and introduces students to the essentials of strategy development and policy making in cybersecurity. Topics considered include planning principles in cyber strategy; risk management and cybersecurity policy; the connections between cybersecurity policies, businesses, and governmental institutions; the knowledge, skills, and abilities needed to develop and implement cybersecurity policy; the social, political and ethical implications that arise in cybersecurity policies and strategies; strategies to assess cybersecurity policy; and the ties between national security and cybersecurity policy.

Prerequisites: ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C with a grade of C or better and CYSE 200T or IT 200T or POLS 101S

POLS 426 Cyber War (3 Credit Hours)

This course explores the national security dimensions of cybersecurity and examines cyber war in international relations. Exploration of cyber war begins with an examination of cybersecurity as a component of national security and investigates the topics of U.S National Cybersecurity and other national approaches to cyber war. The topics of cyber deterrence, cyber as a military domain, the roles of international organizations in cyber war, cyber terrorism, the role of social media, and information warfare will be discussed. The international dimension of cybersecurity is also discussed.

Prerequisites: CYSE 200T or POLS 101S or permission of the instructor

POLS 434/534 Political Behavior and Public Opinion in the United States (3 Credit Hours)

This course is designed to give students an in-depth understanding of the various dimensions of political participation in the United States. Central to this course is the act of voting, which is the cornerstone democratic institution. Students will gain an understanding of how individuals form political attitudes and how these attitudes manifest in the form of electoral behavior. Students will also be asked to think about some non-traditional forms of civic participation such as political protest and even violence. We will also spend some time discussing attitudes about democracy itself and the idea that support for American democracy has eroded. As part of this course, students will be asked to develop their analytical skills through the critical reading and discussion of scholarly works.

Prerequisites: POLS 100S or POLS 101S or POLS 102S

POLS 435/535 Chinese Politics (3 Credit Hours)

A study of origins of the Chinese revolution; development and functions of the Chinese Communist Party; government institutions; the defense establishment; evolution of foreign policy; and post-Mao political and economic reforms.

Prerequisites: POLS 100S and POLS 102S or permission of the instructor

POLS 436 Japanese Politics (3 Credit Hours)

A study of Japan's historical political development and social patterns; government institutions; problems of the constitution; and foreign and defense policy.

Prerequisites: POLS 100S and POLS 102S or permission of the instructor

POLS 437/537 International Relations in East Asia (3 Credit Hours)

A study of contemporary issues (political, economic, and strategic) in the East Asia area; the interactions of China, Japan, the United States, and the former Soviet republics in East Asia.

Prerequisites: POLS 100S

POLS 438/538 Law in Literature and Film (3 Credit Hours)

Students will study law as seen through the lens of fiction. Assignments draw heavily from classic and contemporary novels, short stories, plays, films, and perhaps television. As these artistic representations of law in action are explored, short theoretical readings help focus on questions of philosophy, politics, and justice. The course also explores the relationship between fiction and reality through appellate opinions and contemporary literature on the American legal system. The goal is to come to a better understanding of the potential blessings, dangers, and limitations of law.

Prerequisites: POLS 101S or permission of the instructor

POLS 439/539 International Relations of African States (3 Credit Hours)

This course aims to expose students to an examination of the workings of international politics from the viewpoint of Africans and African states. International relations have tended to look at the world from the viewpoint of its most powerful states. Yet, most of the world's states - notably in Africa - are weak but have great potential global impact.

Prerequisites: Junior standing or permission of the instructor

POLS 442/542 Twentieth Century Dictatorships (3 Credit Hours)

A study of the Fascist, Nazi, Stalin and Mao regimes and the forces that brought them to power and sustained them, including a study of the impact of their policies on their people and neighboring states.

Prerequisites: Six hours in human behavior and junior standing or permission of the instructor

POLS 445 Globalization: Dynamics and Implications (3 Credit Hours)

Explores the essential characteristics of globalization and its implications for social relations and existing institutions.

Prerequisites: Three hours in economics and 6 hours in political science

POLS 455/555 The Politics of Climate Change (3 Credit Hours)

An examination of the science of climate change and how United States political actors have responded to this global environmental challenge.

Prerequisites: Junior standing or permission of the instructor

POLS 458T Weapons of Mass Destruction in Global Security (3 Credit Hours)

Since the end of the Cold War, weapons of mass destruction have emerged as one of the most dangerous and contentious issues in international affairs. The course examines how these weapons are made, how they proliferate, and how they are controlled.

Prerequisites: POLS 100S

POLS 461 Seminar in European Politics (3 Credit Hours)

This course focuses on one specific European country such as France, Germany, the United Kingdom, etc. Examination of trends and events which most influenced the evolution of domestic politics and foreign relations from World War II to the present.

Prerequisites: POLS 100S or POLS 102S and POLS 314 or POLS 332W

POLS 462 Ethnic Conflict in the New Global Order (3 Credit Hours)

Ethnically based conflict is presently a pervasive worldwide phenomenon. This course examines internal and external factors causing ethnic conflicts and mechanisms for resolving or mitigating such conflicts.

Prerequisites: Six hours in human behavior

POLS 466/566 Politics of the Middle East (3 Credit Hours)

An analysis of the political processes throughout the region and in selected nations of the Middle East. Topics to be discussed include inter-Arab relations, the Arab-Israeli conflict, the Iran-Iraq rivalry and foreign power involvement in the Middle East.

Prerequisites: Junior standing or permission of the instructor

POLS 470 African Americans and Foreign Affairs (3 Credit Hours)

This course focuses on race, ethnicity, and the role and influence of African Americans in international affairs and American foreign policy making. It investigates the activities of African Americans in the international arena. The emphasis is on how African Americans have participated and the results of that participation from the era of slavery to Barack Obama.

Prerequisites: Junior standing or permission of the instructor

POLS 480W Senior Seminar in International Studies (3 Credit Hours)

Interdisciplinary research and preparation of a senior thesis in international studies This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, senior standing in the BAIS degree program or permission of the instructor

POLS 481 Seminar in American Politics (3 Credit Hours)

The advanced study of selected topics in American politics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly.

Prerequisites: Junior standing in political science

POLS 493 Great Decisions (1 Credit Hour)

An examination and discussion of critical world issues based upon the Foreign Policy Association's Great Decision Series.

Prerequisites: POLS 100S or POLS 101S

POLS 495/595 Topics in Political Science (1-3 Credit Hours)

The advanced study of selected topics in political science which, due to their specialized nature, may not be offered regularly.

Prerequisites: Appropriate survey course or permission of the instructor

POLS 496/596 Topics in Political Science (1-3 Credit Hours)

The advanced study of selected topics which, due to their specialized nature, may not be offered regularly.

Prerequisites: Appropriate survey course or permission of the instructor

POLS 497/597 Independent Research in Political Science (1-3 Credit Hours)

Independent research in political science under the supervision of a faculty member.

Prerequisites: Senior standing or permission of the instructor

POLS 498 Tutorial Work-Special Topics (1-3 Credit Hours)

Independent research in political science under the supervision of a faculty member.

Prerequisites: Senior standing or permission of instructor

PRTG - Portuguese

PRTG 101F Beginning Portuguese I (3 Credit Hours)

Introduction to the four skills (listening, speaking, reading, writing) of elementary Portuguese.

PRTG 102F Beginning Portuguese II (3 Credit Hours)

This course will build and expand on the linguistic proficiency in the four skills areas (listening, speaking, reading, writing) of elementary Portuguese.

Prerequisites: PRTG 101F or permission of the instructor

PRTG 295 Topics in Portuguese (1-3 Credit Hours)

A study of selected topics for elective credit. These courses will appear in the course schedule.

PRTS – Parks, Recreation and Tourism Studies

PRTS 210S Leisure and Human Behavior (3 Credit Hours)

This course will examine leisure and its relationship to human behavior from historical and contemporary perspectives. The course will explore fundamental principles, theories, and philosophies of recreation, play, and leisure and how they relate to health and wellness, quality of life, personal identity, work, the economy, and social institutions. The role of leisure in one's life will be examined in depth with a focus on positive and negative leisure behaviors, trends in world culture, and how societal factors influence leisure behavior.

PRTS 212 Program Planning and Development in Parks, Recreation, and Tourism (3 Credit Hours)

This course is designed to help students understand and develop their program planning and development skills. Theories and techniques in relation to programs in parks, recreation organizations, and hospitality and tourism businesses are explored. The course will examine the planning process, including needs assessment, risk assessment, staffing, marketing, budgeting, and implementation.

PRTS 251 Introduction to Park and Recreation Management (3 Credit Hours)

This course introduces students to the field of park and recreation management, including public, non-profit, and private/commercial service delivery organizations. Career opportunities in each of these sectors will also be explored.

PRTS 271 Introduction to Tourism & Hospitality Management (3 Credit Hours)

This course is designed to present an introduction to the tourism industry. Emphasis is placed on historical and technological development within tourism, the different components of the industry (transportation, accommodations, attractions, events), and career opportunities in tourism, events, and hospitality.

PRTS 302 Facilitating the Recreation Experience (3 Credit Hours)

This course is designed to help students develop recreation facilitation and leadership skills. The course will focus on leadership theories, recreation leadership techniques, and group dynamics. Students will practice group leadership techniques through in-class activities and community engaged learning.

Prerequisites: restricted to Park, Recreation, and Tourism Studies majors

PRTS 332 Recreation Administration (3 Credit Hours)

This course examines personnel, financial and organizational management principles, practices, and policies related to the recreation industry. The course explores general personnel management, organizational management, and the budget process. Students will learn about revenue sources, budget formats, and managing full-time, part-time, and seasonal personnel.

Prerequisites: Junior standing or permission of the instructor

PRTS 350 Lodging Operations (3 Credit Hours)

This course teaches the knowledge and skills needed to navigate lodging operations in the hospitality industry and provides students with a comprehensive understanding of the fundamental principles and practices associated with the successful operation of lodging facilities.

Prerequisites: PRTS 271

PRTS 366 Internship Seminar (1 Credit Hour)

Agency field placement is required of all students in Park, Recreation and Tourism Studies. Seminar will include resume and cover letter writing skills, internship requirements, agency placement referrals, and interviewing techniques.

Prerequisites: Senior standing and permission of the instructor; restricted to Parks, Recreation and Tourism Studies majors

PRTS 368 Internship (9 Credit Hours)

Supervised agency placement is required of all students in the Park, Recreation and Tourism Studies program. Placement must fulfill all professionally appropriate certification standards. Minimum of 400 clock hours. Students must have an overall GPA of 2.00 and a major GPA of 2.00 at the start of the internship.

Prerequisites: PRTS 366, senior standing, permission of the instructor, and completion of all coursework; restricted to Park, Recreation and Tourism Studies majors

PRTS 369 Practicum in Parks, Recreation and Tourism Studies (3 Credit Hours)

Selected field-based experiences in a park, recreation and tourism service setting. Minimum of 200 clock hours.

Prerequisites: Junior standing and permission of the instructor; restricted to Park, Recreation, and Tourism Studies majors only

PRTS 404 Recreation Resource Management (3 Credit Hours)

This course addresses outdoor recreation and natural management using a recreation ecology framework. Physical and social impacts resulting from outdoor recreation in parks and protected areas will be discussed, as well as visitor use management strategies to address those impacts.

Prerequisites: Junior standing

PRTS 405 Outdoor Recreation (3 Credit Hours)

This course is designed to increase knowledge, skills, techniques, policies and procedures related to outdoor recreation. Students are required to participate in outdoor recreation experiences through the Outdoor Adventure Program and on their own.

Prerequisites: junior standing or permission of the instructor

PRTS 433 Camp Administration (3 Credit Hours)

This course will cover organization and administration of camp programs and facilities including history, trends, staffing, client needs, finance, marketing, accreditation, research and legal issues. Primary emphasis will be on organized camp programs and their impact on youth and society.

Prerequisites: junior standing or permission of instructor

PRTS 441 Marketing of Hospitality Services (3 Credit Hours)

This course explores theories and concepts related to marketing and sales within successful service-oriented hospitality and tourism businesses. Course topics include marketing and sales planning, techniques, strategies, and management.

Prerequisites: Junior standing or permission of instructor

PRTS 461 Hospitality Leadership and Management (3 Credit Hours)

This course explores the meaning and practice of leadership and management in the hospitality and tourism industry. The course links theoretical concepts to the application of best practice in various aspects of administration. Students will also learn about current trends, research, and national and international case studies

Prerequisites: PRTS 271 and Junior standing or permission of instructor

PRTS 465 Hospitality Revenue Management (3 Credit Hours)

This course is designed to equip students with a practical understanding of the principles involved in the revenue management of hospitality businesses. By blending theoretical concepts with real-world applications, students will learn how to ethically apply these techniques to enhance business outcomes in a dynamic industry. The Certification in Hotel Industry Analytics (CHIA), which is the only hotel-related certification that recognizes the skill and knowledge that these professionals have, is embedded in this course to boost the career prospects of students.

Prerequisites: junior standing or permission of the instructor

PRTS 475 Sustainable Management in Parks, Recreation, and Tourism (3 Credit Hours)

This course examines the principles and practices of sustainable management within park, recreation, and tourism settings. The course explores the complexities of sustainable management and best practices for achieving economic, environmental, social, and cultural sustainability.

Prerequisites: Junior standing or permission of the instructor

PRTS 482W Evaluation in Parks, Recreation, and Tourism (3 Credit Hours)

The purpose of this course is to provide students with basic knowledge in research and evaluation within the park, recreation and tourism field. Specific focus is placed on applying research and evaluation concepts through a research or evaluation project within the field. Topics include evaluation criteria development, quantitative and qualitative research methods, and utilizing study results to make practical recommendations for park, recreation, and tourism organizations. This is a writing intensive course.

Prerequisites: a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, and junior standing

Pre- or corequisite: PRTS 212

PRTS 491 Festival, Meeting, and Event Management (3 Credit Hours)

This course advances students' knowledge of the marketing, planning, and management of festivals, meetings and conventions, and special events in tourism destinations. Students will learn strategies for successfully planning, marketing, organizing, and implementing a variety of events.

Prerequisites: Junior standing or permission of the instructor

PRTS 495 Topics (1-3 Credit Hours)

This course provides an opportunity for in-depth study of selected topics in the variety of areas comprising parks, recreation and tourism studies.

Prerequisites: junior standing

PRTS 497 Independent Study (1-3 Credit Hours)

Individualized instruction to include research, specialized studies, or other scholarly writing.

Prerequisites: junior standing or permission of the instructor

PSYC - Psychology

PSYC 197 Undergraduate Research Experience in Psychology (0 Credit Hours)

Student participation in a supervised, undergraduate research experience for which credit will not apply to the degree. Experience must be related to the student's major, minor or career area of interest.

Prerequisites: permission of the instructor

PSYC 201S Introduction to Psychology (3 Credit Hours)

Introduction to the scientific study of psychology, including the methods used to gather and interpret data. The student is introduced to fundamental terms, theories, and concepts dealing with the biological bases of behavior; learning; perception; cognition and intelligence; personality; psychological disorders; human development; and social processes. An emphasis is placed on application of concepts and critical thinking.

PSYC 203S Lifespan Development (3 Credit Hours)

A broad contemporary view of the processes of development. The influences of biological and environmental factors in the development of personality and cognitive functioning are explored.

PSYC 300 Careers in Psychology (3 Credit Hours)

Exploration of available careers in psychology with a bachelor's degree as well as career options for individuals after graduate school (e.g., master's degree, PhD, PsyD, etc.). All assignments will be aimed at helping students learn more about available opportunities and develop skills needed to find a job and/or get into graduate school. This course is recommended during the sophomore or junior year.

Prerequisites: Open to declared PSYC majors only, or with instructor approval; completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 303 Industrial/Organizational Psychology (3 Credit Hours)

An application of psychological principles and research to human behavior in work settings. Among the topics covered are personnel selection, training, and evaluation; employee motivation and job satisfaction; and organizational leadership and theory.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 304 Social Psychology (3 Credit Hours)

The behavior of the individual as affected by other people and groups. Interpersonal attraction, attitude change, group dynamics, and the application of psychology to social problems are among the topics covered.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 305 Introduction to Clinical Psychology (3 Credit Hours)

This course surveys the evolution and future of clinical psychology, covering research, assessment and intervention, and subspecialties.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 306 Health Psychology (3 Credit Hours)

Course examines how psychological states (e.g., anxiety, stress) influence physical health. The course also examines how physical states (e.g., illness, pain, injury) influence psychological health. Topics include the impact of stress on health and proneness to illness; coping with illness, injury and trauma; and the role of health-enhancing behaviors in maintaining physical health.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher or permission of the instructor

PSYC 307 Institutionalization of Human-Centered Computing (3 Credit Hours)

This course introduces students to the fundamental principles of human-computer interaction. Emphasis is placed on leadership knowledge needed to implement human-centered design practices into an organization's culture.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 308 Positive Psychology (3 Credit Hours)

This course examines and discusses psychological theories and research that focus on human strengths and potential. Factors that contribute to happiness and a fulfilling life are emphasized. Lectures, self-assessments and experiential exercises are used to understand how to cultivate a meaningful life.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 311 Psychology of Criminal Behavior (3 Credit Hours)

The study of crime from a psychological perspective. Topics include theories of criminal behavior, violent and non-violent crime, sexual offenses, insanity, addiction, white collar crime, and other criminal behaviors.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 317 Quantitative Methods (4 Credit Hours)

The application of inferential statistical principles to psychological research problems.

Prerequisites: Completion of PSYC 201S and MATH 102M or higher, both with a grade of C (2.0) or higher

PSYC 318W Research Methods in Psychology (4 Credit Hours)

An examination of research principles and techniques in psychology. Experimental design and interpretation is stressed. Students learn to locate and read technical articles and to report on research projects in the style of the American Psychological Association. This is a writing intensive course.

Prerequisites: Completion of ENGL 211C or ENGL 221C or ENGL 226C or ENGL 231C and PSYC 317, both with a grade of C (2.0) or higher

PSYC 321 Psychology of the Exceptional Child (3 Credit Hours)

A study of the psychological development of the child with physical, emotional, social, intellectual, and educational disabilities.

Prerequisites: Completion of PSYC 201S or PSYC 203S with a grade of C (2.0) or higher

PSYC 322 The Psychology of Adolescence (3 Credit Hours)

A survey of the processes of development during adolescence. Covers topics such as the influences of biological, emotional, social, and cognitive factors on personality development and adjustment of the adolescent.

Prerequisites: Completion of PSYC 201S or PSYC 203S with a grade of C (2.0) or higher

PSYC 324 Psychology of Gender (3 Credit Hours)

Concepts and theories of sex and gender, including models of how gender roles are developed and maintained, will be examined. Major research findings regarding gender will be reviewed.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 325 Drugs and Behavior (3 Credit Hours)

An examination of the effects of psychoactive drugs on behavior and the factors involved in drug use. Current research literature is discussed.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 343 Personnel Psychology (3 Credit Hours)

The application of psychological principles and research to the development and improvement of personnel subsystems in business and industry. Emphasis is placed on the assessment, selection and training of workers and manager.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 344 Human Factors (3 Credit Hours)

The application and evaluation of psychological principles and research relating human behavior to the design of tools, technology, and the work environment.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 345 Organizational Psychology (3 Credit Hours)

This course emphasizes the study of human behavior in organizations. Topics include leadership, motivation, group behavior, communications, power and politics, and organization change.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 351 Child Psychology (3 Credit Hours)

The development of children within their diverse environments is examined. A focus is on the methods used to understand how children experience their world.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher or PSYC 203S with a grade of C (2.0) or higher

PSYC 353 The Psychology of Adulthood and Aging (3 Credit Hours)

The study of adults with emphasis on aging. Current theories and research as well as the characteristics, lifestyles, and activities of adulthood and aging will be discussed.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher or PSYC 203S with a grade of C (2.0) or higher

PSYC 363 Psychology of Sex (3 Credit Hours)

A study of critical issues in human sexuality; gender and sexual identity, sexual arousal and erotic behavior, relationship development, and sexual dysfunction and deviation disorders.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher or permission of the instructor

PSYC 365 Undergraduate Teaching Assistant I (1-3 Credit Hours)

This course affords students the opportunity to earn course credit for their work in supporting instructors and engaging with their peers in an undergraduate level course. It is designed for motivated and academically inclined students who wish to contribute to the educational environment and gain valuable, practical experience. Students work with instructors to identify appropriate tasks to be completed. 1-3 credits may be earned based on the number of hours involved in direct activities for the assigned class (3 credits = 9 hours per week; 2 credits = 6 hours per week; 1 credit = 3 hours per week). Students must be selected by the instructor. Positions are not guaranteed. Maximum of 6 credit hours allowed between PSYC 365 and PSYC 366.

Prerequisites: Completion of PSYC 201S with a grade of C or better, grade of B or higher in the course in which student serves as an undergraduate teaching assistant, and permission of instructor

PSYC 366 Undergraduate Teaching Assistant II (1-3 Credit Hours)

This course affords students the opportunity to earn course credit for their work in supporting instructors and engaging with their peers in an undergraduate level course. It is designed for motivated and academically inclined students who wish to contribute to the educational environment and gain valuable, practical experience. Students work with instructors to identify appropriate tasks to be completed. 1-3 credits may be earned based on the number of hours involved in direct activities for the assigned class (3 credits = 9 hours per week; 2 credits = 6 hours per week; 1 credit = 3 hours per week). Students must be selected by the instructor. Positions are not guaranteed. Maximum of 6 credit hours allowed between PSYC 365 and PSYC 366.

Prerequisites: Completion of PSYC 201S with a grade of C or better, grade of B or higher in the course in which student serves as an undergraduate teaching assistant, PSYC 365, and permission of instructor

PSYC 368 General Internship in Psychology (3 Credit Hours)

For ODU psychology majors only. Students engage in academically relevant work-related activities in non-clinical settings. Available for pass/fail grading only. Students should work with the Instructor to identify their placement in the semester prior to enrollment. A maximum of 6 credits of PSYC 368 and/or PSYC 369 can be counted towards the major in Psychology.

Prerequisites: Junior standing and permission of the instructor

PSYC 369 Clinical Internship in Psychology (3 Credit Hours)

For ODU psychology majors only. Students engage in academically relevant work activities in clinical settings. Available for pass/fail grading only. Students should work with the Instructor to identify their placement in the semester prior to enrollment. Instructor approval is required prior to registration. A maximum of 6 credits of PSYC 368 and/or PSYC 369 can be counted towards the major in Psychology.

Prerequisites: Junior standing and permission of the instructor

Corequisites: PSYC 371

PSYC 371 Clinical Supervision in Psychology (1 Credit Hour)

Students doing clinical internships at designated clinical placements must also enroll in this course taught by a faculty member. This seminar addresses the special issues in the areas of safety, confidentiality, and professionalism that arise in clinical settings. Students doing general (non-clinical) internships may also enroll in the course with permission of the Instructor. A maximum of 2 credits of PSYC 371 can be counted towards the major in psychology.

Prerequisites: Permission of the instructor

Corequisites: PSYC 369

PSYC 395 Topics in Psychology (1-3 Credit Hours)

The department offers selected topics that may not be offered on a regular basis.

Prerequisites: permission of the instructor

PSYC 396 Topics in Psychology (1-3 Credit Hours)

The department offers selected topics that may not be offered on a regular basis.

Prerequisites: permission of the instructor

PSYC 403 History of Psychology (3 Credit Hours)

A survey of the historical development of modern psychology. The major systems and their influences on contemporary American psychology are studied.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 405 Psychopathology (3 Credit Hours)

A study of psychopathology, covering various behavior disorders, their descriptions, characteristics, and causation. Methods of therapeutic technique are reviewed.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 408 Theories of Personality (3 Credit Hours)

A study of the structure of personality and the dimensions along which individuals differ. The contributions of major personality theorists and the implications of current research are considered.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 410 Human Cognition (3 Credit Hours)

An investigation of the ways in which people learn and think. Current models of human memory and cognition are considered in relation to the evidence on human thinking capabilities. The role of language in thought and knowledge acquisition is also explored.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 412 Psychological Tests (3 Credit Hours)

An examination of the history, theory and applications of psychological testing.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 413 Sensation and Perception (3 Credit Hours)

An analysis of the processes by which humans obtain information about the environment through the eyes, ears, and other sensory systems.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 414 Principles of Learning (3 Credit Hours)

Course focuses on basic learning principles and processes; classical conditioning, instrumental conditioning, discrimination, attention, appetitive and aversive conditioning.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 417 Advanced Statistics and Computer Applications (3 Credit Hours)

The course covers advanced statistical methods and computer applications that build on knowledge and skills acquired in PSYC 317.

Prerequisites: Completion of PSYC 317 with a grade of C (2.0) or higher

PSYC 420 Cross-Cultural Psychology (3 Credit Hours)

A wide variety of psychological research and theory relevant to human behavior in different cultures is examined and the impact of culture on human behavior is discussed. The course examines cross-cultural research conducted by scholars around the world. In addition to factual knowledge, emphasis is placed on critical thinking and problem solving.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 424 Physiological Psychology (3 Credit Hours)

An investigation of the biological bases of behavior including mental illness, motivation, learning, memory and language.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher

PSYC 460 Psychology of African Americans (3 Credit Hours)

This course examines the issues and perspectives related to the psychological evolution of African Americans in the United States. Particular emphasis is placed on exploring the discipline of psychology from an Afrocentric focus.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher or permission of the instructor

PSYC 487 Honors Program in Psychology (3 Credit Hours)

For ODU psychology majors only. With psychology faculty supervision, student develops an honors thesis proposal for approval by the Psychology Honors Program committee. See section on Honors Program in Psychology in this Catalog.

Prerequisites: PSYC 497; cumulative GPA of 3.25 or higher and psychology GPA of 3.50 or higher; permission of the departmental Honors Program chair

PSYC 488 Honors Program in Psychology (3 Credit Hours)

For ODU psychology majors only. With psychology faculty supervision, student conducts the supervised honors research and documents it in a thesis for approval by the Psychology Honors Program committee. Student also participates in a required seminar to discuss and present the research. See section on Honors Program in Psychology in this Catalog.

Prerequisites: PSYC 497; cumulative GPA of 3.25 or higher and psychology GPA of 3.50 or higher; permission of the departmental Honors Program chair

PSYC 489 Readings in Psychology (3 Credit Hours)

The course may be taken only once. An individualized course in which the student does library research and writes a paper.

Prerequisites: approval by supervisory faculty member and department

PSYC 490 Readings in Psychology (3 Credit Hours)

The course may be taken only once. An individualized course in which the student does library research and writes a paper.

Prerequisites: approval by supervisory faculty member and department

PSYC 494 Entrepreneurship in Psychology (3 Credit Hours)

The entrepreneurship is a course designed to help students enhance their personal and professional development through innovation guided by faculty members and professionals. It offers students an opportunity to integrate disciplinary theory and knowledge through developing a nonprofit program, product, business, or other initiative. The real-world experiences that entrepreneurs provide will help students understand how academic knowledge leads to transformations, innovations, and solutions to different types of problems.

Prerequisites: Junior standing

PSYC 495 Topics in Psychology (1-3 Credit Hours)

The department offers selected topics that may not be offered regularly. These special topics will appear in the course listing each semester.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher or permission of the instructor

PSYC 496 Topics (1-3 Credit Hours)

The department offers selected topics that may not be offered regularly. These special topics will appear in the course listing each semester.

Prerequisites: Completion of PSYC 201S with a grade of C (2.0) or higher or permission of the instructor

PSYC 497 Supervised Research (3 Credit Hours)

For ODU psychology majors only. Student and faculty supervisor develop and approve a contract of required research activities for the semester, such as attending research lab meetings, data collection, coding and/or analysis, library research, etc.

Prerequisites: GPA of 2.5 and pre-approval by psychology faculty supervisor

PSYC 498 Supervised Research (3 Credit Hours)

For ODU psychology majors only. Student and faculty supervisor develop and approve a contract of required research activities for the semester, such as attending research lab meetings, data collection, coding and/or analysis, library research, etc.

Prerequisites: GPA of 2.5 and pre-approval by psychology faculty supervisor

PUBH - Public Health

PUBH 200 Principles of Public Health (3 Credit Hours)

Overview of the principles, practices, and science of public health in the world. This course focuses on origins, evolution, structure and administration of public health science. Exploration and discussion of the core functions of public health - biostatistics, environmental sciences, epidemiology, health policy and management sciences, and social and behavioral sciences - will be instructed.

PUBH 318 Principles of Nutrition (3 Credit Hours)

Course designed especially for those entering the health education or health care field, covering the physiology of each of the major body systems as a basis for understanding those aspects of its function that reflect the importance of various nutrients.

Prerequisites: CHEM 105N-CHEM 106N or CHEM 121N-CHEM 122N and CHEM 123N-CHEM 124N; BIOL 240, BIOL 241, BIOL 250 or BIOL 251, or permission of the instructor

PUBH 320 Health Equity and Disability Culture (3 Credit Hours)

This course will explore the history of health equity and disability and how prejudice and discrimination against people with disabilities impact health. Students will learn how to apply health equity frameworks, theories, and research to address disability-specific models of health disparities and to achieve health equity in populations with disabilities.

Prerequisites: PUBH 200 with a grade of C or higher or permission of the instructor

PUBH 335 Population Health (3 Credit Hours)

This course provides a population-based approach to professional work in disease management, chronic care management and politics, in addition to students studying public health, health policy, quality and patient safety, health care administration, medicine, nursing, pharmacy, social work and other related clinical professions. The course will focus on social determinants of health to discuss approaches to improving clinical health outcomes for a range of social groups and communities.

Prerequisites: PUBH 200 with a grade of C or higher

PUBH 360 Introduction to Global Health (3 Credit Hours)

This course introduces students to health-care delivery systems of non-Western countries, specifically developing countries. The various factors that influence health-care planning and delivery of health services are addressed.

Prerequisites: PUBH 200

PUBH 390 The U.S. Healthcare Delivery System (3 Credit Hours)

The uniqueness of the U.S. healthcare delivery system will be explored in terms of a systems framework and its complexity. The basic characteristics that differentiate the U.S. healthcare delivery system from that of other countries will be presented. An understanding of the U.S. health care system has specific implications for health services managers.

Prerequisites: PUBH 200 with a grade of C or higher

PUBH 395 Topics in Public Health (3 Credit Hours)

Study of selected topics in Public Health.

Prerequisites: A declared major in the University or approval of the program director

PUBH 403W Social and Behavioral Aspects of Public Health (3 Credit Hours)

The course will emphasize the importance of social context and cultural construction, social and behavioral foundations of public health and examine current issues in health from a social and behavioral sciences perspective. The course uses a social ecological framework to address multilevel influences on health and enlarge the dominant 'risk factor' approach to health behavior. This is a writing intensive course.

Prerequisites: ENGL 110C and ENGL 211C with a C or better, PUBH 200, and PUBH 335 or HLSC 335

PUBH 405 Interprofessional Study Abroad in Public Health (3 Credit Hours)

This study abroad service learning course will introduce the student to the political, social, cultural, ethical and administration issues involved in public health, prevention and health promotion globally. Students will travel to another country and learn the incidence/prevalence, morbidity/mortality, and identified public health problems in specific regions and countries.

Prerequisites: Permission of instructor

PUBH 415 One Health-One Medicine (3 Credit Hours)

This course will teach students the applications of multidisciplinary competencies towards solving human health challenges. The course will identify all areas of global health issues that require human, veterinary and environmental applications for solutions.

Prerequisites: Junior standing or permission of instructor

PUBH 421 Leadership in Public Health (3 Credit Hours)

The course will introduce students to the main theories of leadership in public health covering key concepts and strategies using the six levels of leadership framework. The course will explore how individual, team, organizational, community, professional and global leadership impact population and public health.

Prerequisites: Junior standing or permission of instructor

PUBH 422 Health, Culture and Diversity-Reducing Disparities in Public Health (3 Credit Hours)

The course will introduce students to the main theories of culture, health and diversity and examines what is meant by culture, the ways in which culture intersects with health issues, how public health efforts can benefit by understanding and working with cultural processes, and a brief selection of conceptual tools and research methods that are useful in identifying relationships between culture and health. The course will also include practical guidelines for incorporating cultural understanding in public health settings and examples of programs where that has occurred.

Prerequisites: Junior standing or permission of instructor

PUBH 425/525 Health Aspects of Aging (3 Credit Hours)

Identifies major issues and problems in meeting health care needs of the aged. Emphasis on role of social assets and supports in determining effects of life changes on the aging process.

Prerequisites: PUBH 320, PUBH 335, and PUBH 390 or permission of the instructor

PUBH 430W/530 Community Health Resources and Health Promotion (3 Credit Hours)

Designed to provide information about community health resources. This course will focus on health administration and public health applications and is a writing intensive course.

Prerequisites: ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C with a grade of C or better and a declared major in the University or approval of the program director

PUBH 440/540 Finance and Budgeting in Healthcare (3 Credit Hours)

This course covers financial management functions in healthcare organizations including operating and capital budgeting processes along with budgeting and financial controls.

Prerequisites: Junior standing and a declared major in the BSPH Public Health, Health Services Administration programs or permission of the instructor

PUBH 445/545 Health Services Research Methods (3 Credit Hours)

This course focuses on health services research and its assessment abilities and application in health care and public health. Topics include the use of EXCEL, SAS, and SPSS to analyze data. An exploration of the issues and challenges of health services research for health related organizations and other organizations. Statistical procedures and practices will also be conducted.

Prerequisites: STAT 130M

PUBH 450/550 Public and Community Health Administration (3 Credit Hours)

A review of the principles and practice of administering public and community health organizations and programs at federal, state, and local levels. Constitutional, statutory and administrative bases for organizing and conducting public/community health programs will be discussed.

Prerequisites: A declared major in Health Services Administration or Public Health major, minor in Community Health, or permission of the instructor

PUBH 461/561 Managerial Epidemiology (3 Credit Hours)

This course will blend theory and application of epidemiology. This course will also provide a comprehensive introduction to epidemiology and explain how to use epidemiological concepts and tools to improve decisions about the management of health services.

Prerequisites: PUBH 335, PUBH 390, and a declared major in the University or approval of the program director or instructor

PUBH 465/565 Policy and Politics of Health (3 Credit Hours)

This course will explore both health policy and the politics of health. Students will develop an understanding of the systematic and analytical framework for developing health and health care policy issues.

Prerequisites: A major in Health Services Administration or Public Health, minor in Health Equity and Social Justice, or permission of the instructor

PUBH 468 Internship (1-3 Credit Hours)

The internship will allow a student new to the health administration field or public health field to complete a capstone internship to gain entry skills for a beginning career pathway in the profession. The course is intended to provide field experience and assimilation of the theoretical aspects learned in the coursework in a practical/work setting. A minimum of 200 hours is required for the 3-credit internship.

Prerequisites: Major in BS in Public Health or BSHS in Health Services Administration and senior standing

PUBH 475/575 Healthcare Marketing (3 Credit Hours)

This course provides a basic understanding of marketing in a health care setting. It will cover the following: the history of marketing in a health care setting, health care markets, marketing techniques, and leadership skills in managing and supporting the marketing efforts.

Prerequisites: A declared major in the University or approval of the instructor or program director

PUBH 480/580 Health Ethics and the Law (3 Credit Hours)

This course provides the students with a basic knowledge of health law and examines legal issues confronting health services administrators in various health care environments.

Prerequisites: A declared major in the BSPH Public Health, Health Services Administration program or permission of the instructor

PUBH 485 Public Health Informatics (3 Credit Hours)

This course focuses on healthcare informatics (information systems) and applications in health care organizations. It provides an overview of health information system concepts, management, and integration of technology in healthcare organizations.

Prerequisites: For Public Health or Health Services Administration majors, or permission of the instructor

PUBH 495/595 Topics in Public Health (1-3 Credit Hours)

This course provides the opportunity for the study of selected topics in public/community health or health administration, including informatics, under the supervision of a faculty member.

Prerequisites: Permission of the instructor

PUBH 498 Directed Research in Public Health and Health Services Administration (1-6 Credit Hours)

Supervised research on a specific problem in health services administration or public health. Regular meetings with faculty and a written/oral report are required.

Prerequisites: Permission of the instructor

QUST - Queer Studies

QUST 302W Dimensions of Diversity: Intersectionality Among Women (3 Credit Hours)

This course explores the intersections of gender, race, class, and sexuality within society; it examines how identity has been a key site for generating knowledge and political action. Students will learn the histories and nuances of topics such as intersectionality, privilege, allyship, and cultural appropriation. Finally, the course will examine how concepts such as 'diversity' are mobilized in relation to different institutions, such as the law and education. This is a writing intensive course.

Prerequisites: WGS 201S, a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, and 6 semester hours in literature, history, social sciences, and/or performing arts courses

QUST 303 Queer Studies (3 Credit Hours)

This course is an interdisciplinary study of LGBTQ+ (lesbian, gay, bisexual, transgender, queer) experiences. It introduces students to personal, cultural, and political aspects of queer life while examining social forces such as heteronormativity, the social construction of gender, and homophobia and their impact on queer lives.

Prerequisites: WGS 201S or instructor approval

QUST 305 Queer Literature (3 Credit Hours)

This course provides a historical sampling of queer literary voices in the U.S. Students explore fiction, poetry, drama, and visual literary forms through the lens of queer theory. Students investigate the ways in which queer authors and subjects have been excluded from the traditional canon and how readers, academics, critics, and authors of anthologies have ignored or obscured queer possibilities and homoeroticism in literary works. Students also explore the benefits of thinking of queer literary works as queer literatures (in the plural sense rather than the singular Queer Literature) and attempt to answer the question, is there such a thing as Queer Literature?

Prerequisites: ENGL 112L, ENGL 114L, or WCS 100L

QUST 395 Topics in Queer Studies (1-3 Credit Hours)

A study of selected topics in Queer Studies. These courses are usually interdisciplinary and align with faculty teaching and research strengths.

Prerequisites: WGS 201S or instructor approval

QUST 402 Feminisms and Sexualities (3 Credit Hours)

This course will examine feminist approaches to the subject of sexuality in the twentieth and twenty-first centuries. The course examines theorizations of sexuality, such a radical, critical race, and transnational feminisms, queer theory, and trans studies. Key questions will be: how have feminists theorized sexualities? What does sexuality have to do with feminist studies or practices? How do other identities, such as race and class, inform sexuality?

Prerequisites: WGS 201S, WGS 390T or instructor approval

QUST 460W Feminist and Queer Theory (3 Credit Hours)

This course will examine feminist and queer theories, specifically intersectional, transnational, and radical perspectives. It explores how feminist and queer scholars approach research, writing, and knowledge production, and applies these insights to students' own interests. The course analyzes how feminist and queer scholars have written about storytelling, the body, and desire, and links these discussions to how to produce positive social change in our world. This course is fundamentally interdisciplinary; students are encouraged to make connections between the course materials, their research interests, and other fields of study. This is a writing intensive course.

Prerequisites: WGS 201S, QUST 302W or WGS 302W, and a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C

QUST 495 Topics in Queer Studies (3 Credit Hours)

Advanced seminars on selected topics. The subject matters is usually interdisciplinary and aligns with faculty teaching and research strengths.

Prerequisites: WGS 201S or instructor approval

QUST 497 Independent Study (1-6 Credit Hours)

Independent study of an interdisciplinary topic in Queer Studies, or a reading plus internship project to be selected under the direction of a faculty member. Conferences and papers as appropriate.

Prerequisites: QUST 303 or WGS 303 and approval of instructor and chair of department

QUST 498 Independent Study (1-6 Credit Hours)

Independent study of an interdisciplinary topic in Queer Studies, or a reading plus internship project to be selected under the direction of a faculty member. Conferences and papers as appropriate.

Prerequisites: QUST 303 or WGS 303 and approval of instructor and chair of department

REL - Religious Studies

REL 131 Introductory Greek for Reading the New Testament I (3 Credit Hours)

An introductory course in Koine Greek, the language of the New Testament, for those interested in preparing for academic or personal study of early Christianity or the New Testament in the language in which the documents were written. Does NOT satisfy any foreign language requirement at Old Dominion University.

REL 132 Introductory Greek for Reading the New Testament II (3 Credit Hours)

An intermediate course in Koine Greek, the language of the New Testament, for those interested in preparing for academic or personal study of early Christianity or the New Testament in the language in which the documents were written. Does NOT satisfy any foreign language requirement at Old Dominion University.

Prerequisites: REL 131 or permission of the instructor

REL 147G Cults and Conspiracies (3 Credit Hours)

This course will explore why people believe conspiracy theories and why people become dedicated to religious cults or new religious movements, and will provide training in tools and strategies for examining truth claims of various groups.

REL 150P Life, Death, and Meaning (3 Credit Hours)

What is the meaning of life, and what role might the end of life play in living meaningfully? This course provides an introduction to philosophy and religious studies through an investigation of different views on death and the meaning of life from diverse cultures and identities. (Cross-listed with PHIL 150P)

REL 155E Human Nature (3 Credit Hours)

What ways of thinking, feeling, and acting are essentially human? This course focuses on some of the most influential and fascinating philosophical and religious accounts of human nature from diverse cultural perspectives. Topics may include the nature of human beings in relation to God, society, ethics, politics, knowledge, the environment, freedom, evolution, the mind, language, race, gender, and technology. (Cross-listed with PHIL 155E)

REL 226G Honors: Muslims & Media (3 Credit Hours)

Open only to students in the Honors College. A special honors section of REL 260G.

REL 235E Love, Sex, and Desire (3 Credit Hours)

Is love universal or culturally bound? Is sexual desire biologically driven or learned? This course provides an introduction to Philosophy and Religious Studies through an investigation of love, sex, and desire vis-a-vis ethical values and societal norms. (Cross-listed with PHIL 235E)

REL 260G Muslims & Media (3 Credit Hours)

Television, film, and journalism play an influential role in introducing Muslim life to broad audiences. This course provides an introduction to the representation of Islam in news and popular culture over the past century. In examining the relationship between Muslims and media we will develop information literacy skills and learn how to critically evaluate and interpret these sources.

REL 311 Hebrew Bible/Old Testament (3 Credit Hours)

An investigation of the Hebrew Bible on the basis of Biblical criticism and research. Attention is given to the cultural and historical background of these writings.

Prerequisites: junior standing and three semester hours in philosophy, or permission of the instructor

REL 312 New Testament (3 Credit Hours)

An investigation of New Testament literature and thought on the basis of Biblical criticism and research. Attention is given to the religious and cultural background of early Christianity, particularly in late Judaism.

Prerequisites: junior standing and three semester hours in philosophy, or permission of the instructor

REL 315 Qur'an (3 Credit Hours)

The course will examine the Qur'an, the scripture of Islam, as well as other sacred texts such as the Hadith literature (sayings of Muhammad) and the Sira literature (accounts of Muhammad's life). This course will explore the role of these literatures in the faith, culture, and history of Islam. Our survey will include explorations of the history and reception of various texts, their literary and stylistic features, and various themes such as mystical, legal, modern, and feminist interpretations.

Prerequisites: ENGL 110C

REL 333 Historical Jesus (3 Credit Hours)

This course examines the several quests to uncover the historical reality behind Jesus of Nazareth in modern biblical-historical scholarship, including the work of scholars like Albert Schweitzer, Rudolph Bultmann, and the many contemporary inquirers. Students are expected to have some familiarity with the New Testament and/or early Christianity.

Prerequisites: Junior standing and three semester hours in REL or PHIL

REL 350 Judaism (3 Credit Hours)

This course is a basic introduction to Judaism. We will explore the fundamental tenets of Jewish belief, examine primary expressions of Jewish ritual and practice, discuss the historical development of Judaism, and explore sacred texts, secular Yiddish texts, and contemporary issues confronting Jews and Judaism.

Prerequisites: ENGL 110C

REL 351 Christianity (3 Credit Hours)

A study of the Christian tradition, including its primary texts, historical development, intellectual tenets, and contributions to human culture. Specific attention will be given to Christianity as a way of life.

Prerequisites: three semester hours in philosophy or permission of the instructor

REL 352 Islam (3 Credit Hours)

A study of the Islamic tradition, including its primary texts, historical development, intellectual tenets, and contributions to human culture. Specific attention will be given to Islam as a way of life.

Prerequisites: three semester hours in philosophy or permission of the instructor

REL 353 Asian Religions (3 Credit Hours)

This course introduces students to several key religious traditions originating in Asia, such as: Hindu traditions in India; Confucianism, Daoism, and popular religion in China, Buddhism and Shinto in Japan; and Buddhist traditions of China, Tibet, and Mongolia. Students will read and analyze primary sources in English translation. By examining artifacts from literature, art, and poetry, students will also learn about cultural history. Throughout the course, we will be employing hermeneutical methods in the field of religions studies, such as methods of comparisons.

Prerequisites: ENGL 110C and 3 credits of PHIL or REL, or permission of the instructor

REL 354 African and African American Religious Traditions (3 Credit Hours)

This course surveys key historic and contemporary religions and socio-religious ideas that help shape African and African American life, culture and practices. It also reflects on culture and practice to discover ways in which lived experience shapes religious thought and practice.

Prerequisites: ENGL 110C and 3 credits of PHIL or REL, or permission of the instructor

REL 380 Hinduism (3 Credit Hours)

An intensive study of the basic teachings of Hinduism as manifested in its sacred writings.

Prerequisites: ENGL 110C and 3 credit hours in PHIL or REL, or permission of instructor

REL 381 Buddhist Traditions (3 Credit Hours)

A study of the origin, historical development, and contemporary status of Buddhism, in terms of its religious and philosophical elements and its influence in Asian cultures.

Prerequisites: ENGL 110C and 3 credit hours in PHIL or REL, or permission of instructor

REL 395 Topics in Religious Studies (3 Credit Hours)

The advanced study of selected topics designed to permit qualified students to work on subjects that, because of their specialized nature, may not be taught regularly. These courses will appear in the course schedule booklet and will be more fully described in information distributed to all academic advisors.

Prerequisites: 3 hours in PHIL or permission of the instructor

REL 396 Topics in Religious Studies (3 Credit Hours)

The advanced study of selected topics designed to permit qualified students to work on subjects that, because of their specialized nature, may not be taught regularly. These courses will appear in the course schedule and will be more fully described in information distributed to all academic advisors.

Prerequisites: three hours in PHIL or REL or permission of the instructor

REL 403/503 Gender and Sexuality in Islam (3 Credit Hours)

This course explores the shifting constructions of gender and sexuality in Muslim communities from the early period until the present, considering feminism, patriarchy, gender identity, masculinity, femininity, homosexuality, heteronormativity, and transgender people.

Prerequisites: ENGL 211C, ENGL 221C or ENGL 231C, and three credit hours in PHIL or REL, or permission of the instructor

REL 451/551 Native American Philosophies (3 Credit Hours)

This course will provide students with an introduction to Native American philosophies with a focus on issues of identity, genocide, personhood, gender, sovereignty, and decolonization. Topics will be approached through a consideration of Native American philosophical methodologies and Native views regarding metaphysics, epistemology, and ethics. (Cross-listed with PHIL 451)

Prerequisites: ENGL 110C and 3 credit hours in PHIL or REL, or permission of instructor

REL 483/583 Tibet, Happiness, and this Precious Life (3 Credit Hours)

Throughout this course, students will examine Tibetan texts and artifacts that address the meaning of happiness and the human condition. The course covers the indigenous religion Bön; the four main Tibetan Buddhist traditions (Nyingma, Sakya, Kagyu, and Geluk), Islam in Tibet, and contemporary social issues, such as gender, identity politics, and the use of social media.

Prerequisites: ENGL 110C and 3 credit hours in PHIL or REL, or permission of the instructor

REL 495/595 Topics in Religious Studies (1-3 Credit Hours)

The advanced study of selected topics designed to permit qualified students to work on subjects that, because of their specialized nature, may not be taught regularly. These courses will appear in the course schedule and will be more fully described in information distributed to all academic advisors.

Prerequisites: 3 hours in PHIL or REL or permission of the instructor

REL 496/596 Topics in Religious Studies (1-3 Credit Hours)

The advanced study of selected topics designed to permit qualified students to work on subjects that, because of their specialized nature, may not be taught regularly. These courses will appear in the course schedule and will be more fully described in information distributed to all academic advisors.

Prerequisites: three hours of PHIL or REL or permission of the instructor

REL 497/597 Tutorial Work in Religious Studies (1-3 Credit Hours)

Independent reading and study of a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: permission of the instructor

REL 498/598 Tutorial Work in Religious Studies (1-3 Credit Hours)

Independent reading and study of a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: permission of the instructor

REST - Real Estate

REST 319 Principles of Real Estate (3 Credit Hours)

The fundamentals of real estate productivity and value are developed. Legal elements of real estate transactions, physical aspects of real estate location and production, and economic factors pertinent to real estate.

Prerequisites: A declared major in the University or permission of the Dean's Office

REST 368 Real Estate Internship (1-3 Credit Hours)

A faculty supervised, professionally oriented project. Approval for enrollment and allowable credits is determined by the department chair.

A transfer student must have completed one semester at Old Dominion University.

Prerequisites: A declared major in the Strome College of Business or permission of the Dean's Office

REST 450 Real Estate Finance (3 Credit Hours)

This course explores the different financing and ownership arrangements used in real estate transactions.

Prerequisites: REST 319 or permission of the instructor

REST 451 Real Estate Appraisal (3 Credit Hours)

Economic theories of value applied to real estate as a guide to business decisions.

Prerequisites: REST 319 or permission of the instructor

REST 452 Real Estate Property Management (3 Credit Hours)

The course offers an introduction to the role that real estate property management plays, and also indirectly, to make students aware of the career opportunities available. The class emphasizes the role of property management on asset value. This is considered from a range of perspectives. Not only is the role of asset management in adding value to an investment considered but the corporate/occupiers viewpoint is also examined.

Prerequisites: REST 319

REST 454 Real Estate Investment Analysis (3 Credit Hours)

Examination of developments in real estate valuation and investment with use of computer terminal models.

Prerequisites: REST 319 or permission of the instructor

REST 495 Selected Topics in Real Estate (3 Credit Hours)

For advanced students in real estate.

Prerequisites: REST 319 or permission of the instructor

RMI - Risk Management and Insurance

RMI 317 Principles of Risk Management and Insurance (3 Credit Hours)

Recommended elective for non-business as well as business majors. The primary focus of this introductory course is on evaluating life, health, retirement, property, liability and personnel exposures to loss and analyzing the methods for managing these risks. Risk management and insurance techniques for dealing with potential losses to individuals and organizations will be emphasized. Classwork and a group project will also cover emerging risks, such as cyber risk, and technologies disrupting the industry. Students receiving a B or better in this course can have it count as the CPCU 500 course of the Chartered Property-Casualty Underwriter (CPCU) professional designation.

Prerequisites: A declared major in the University or permission of the Dean's Office of the Strome College of Business

RMI 367 Cooperative Education (1-6 Credit Hours)

Available for pass/fail grading only. May be repeated for credit up to a maximum of 6 credits. Approval for enrollment and allowable credits are determined by the risk management and insurance advisor in accordance with the policy for granting credit for Cooperative Education programs.

Prerequisites: A declared major in the University or permission of the Dean's Office

RMI 368 Insurance Internship (1-3 Credit Hours)

A faculty supervised, professionally oriented project. Approval for enrollment and allowable credits is determined by the Risk Management advisor. A transfer student must have completed one semester at Old Dominion University.

Prerequisites: A declared major in risk management and approval of the Risk Management advisor

RMI 410 Life and Health Insurance (3 Credit Hours)

This course uses a broad-based financial planning approach in considering the nature and importance of individual life and health risks and uses of individual life and health insurance in treating these risks. The implications of various legal, tax, and accounting considerations on businesses and individuals are discussed. The course also provides an overview of the operational aspects of life insurers, including organization, underwriting, actuarial, reinsurance, marketing, investment, taxation, and accounting functions. Cases are employed.

Prerequisites: RMI 317 or permission of the instructor

RMI 411 Employee Benefit Planning (3 Credit Hours)

This course considers the ability of group insurance and other private pooling mechanisms to alleviate the financial problems arising from death, disability, medical treatment and retirement. Primary emphasis on design, tax and administrative characteristics as they relate to employer-sponsored benefit programs. Cases are employed.

Prerequisites: RMI 317 or permission of the instructor

RMI 412 Property & Liability Insurance Company Operations (3 Credit Hours)

The course provides a broad overview of the operational activities and current problems of property and liability insurance companies, including organization, regulation, pricing, underwriting, claims, reinsurance, marketing, investment, and accounting functions. Classwork and a group project will also cover emerging risks, such as cyber risk, and technologies disrupting the industry. Students receiving a B or better in this course can have it count as the CPCU 520 course of the Chartered Property-Casualty Underwriter (CPCU) professional designation.

Prerequisites: RMI 317 or permission of the instructor

RMI 413 Risk Analysis and Control (3 Credit Hours)

Recommended elective for non-business as well as business majors. This course focuses on the risk analysis and control phases of the risk management process in business and governmental organizations. Particular attention is paid to the recognition, measurement, and treatment of traditional and emerging risks, risk financing options other than commercial insurance, and decision making under conditions of uncertainty. Classwork and a group project will also cover emerging risks, such as cyber risk, and technologies disrupting the industry.

Prerequisites: RMI 317 or equivalent or permission of the instructor

RMI 443 Enterprise Risk Management (3 Credit Hours)

This course is designed as a capstone course for students majoring or minoring in risk management and insurance. The class will be introduced to all aspects of enterprise risk management (ERM), which is the emerging paradigm in risk management. Classwork and a group project will also cover emerging risks, such as cyber risk, and technologies disrupting the industry.

Prerequisites: RMI 317 and either RMI 412 or RMI 413 or permission of instructor

RMI 495 Selected Topics in Risk Management and Insurance (3 Credit Hours)

For advanced students in risk management and insurance.

Prerequisites: Permission of the instructor

RT - Recreational Therapy

RT 210 Leisure, Health, and Wellness (3 Credit Hours)

This course focuses on the concept of leisure and its impact on health and wellness for individuals and groups. Fundamental principles, philosophies, and theories of leisure, health, and wellness are emphasized. Leisure's relationships with physical, cognitive, social, emotional, and spiritual growth, human satisfaction, and quality of life are explored. Leisure's influence on challenges to wellness experienced by diverse populations (e.g., individuals with disabilities, older adults, racial and ethnic groups, individuals identifying as LGBTQIA+) is examined. Strategies for protecting and promoting health through leisure are integrated throughout the course.

Pre- or corequisite: RT 261

RT 261 Foundations of Recreational Therapy Practice (3 Credit Hours)

This course is designed to be an introduction to the historical and conceptual roots of recreational therapy. Content includes recreational therapy service delivery models, legislation, professional organizations, places of practice, ethical conduct, and credentialing procedures.

RT 290 Professional Preparation in Recreational Therapy (3 Credit Hours)

This course is designed to facilitate personal exploration and professional preparation for careers in recreational therapy. Topics include professional ethics, professional involvement, professional behaviors & responsibilities, and career preparation. On-site observation of recreational therapists in practice settings is required.

Prerequisites: RT 261 with a minimum grade of C- and recreational therapy major

RT 366 Internship Preparation (1 Credit Hour)

This course is designed to provide students with the skills and knowledge required to successfully acquire an internship placement in recreational therapy. Emphasis will be placed on resume and cover letters, internship search strategies, interviewing skills, and internship documentation requirements. Students are required to become familiar with all documentation requirements in the Recreational Therapy Internship Manual, and successfully secure an internship for the following semester.

Prerequisites: RT 261 with a minimum grade of C-, senior standing, and a recreational therapy major

RT 368 Junior Internship (3 Credit Hours)

This course requires a 200-hour junior internship experience at an approved health and human service agency in which students are involved with ongoing recreational therapy programs. Students are expected to observe and assist recreational therapy staff during this field experience. Students must be supervised by a Certified Therapeutic Recreation Specialist (CTRS) working for the agency.

Prerequisites: Junior standing, RT 261 with a minimum grade of C-, RT 290, RT 420, RT 450, and a declared recreational therapy major

RT 420 Intervention Techniques in Recreational Therapy (4 Credit Hours)

This course is designed to introduce students to a wide variety of Recreational Therapy interventions. Students will explore physical, cognitive, and psychosocial interventions. Facilitation techniques, activity modification, and group facilitation will be explored. Students will connect diagnostic groups to specific Recreational Therapy interventions. Students will facilitate group recreational therapy interventions during lab.

Prerequisites: RT 261 with a minimum grade of C-, recreational therapy major or minor, junior or senior standing, and a declared major in the university

RT 430 Assessment, Documentation, and Evaluation in Recreational Therapy (3 Credit Hours)

This course will provide students with a detailed examination of assessment, documentation, and evaluation procedures used in the recreation therapy treatment process. Course focus includes the assessment and documentation process, including instrument design, selection, and implementation, and the reporting and use of data for treatment planning and program evaluation.

Prerequisites: RT 261 with a minimum grade of C-, recreational therapy major or minor, junior or senior standing, and a declared major in the university

RT 450 Diagnostic Groups in Recreational Therapy (3 Credit Hours)

This course is designed to introduce students to a variety of disabilities, illnesses, and health conditions recreational therapists may encounter in practice. The prevalence, etiology, diagnostic criteria, pathology, symptomatology, and prognosis of various conditions is presented, and the bio-psycho-social impact of the illness/disability on the individual and family is discussed. Emphasis is placed on the delivery of recreational therapy services for individuals with illnesses/disabilities and related populations.

Prerequisites: RT 261 with a minimum grade of C-, recreational therapy major or minor, junior or senior standing, and a declared major in the university

RT 460 Administration of Recreational Therapy Services (3 Credit Hours)

This course explores the basic principles of organizing and managing quality recreational therapy services. Content includes supervisory and administrative responsibilities, budgeting, managing personnel including student interns and volunteers, developing a clinical supervision program, marketing recreational therapy services, and developing a recreational therapy department based on professional standards of practice and recreational therapy models of service delivery.

Prerequisites: RT 261 with a minimum grade of C-, recreational therapy major or minor, junior or senior standing, and a declared major in the university

RT 468 Senior Internship (12 Credit Hours)

This capstone course requires a 560-hour and 14-week senior internship experience at an approved health and human service agency practicing recreational therapy. Students will apply academic learning and will demonstrate competencies associated with entry-level practice in recreational therapy. The student's academic and agency direct supervisors must be Certified Therapeutic Recreation Specialists.

Prerequisites: Senior standing and permission of instructor

RT 470 Recreational Therapy Program Design and Implementation (3 Credit Hours)

This skill-based course is designed to further students' practical understanding of client-centered recreational therapy program design and implementation using evidence-based strategies, techniques, and interventions. Emphasis is placed on the purpose, roles, and outcomes of recreational therapy service delivery in healthcare and community settings. Topics include assessment, recreational therapy practice models, specific program planning, task analysis, facilitation techniques, implementation of evidence-based interventions, documentation, and evaluation of services as well as interprofessional practice. Field-based application of course concepts is required.

Prerequisites: RT 261 with a minimum grade of C-, recreational therapy major or minor, junior or senior standing, and a declared major in the university

Pre- or corequisite: RT 420 and RT 450

Corequisites: RT 480W

RT 480W Evidence-Based Practice and Trends in Recreational Therapy (3 Credit Hours)

This course provides an overview of evidence-based practice and related disciplinary writing in recreational therapy contexts. Through exploration of current trends and issues in the field of therapeutic recreation and a writing intensive approach, students develop skills in evaluating and interpreting research and applying applicable findings through evidence-based practice, service to the field, and professional advocacy. This is a writing intensive course.

Prerequisites: ENGL 211C or ENGL 231C; RT 261 with a minimum grade of C-, recreational therapy major or minor, junior or senior standing, and a declared major in the university

Pre- or corequisite: RT 420 and RT 450

Corequisites: RT 470

RT 497 Independent Study (1-3 Credit Hours)

Individualized instruction to include research, specialized studies, or other scholarly writing.

Prerequisites: Declared recreational therapy major and permission of instructor

RT 498 Directed Research in Recreational Therapy (1-6 Credit Hours)

Supervised research on a specific problem in recreational therapy. Regular meetings with faculty and a written/oral report are required.

Prerequisites: Instructor approval required

RUS - Russian

RUS 101F Beginning Russian I (3 Credit Hours)

Aural comprehension, oral drill and discussion of grammar principles, written exercises, and reading assignments.

RUS 102F Beginning Russian II (3 Credit Hours)

Aural comprehension, oral drill and discussion of grammar principles, written exercises, and reading assignments.

Prerequisites: RUS 101F

RUS 195 Topics in Russian (1-3 Credit Hours)

A study of selected topics designed as electives. These courses will appear in the course schedule. Highly interactive.

RUS 196 Topics in Russian (1-3 Credit Hours)

A study of selected topics designed as electives. These courses will appear in the course schedule. Highly interactive.

RUS 201 Intermediate Russian I (3 Credit Hours)

Graded readings with grammar review followed in the second semester by an introduction to Russian literature.

RUS 202 Intermediate Russian II (3 Credit Hours)

Graded readings with grammar review followed in the second semester by an introduction to Russian literature.

Prerequisites: RUS 201

RUS 295 Topics in Russian (1-6 Credit Hours)

A study of selected topics designed as electives. These courses will appear in the course schedule.

RUS 296 Topics in Russian (1-3 Credit Hours)

A study of selected topics designed as electives. These courses will appear in the course schedule.

RUS 305 Contemporary Russian Conversation (3 Credit Hours)

A study of selected dialogues emphasizing the spoken language and designed to improve oral proficiency and aural comprehension.

Prerequisites: RUS 202 or advanced placement

RUS 395 Topics in Russian (1-3 Credit Hours)

A study of selected topics designed as electives. These courses will appear in the course schedule.

Prerequisites: RUS 202 or the equivalent

SCI - Sciences

SCI 101 Introduction to the College of Sciences (1 Credit Hour)

Presents the relationship between majors in the College of Sciences and the student's career goals for students planning to major in a science. Provides an orientation to the University emphasizing the learning skills needed for science majors.

SCI 195 Topics (3 Credit Hours)

Topics of study that are not offered regularly.

SCI 302T The Evolution of Modern Science (3 Credit Hours)

This course outlines the history of science from Aristotle to the present. Scientific progress has always been coupled with human progress and subject to the politics and culture of the times. Scientists, in most instances, have been in the mainstream of society. But, because of their curiosity and innovation, scientists have often clashed with the prevailing culture. (Cross-listed with HIST 386T).

Prerequisites: HIST 100H, HIST 101H, HIST 102H, HIST 103H, HIST 104H, or HIST 105H

SCI 347 Responsible Conduct of Research (1 Credit Hour)

Responsible conduct of research is essential to good science and promoting public confidence in scientific knowledge. This course will introduce students to responsible conduct of science and scientific research by exploring ethical and professional principles associated with the practice of research.

Prerequisites: Junior standing

SCI 395 Special Topics (1-3 Credit Hours)

Topics of study that are not offered regularly.

Prerequisites: permission of the instructor

SCI 468 Research Methods in Math and Sciences (3 Credit Hours)

Emphasizes the tools and techniques used to solve scientific problems. Topics include use and design of experiments, use of statistics to interpret experimental results, mathematical modeling of scientific phenomena, and oral and written presentation of results. Students will perform four independent inquiries, combining skills from mathematics and science to solve research problems.

Prerequisites: BIOL 307, BIOL 308 or BIOL 316/BIOL 317 OR CHEM 321 OR MATH 212 OR OEAS 306 or OEAS 310 OR PHYS 232N

SCI 495 Topics (1-3 Credit Hours)

Topics that are not offered regularly.

Prerequisites: permission of the instructor

SCLM - Supply Chain, Logistics, and Maritime Operations

SCLM 201 Introduction to Spreadsheet Applications (1 Credit Hour)

The spreadsheet has become one of the most widely used analytical tools in the modern world. This course introduces students to the use of spreadsheet (e.g., MS Excel). Topics include: formulas, functions, sorting and filtering, and pivot tables. Besides the spreadsheet capabilities, the course will cover spreadsheet applications in the supply chain, logistics and maritime industry.

SCLM 202 Data-Driven Decision Making in Supply Chain and Maritime Operations (3 Credit Hours)

An introductory study of analytics applications in supply chain, logistics and the maritime industry using MS Excel and Tableau. Generic topics include understanding the problem-solving process, data visualization, descriptive and predictive analytics applications in supply chains. Spreadsheet applications in maritime transportation/logistics, sourcing, and scheduling offer an introductory overview of forecasting and optimization techniques

SCLM 204 Fundamentals of Global Supply Chain Management (3 Credit Hours)

An introductory course in supply chain and logistics. Topics cover strategic, tactical and operational issues in planning, implementing, and controlling end-to-end fulfilment of globally produced goods and/or services using the SCOR model. The pedagogy also superimposes analytics with strategic outcomes to facilitate prudent, data-driven decision making across supply chains.

SCLM 301 Supply Chain Analytics (3 Credit Hours)

A survey of analytics applications in supply chain and logistics, emphasizing the use of data to inform business decision-making. Students work in teams to analyze data using the five broad areas of analytics, namely data mining, statistical inference, forecasting, simulation and optimization using a wide array of examples from scheduling, location modeling, transportation, transshipment, and process improvement. Students also gain experience with effective communication of results to decision-makers.

Prerequisites: SCLM 201

SCLM 303T Maritime Leadership, Technology, and Society (3 Credit Hours)

This course introduces students to the intersections between maritime leadership, technology, and society. It will explain the important elements of the marine transportation and technological systems, which consist of waterways and ports that allow for various modes of transportation to move people and goods to, from, and on the water. Specific topics include an introduction to different types of cargo, how cargo is moved, ship types, ship equipment, ship routes, basic navigation and ship stability, emerging industries including offshore wind and autonomous systems, maritime law, maritime safety, and leadership.

Prerequisites: ENGL 110C

SCLM 304 Operations in a Global Environment (3 Credit Hours)

This course examines strategic, tactical and operational issues in the planning and control of manufacturing and service delivery operations in an increasingly globalized world. This course examines such topics as process design, capacity, materials planning and control, inventory decisions, location and layout, quality and scheduling.

Prerequisites: STAT 130M

SCLM 311 Project Management in Supply Chain & Logistics Operations (3 Credit Hours)

This course will examine the intersection of project/program management and supply chain operations with an introduction to key project management concepts including scope, schedule, and budget. Students will gain a deeper understanding of how improving logistical processes can enhance products, processes and services while providing value to supply chain stakeholders. The course will emphasize team building, leadership and negotiation skills for successful project execution.

Prerequisites: SCLM 204

SCLM 368 Internship in Supply Chain, Logistics, and Maritime Operations (3 Credit Hours)

Practical field experience in a Supply Chain, Logistics and Maritime Operations related project through a supervised internship.

Prerequisites: Permission for enrollment and allowable credit by the School's Director in the semester prior to enrollment

SCLM 370 Global Logistics (3 Credit Hours)

The course examines international logistics and terms for movement of goods and analyzes how companies enter into foreign markets and participate in international trade. It discusses processes and concepts involved in domestic and international multimodal transportation. It also covers operational issues such as payment, commercial documents, insurance, and customs.

Prerequisites: Junior standing

SCLM 380 Multimodal Freight Transportation (3 Credit Hours)

The course includes an overview of the key elements of multimodal freight transportation. It examines modes of transportation, transportation economics, and transportation technology, as well as costing and pricing for transportation. The relationships between intermediaries (including third party-logistics companies), carriers, and shippers are discussed. It also provides an overview for transportation risk, transportation software as well as issues on global logistics.

Prerequisites: SCLM 370

SCLM 410 International Maritime and Transportation Law and Policy (3 Credit Hours)

The logistics activities are increasingly global and are influenced by a system of national and international laws. This complex industry requires an understanding of the regulations and legislation for freight transportation flows. This course will cover domestic and international supply contracts for freight cargo, Incoterms, international law of the sea, maritime jurisdiction, regulation of shipping, carriage of goods, cargo and marine insurance, salvage, marine environmental law, safety at sea, along with other relevant transportation laws.

Prerequisites: Junior standing

SCLM 414 Maritime Operations (3 Credit Hours)

This course covers the operation of assets related to maritime transportation, including seaports, vessels fleets in the movement of cargo domestic and international cargo. It presents concepts related to organization and operation of ports. It discusses issues involved in planning, investment, communication systems, congestion, pollution, safety, security; intermodal transportation; water and land accessibility; and port competition and cooperation. Examines freight shipping organizations operations. Topics include vessel fleet, shipping markets, operations, costs, insurance, and regulations; and ship types, safety, role of the flag state, pollution, chartering and purchase, and understanding of the shipbuilding and ship repair market.

Prerequisites: SCLM 370

SCLM 415/515 Maritime and Supply Chain Safety and Security (3 Credit Hours)

This course examines methods to anticipate threats and mitigation strategies for securing the supply chain and increasing its resilience. It provides an overview of international and U.S initiatives to ensure the security of logistics assets, cargo, people, and infrastructure within the maritime and supply chain domain. The course also addresses threats to the international trade (including maritime piracy, terrorism, cyber threats), and state-of-the-art techniques and tools for protecting the industry against cyberattacks, as well as roles and responsibilities of the supply chain actors.

Prerequisites: Junior standing

SCLM 419/519 Maritime and Supply Chain Risk and Insurance (3 Credit Hours)

This course examines the risks associated with supply chain operations, including aspects of identification, analysis, assessment, response, and control of the risks associated with the transportation and storage of goods. It covers risk assessment as a function of threats, vulnerabilities, and consequences for operational performance for all modes of transportation. Topics include Lloyd's and the London Insurance Market, principles of insurance and law, international liability conventions, institute clauses, exclusions, cargo policies, particular and general average, and salvage insurance.

Prerequisites: SCLM 370

SCLM 430 Global Sourcing and Supply Market Analysis (3 Credit Hours)

This course offers a strategic overview of sourcing materials and services within the supply chain, covering the evolution from purchasing to supply management. Topics include sourcing analytics, supplier evaluation, global risk, and ethical sourcing. Students will develop negotiation, analytical, and communication skills through experiential learning, including consulting projects, case studies and role-playing exercises, to master both conceptual and practical aspects of global sourcing.

Prerequisites: SCLM 204

SCLM 442/542 Supply Chain and Maritime Intelligence (3 Credit Hours)

This course examines the performance metrics of the supply chain, including item tracking and visibility of the whole chain, including control tower approaches. It covers the importance of supply chain information collection, real-time data sharing and basic analytics tools to evaluate and improve the degree of execution of the supply chain and generating insights. Topics include monitoring supply chain processes, end-to-end visibility, collaborative supply chain networks, data integration, and data visualization.

Prerequisites: SCLM 301

SCLM 443 Building Sustainable Supply Chains (3 Credit Hours)

This course examines the environmental impact of supply chain activities, including environmental measurements and strategies to achieve carbon neutrality. Topics include green network distribution, sustainable sourcing operations, and circular supply chains.

Prerequisites: Junior standing

SCLM 450/550 Supply Chain 4.0 Technologies and Innovations (3 Credit Hours)

This course examines the role of technology within the supply chain and how these technologies can be used to improve supply chain performance. Topics include AI, blockchain and smart contracts, IoT and digital twins, Large Language models (LLM), automation and robotics, digital supply chain transformation, machine learning in supply chain, anti-hacking technologies, autonomous vehicles, and additive manufacturing, among others.

Prerequisites: SCLM 202 and SCLM 204

SCLM 461/561 Warehousing, Distribution and Material Management (3 Credit Hours)

This course is designed to investigate the strategic role of warehouses, distribution centers and material management in domestic and global supply chains. Course content includes the analysis of distribution center operations through the study of warehouse design and layout, material handling systems and equipment, distribution network design, warehouse processes, order-picking strategies, inventory control, and safety.

Prerequisites: SCLM 370

SCLM 471 Port and Terminal Operations (3 Credit Hours)

Examines the role of seaports in the movement of cargo throughput. It presents concepts related to design, organization, administration, and operation of ports. It discusses issues involved in planning, investment, communication systems, congestion, pollution, safety, security, technology; intermodal transportation; water and land accessibility; and port competition and cooperation to improve customer service.

Prerequisites: SCLM 370

SCLM 472/572 Vessel Fleet Operations (3 Credit Hours)

Examines the operations of freight shipping organizations involved in the transport of cargo by ship. Key topics are vessel fleets and ship space; shipping markets, operations, costs, investment, insurance, claims, and regulation; and ship types, cargoes, safety, flagging, pollution, and chartering, purchase and scrapping.

Prerequisites: SCLM 370

SCLM 473/573 Inland Waterways and Dredging Operations (3 Credit Hours)

This course is designed to explore and analyze the current condition of inland waterways and the maintenance of the navigational channels. It will include topics such as: the importance of marine highways, current waterways infrastructure (dams, locks and canals), barge types, the environmental benefits as well as its current legislation and policy. Also, it will cover dredging processes, types of equipment and stages of dredging projects with emphasis on the maintenance of navigation channels, disposal sites, and beneficial use of dredge materials.

Prerequisites: SCLM 370

SCLM 474/574 Shipbuilding & Ship Repair Logistics (3 Credit Hours)

Examines the shipbuilding and ship repair industry from the perspective of industry economics, technology, project management and supply and procurement processes. It covers principal ship dimensions, typical types of ship repairs, the preparation for a routine docking period with emphasis on the materials logistics, and the shipbuilding logistics process.

Prerequisites: SCLM 370

SCLM 481/581 Freight Brokerage and 3PL Services (3 Credit Hours)

This course covers the basics of Freight Brokering including types of freight and the types of niche markets available, import/export compliance and regulations, Broker-Carrier and Broker-Shipper Agreements, determination of freight shipment rates, load tracking, and carrier relations. Also, it covers the role of the 3PLs in freight brokerage plus inventory management, consolidation, order fulfillment and warehousing.

Prerequisites: SCLM 370 or SCLM 204

SCLM 486/586 Cruise Ship Operations (3 Credit Hours)

Overview cruise ship markets and tourism, and cruise ship types and cruise ship lines. Basic cruise operations including sales, supplies, safety and security, itineraries and ports of call, terminal operations and personnel management. Detailed understanding of the relevant issues surrounding the cruise ship terminal operations and sustainability of cruise line services.

Prerequisites: SCLM 370

SCLM 495 Selected Topics in Supply Chain, Logistics and Maritime Operations (3 Credit Hours)

A study of selected topics within Supply Chain, Logistics and Maritime Operations designed to provide an in-depth exploration of current issues.

Prerequisites: SCLM 204 and permission of the instructor; or permission of the Director of the School of Supply Chain, Logistics and Maritime Operations

SCLM 497 Independent Study (3 Credit Hours)

Independent study in Supply Chain, Logistics and Maritime Operations under the direction of a faculty member.

Prerequisites: senior standing and permission of the instructor; or permission of the Director of the School of Supply Chain, Logistics and Maritime Operations

SEPS - STEM Education and Professional Studies

SEPS 100 Sales Techniques (3 Credit Hours)

This is an introductory course that emphasizes the concept of determining customer needs, wants, and desires and matching them to products and services for a long-term sales relationship.

SEPS 102 Advertising and Promotion (3 Credit Hours)

This is an introductory course designed to teach the fundamental product and service promotion processes of planning and producing advertising and promotion campaigns.

SEPS 195 Topics (1-3 Credit Hours)

Topics of current interest in the area of STEM Education and Professional Studies.

SEPS 203S Dress, Culture and Society (3 Credit Hours)

This course is an analysis of dress in cultures around the world while developing an understanding of its relationship to human beings as biological, aesthetic, and social animals. Human beings dress their bodies to communicate identity and to receive personal satisfaction. Students will discover how global fashion, age, gender, ethnicity, and income influence the fashion industry and our lives.

SEPS 208 Retail Merchandising and Buying (3 Credit Hours)

This course introduces students to the fundamentals of retail merchandising and explores retail buyers' skills and responsibilities including identifying customers and vendors, retail mathematics, buying plans, and merchandise control.

SEPS 220 The Fashion Industry (3 Credit Hours)

Course is designed for marketing education and fashion students. It covers fashion as a force which alters patterns of change and growth in the fashion industry to include designers, manufacturers, buyers, retailers, and customers. Students explore the latest trends in style and materials.

SEPS 223A Visual Merchandising and Display (3 Credit Hours)

This course is designed to introduce students to the best practices and effective strategies in visual merchandising. It will provide the basic framework with which prospective merchandisers plan and construct visual displays that enhance the selling of merchandise and ideas.

SEPS 234 Survey of Dress and Costume (3 Credit Hours)

Whether high fashion or low, glitz or grunge, from revolutionary politics to the new machine age, war and depression to growth and prosperity, fashion dress and costume goes hand-in-hand with history. This course examines the evolution of dress and costume and finds innovation at every turn.

SEPS 295 Topics (1 Credit Hour)

Topics of current interest in the area of STEM Education and Professional Studies.

SEPS 297 Observation and Participation (1 Credit Hour)

Students observe middle and/or high school classes for 30 clock hours. Assist teachers and students in practical settings. Relate principles and theories of education and specialty content to actual practice in the classrooms and schools. Attend seminars related to contemporary school practices.

Prerequisites: sophomore standing

SEPS 302 Workforce Supervision Management (3 Credit Hours)

Explores the skills and knowledge required of successful supervisors: leading, motivating, setting goals, delegating, budgeting, interviewing, negotiating, counseling, coaching, conducting meetings, and handling grievances.

Prerequisites: junior standing or permission of the instructor

SEPS 355 Fashion Consumer Behavior (3 Credit Hours)

This course is designed to enhance a student's understanding of what drives customers' wants and needs for fashion merchandise. Students examine the forces that affect consumer buying behavior and how they relate to the marketing of fashion.

Prerequisites: SEPS 208 and SEPS 220

SEPS 367 Cooperative Education (1-3 Credit Hours)

Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures as formally determined by the department and the Cooperative Education program prior to the semester in which the work experience is to take place.

Prerequisites: approval by the department in accordance with the policy for granting credit for Cooperative Education programs

SEPS 389 Education and Training of Adults (3 Credit Hours)

An in-depth overview of education and training of adults. Attention is given to adult learning theory and strategies for facilitating the learning process. Aspects of the course will focus on helping students understand and visualize jobs and careers in adult education and training.

Prerequisites: junior standing or permission of the instructor

SEPS 395 Topics in Occupational Education (1-3 Credit Hours)

The department offers selected topics designed to permit small groups of qualified students to work on subjects of mutual interest.

Prerequisites: permission of the instructor

SEPS 400/500 Instructional Systems Development (3 Credit Hours)

Students learn how to design and develop classroom instructional materials including career and technical education and training curricula and programs for youths and adults. Skills in this area include the selection and use of materials, including media and computers and evaluation of pupil performance. Training specialist students learn to develop instructional materials using the instructional systems design process. Career and technical education students learn to plan instruction, to implement competency-based and standards-based education, and to modify and use the Virginia career and technical education curriculum guides.

Prerequisites: junior standing

SEPS 401/501 Foundations of Career and Technical Education (3 Credit Hours)

This course is designed to teach career and technical education majors to plan, develop, and administer a comprehensive program of career and technical education for high school students and adults. Students also develop an understanding of the historical and sociological foundations underlying the role, development and organization of public education in the United States.

Prerequisites: junior standing

SEPS 402/502 Instructional Methods in Occupational Studies (3 Credit Hours)

Designed to develop a student's ability to use basic instructional techniques and methods applicable to career and technical education, and adults in business, government, and industrial organizations. It involves videotaped micro-teaching demonstrations and presentations.

Prerequisites: SEPS 400

SEPS 405 Directed Work Experience (4 Credit Hours)

Student must be employed the summer prior to his/her senior year in an emphasis-related job approved by the instructor. The student work is supervised by a job supervisor and the course instructor in a cooperative effort. Must complete a job package that describes all aspects of the organization.

Prerequisites: junior standing

SEPS 408/508 Advanced Classroom Issues and Practices in Career and Technical Education (3 Credit Hours)

An overview of classroom issues and practices for prospective career and technical teachers. The course covers classroom management and safety, communication processes, reading in the content area and child abuse and neglect recognition and intervention. Students learn the legal requirements and alternative teaching strategies for serving students with special needs. Students visit schools for a 30-hour student observation. PRAXIS II and VCLA are course completion requirements.

Prerequisites: admission to an approved teacher education program

SEPS 409/509 Fashion Forecasting Market Trip (3 Credit Hours)

This is the study of planning and conducting a fashion buying trip to one of the major fashion markets in the United States like the Las Vegas Magic Trade Show. The students envision themselves as buyers in action and learn how trend forecasting and creative presentations help market fashion products and services to trade customers and consumers.

Prerequisites: SEPS 208

SEPS 410/510 The Foreign Fashion Market Trip (3 Credit Hours)

Students plan and conduct a fashion buying trip to a foreign market in Europe or Asia, and learn how to buy merchandise in the global marketplace. The course requires students to go on the trip as well as attend the pre- and post-trip classes.

Prerequisites: SEPS 208

SEPS 415 Advanced Merchandising (3 Credit Hours)

This course is designed for marketing education and fashion students. It includes advanced merchandising math concepts used in the merchandising industry. Topics include pricing and re-pricing merchandise, creating and analyzing six-month plans, maintaining inventory control, and solving problems that are typically experienced in the merchandising field.

Prerequisites: SEPS 208

SEPS 420 Fashion Research (3 Credit Hours)

This course is designed to apply diverse research methods to explore the complex dynamics in fashion. Utilizing an interdisciplinary approach, students will engage in diverse topics in fashion bridging the gap between theory and practice.

Prerequisites: SEPS 208 and SEPS 220

SEPS 422 Fashion Product Development (3 Credit Hours)

Students work step-by-step through the preproduction processes of apparel product development: planning, forecasting, fabricating, developing silhouettes and specifications, pricing, and sourcing. The course demonstrates how these processes must be coordinated to get the right product to retail when consumers want it and at a price they are willing to pay.

Prerequisites: SEPS 208 and SEPS 220

SEPS 424/524 Fashion, Textiles, and Construction Analysis (3 Credit Hours)

This course explores information related to new technological advances in the textile/apparel industry and determines consumer preferences and concepts of fashion product quality. It includes the development of standards for judging qualities of merchandise. Fabrics are examined to determine the value they provide to the apparel and accessories customer.

Prerequisites: junior standing or permission of the instructor

SEPS 427 Fashion Marketing (3 Credit Hours)

This course explains key concepts of fashion marketing and illustrates how they are applied within the fashion industry. Using examples and case studies, students will examine how marketers develop and apply strategies that meet consumer needs for fashion products.

Prerequisites: SEPS 208 and SEPS 220

SEPS 431/531 Web-Based Organization for Fashion (3 Credit Hours)

This course provides the basic communications foundations needed to conceive, plan, develop, implement, and maintain a Web-based organization for fashion. Upon completion, students will understand what is required to plan, launch and maintain a successful online venture, limited only by the willingness of the student to explore these technological advances.

Prerequisites: STEM 251G

SEPS 435/535 International Retailing (3 Credit Hours)

This course examines globalization and the development of an integrated global economy. Primary emphasis is placed on the strategies for successful global business expansion for retailers in international markets.

Prerequisites: SEPS 220 or SEPS 208

SEPS 440/540 Fashion Global Sourcing/Supply Chain Management (3 Credit Hours)

This course examines the role of global sourcing in the strategic positioning of retailers in the global economy. Emphasis is placed on economic, political, logistical, and ethical factors affecting world trade and global sourcing decisions.

Prerequisites: SEPS 220 or SEPS 208

SEPS 450/550 Assessment, Evaluation and Improvement (3 Credit Hours)

This course prepares training and educational professionals to plan for and conduct assessments to use in planning instructional programs, evaluate individual learning, monitor student progress, measure program effectiveness and efficiency, and evaluate the return on investments of training courses and programs.

Prerequisites: junior standing

SEPS 456 E-Commerce and Social Media in Fashion (3 Credit Hours)

This course is designed to understand the expanding fields of e-commerce and social media. It will focus on examining features available in social media and the web/mobile technologies and their ability to improve fashion marketing strategies.

Prerequisites: SEPS 208 and SEPS 220

SEPS 480 Senior Project: Merchandise Retailing (3 Credit Hours)

A senior capstone course in which fashion and business knowledge and skills are applied to plan and implement a merchandise retailing business. Students must submit a professional quality written report and present results to a panel of consultants. Course to be taken final semester before graduation.

Prerequisites: Instructor permission

SEPS 481 Career and Professional Development (3 Credit Hours)

To provide the senior-level student majoring in occupational and technical studies with the skills and techniques necessary to bridge the gap from college to career. Focus is on the generation of a professional portfolio and experiential learning that will transfer into today's job market. This course should be taken in the final semester before graduation.

Prerequisites: Junior standing

SEPS 484/584 Student Teaching Mentored (6-12 Credit Hours)

Classroom placement in school systems for students to apply content and methodologies. The student is mentored by a school mentor and university faculty. This course is for newly hired teachers on provisional contracts.

Prerequisites: completion of the approved teacher education program in the major area, departmental approval, and permission of the director of teacher education services; passing scores on PRAXIS I or State Board of Education-approved SAT or ACT scores and passing scores on the appropriate PRAXIS II content examination required

SEPS 485 Student Teaching (12 Credit Hours)

Five days per week, full semester. Available for pass/fail grading only.

Prerequisites: completion of the approved teacher education program in the major area, departmental approval, passing scores on PRAXIS I or State Board of Education-approved SAT or ACT scores, passing scores on the appropriate PRAXIS II content examination, and permission of the director of teacher education services

SEPS 486/586 Middle School Student Teaching for Technical Education (6 Credit Hours)

Classroom placement for student teaching in a middle school technology laboratory. Students apply content and methodology under the supervision of a cooperating teacher and university faculty member. Available for pass/fail grading only.

Prerequisites: SEPS 408, SPED 313, TLED 408 and SEPS 450; or SEPS 508, SEPS 596, STEM 730, SEPS 788, TLED 608, READ 680 for graduate students; passing scores on PRAXIS I or State Board of Education-approved SAT or ACT scores and passing scores on the appropriate PRAXIS II content examination are required

SEPS 495/595 Topics in Occupational Education (1-3 Credit Hours)

The department offers selected topics designed to permit small groups of qualified students to work in subjects of mutual interest which, due to their specialized nature, may not be offered regularly.

Prerequisites: permission of the instructor

SEPS 496/596 Topics in Career and Technical Education (1-3 Credit Hours)

The department offers selected topics designed to permit small groups of qualified students to work in subjects of mutual interest which, due to their specialized nature, may not be offered regularly.

Prerequisites: permission of the instructor

SEPS 497/597 Independent Study in Occupational Education (1-6 Credit Hours)

Independent study.

Prerequisites: permission of the instructor

SEPS 498 Independent Study in Occupational Education (1-6 Credit Hours)

Independent study.

Prerequisites: permission of the instructor

SMGT - Sport Management

SMGT 214 Introduction to Sport Management (3 Credit Hours)

Course will introduce students to the basic foundational knowledge of the sport industry, plus a wide range of career opportunities involving sport, and the various impacts of sport.

Prerequisites: A passing grade in MATH 102M or MATH 103M or MATH 162M or STAT 130M

SMGT 305 Sport Administrative Theory (3 Credit Hours)

Principles of organization and administration as they apply to managing sport organizations. Issues related to working with and through individuals to achieve organizational goals and objectives are discussed.

Prerequisites: SMGT 214 with a grade of C- or better

SMGT 312 Sport Sales (3 Credit Hours)

This course will teach students to learn and navigate the sport sales process. The financial strength of a sport entity is determined by its sales ability, and through lecture, guest speakers, and applied 'real world' exercises, students will have the opportunity to obtain knowledge, skills, and experiences in sport sales that are essential for entry level positions.

Prerequisites: SMGT 214 with a grade of C- or better

SMGT 315 Sport Media and Public Relations (3 Credit Hours)

An introduction to sport media and public relations. Special emphasis will be placed on the communications process in sport and the various mediums that can be used to convey messages. The internal and external publics involved in sport public relations will be examined along with the steps involved in the process.

Prerequisites: SMGT 214 with a grade of C- or better, and a grade of C or better in ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C

SMGT 331 Fiscal Planning and Management in Sport and Recreation (3 Credit Hours)

This course is designed to examine the principles and practices of financial management in diverse recreation and sport service settings. Course will explore the basic concepts of financial planning and analysis to effectively manage a successful operation.

Prerequisites: SMGT 214 with a grade of C- or better, ACCT 201, and MATH 102M or higher

SMGT 368 Sport Management Fieldwork Experience (3 Credit Hours)

Selected experiences in sport, leisure or athletics that will enable students to become more actively involved with sport industry professionals and develop specialized industry skills. There is a 200-clock hour requirement.

Prerequisites: SMGT 214 with a grade of C- or better, SMGT 369 with a grade of C- or better, restricted to sport management majors and minors and permission of the instructor

SMGT 369 Sport Management Pre-Internship (3 Credit Hours)

A practical experience allowing sport management pre-internship students to shadow and observe sport industry professionals in a field-based setting. Portfolio development, reflective assessment of management, observation techniques and internship requirements will be emphasized.

Prerequisites: SMGT 214 with a grade of C- or better, sophomore standing or higher, restricted to sport management majors or minors

SMGT 414 Sport Marketing (3 Credit Hours)

Course will examine competitive market strategies as they apply to the sport industry. Emphasis will be placed on the relationship between sport products and sport markets, the communication mix, market research, and the role of strategic planning for business sponsorship.

Prerequisites: SMGT 214 with a grade of C- or better and junior standing

SMGT 415/515 Principles of Coaching Management (3 Credit Hours)

This course is designed to provide students with a basic knowledge of the coaching profession. Special emphasis will be placed on establishing a sound coaching philosophy, selecting a coaching style, desirable qualities of a coach, ethics and the coach, roles of the head coach, planning and organizing for games and practices, coaching pedagogy, off-season planning, final preparations for the season, and issues and problems related to coaching and recruiting athletes.

Prerequisites: ENGL 110C

SMGT 421 Legal Aspects in Recreation and Sport Management (3 Credit Hours)

This course presents an overview of the increasing effect the law is having on amateur athletics, professional sports and recreation programs.

Prerequisites: SMGT 214 with a grade of C- or better and junior standing

SMGT 432 Sport Facility and Event Management (3 Credit Hours)

This course provides an examination of the principles and practices of sport facility and event management. Special emphasis will be placed on management functions related to facility planning and supervision, financing, site design, public relations, security, operations, maintenance, programming, box office operations and concessions. This course is designed to introduce students to principles and practices of planning, budgeting, operating, scheduling, managing, and evaluating events in the sport industry. Students will acquire an in-depth knowledge about the specialized field of event management and become familiar with management techniques and strategies required for successful promotion, implementation and evaluation of special events within a sport context.

Prerequisites: SMGT 214 with a grade of C- or better and junior standing

SMGT 450W Ethics and Morality in Sport (3 Credit Hours)

This writing intensive course offers an introduction to ethics and morality within the context of sports. It examines the values of sport and the basis for ethical decision making. Readings, case studies and class discussion are used to explore the moral significance of sport. This course is designed to foster critical thinking skills and to improve written and verbal communication skills through analysis of philosophical and ethical issues associated with sport.

Prerequisites: SMGT 214 with a grade of C- or better, a grade of C or better in ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C and Junior standing

SMGT 455 Sport in Contemporary Society (3 Credit Hours)

Discusses the phenomenon of sport as it represents one of the most pervasive social institutions today. The major theme of this course is to demonstrate how sport reflects and enforces the beliefs, values, and ideologies of society. Emphasis is placed on changing attitudes and current trends in the world of sport. The course will be taught from sociological and philosophical perspectives.

Prerequisites: SMGT 214 with a grade of C- or better, and junior standing

SMGT 456/556 Sport Psychology (3 Credit Hours)

This course examines psychological theories and research related to sport and exercise behavior. The course is designed to introduce students to the field by providing a broad overview of topics associated with sport and exercise psychology.

Prerequisites: ENGL 110C

SMGT 460/560 Sport and Social Justice (3 Credit Hours)

The class is a comprehensive survey of the historical interrelationship between sports and civil rights movements in the United States, emphasizing the African American experience. Through popular and academic text and documentary films, students will examine the role that sport has played in raising consciousness about racial issues, and how participation and spectatorship influence attitudes about race.

Prerequisites: SMGT 214 or instructor permission

SMGT 468 Sport Management Internship (6-12 Credit Hours)

Culminating field-based experience required for all students with a major in sport management. Students will work with faculty in securing a placement with a sport-related organization to apply the knowledge from the classroom to real-world experiences. Internship site must be approved by the internship coordinator. 240-480 clock hours are required depending on the credit awarded.

Prerequisites: Completion of all coursework, a C- in SMGT 369, a GPA of 2.0 in the major, and instructor permission

SMGT 480/580 Introduction to Sport Analytics (3 Credit Hours)

This course will examine the theory, development, and application of analytics in sport. Students will learn about the application of analytics in sport for purposes of evaluating player performance, team management, market segmentation, pricing, and other areas in sport industry operations. Analytics includes the inclusive use of data, statistical and quantitative analysis, explanatory and predictive models, and fact-based decision making.

Prerequisites: SMGT 214 with a grade of C- or better, and junior standing

SMGT 495/595 Topics in Sport Management (3 Credit Hours)

This course provides an opportunity for in-depth study of selected topics in sport management.

Prerequisites: ENGL 110C

SMGT 497 Independent Study in Sport Management (1-3 Credit Hours)

Individualized instruction to include research, specialized studies, or other scholarly writing.

Prerequisites: Permission of the instructor

SOC - Sociology

SOC 100S Leadership and Society (3 Credit Hours)

This course addresses the social, political, psychological, economic, and international dimensions of leadership through a social science framework. A specific focus is given to the dynamic interactions between social structures and leadership behavior. Students explore how society shapes leaders and how leaders shape society. Using an introspective approach, students consider their role as current and future leaders in a diverse society.

SOC 201S Introduction to Sociology (3 Credit Hours)

An introduction to the discipline and methods of sociology. Major topics include socialization, social inequality, family, education, gender roles, ethnic and minority relations.

SOC 203S Diversity and Society (3 Credit Hours)

This course examines social diversity and inclusivity in American society and is designed to sensitize students to the roles that typology such as race, ethnicity, social class, religion, sex and gender, age, health, (dis)ability, sexual orientation, and language play in societal definitions of social diversity.

SOC 205S Data, Technology, Society (3 Credit Hours)

This course investigates how data science is transforming not only our sense of science and scientific knowledge, but our sense of ourselves and our communities and our commitments concerning human affairs and institutions generally. Social implications of the digital revolution, including ethical issues associated with algorithmic design and privacy will be examined. Students will use a sociological lens to explore how our increasingly digital lifestyle changes institutions and social relations.

SOC 226S Honors: Introduction to Sociology (3 Credit Hours)

Open only to students in the Honors College. A special honors section of SOC 201S.

SOC 300 Social Problems (3 Credit Hours)

An analysis of the major social problems confronting groups and individuals in a society marked by rapid change. Emphasis is given to the study of social phenomena including both historical and comparative perspectives.

Prerequisites: SOC 201S or permission of the instructor

SOC 303 Families and Society (3 Credit Hours)

This class explores both contemporary and historical aspects of singlehood, courtship, mate selection, cohabitation, marriage, sexuality, and family. Relationship quality, communication, conflict, and the termination of relationships is also examined. Emphasis is placed on examining the diversity of relationships and family structures as well as how our family experiences are shaped by gender, race/ethnicity, class, and sexual orientation.

Prerequisites: Any "S" (Human Behavior general education) course

SOC 306 Religion and Society (3 Credit Hours)

Sociological analysis of religion as a social institution, of the functions of religion and its relationship to other institutions and to social change, and of the religious behavior of individuals.

Prerequisites: SOC 201S or permission of the instructor

SOC 309 Population and Society (3 Credit Hours)

This course offers an introduction to the field of population and its interconnection to broader societal changes. It introduces students to the concepts, issues and concerns in population studies and examines the interaction between population processes and economic development, social changes and environment. Topics include theories, fertility, mortality, migration, distribution and composition, population and development, population and environment, and policy. Emphasis is given to a critical assessment of population processes as both causes and consequences of development and societal changes with a focus on comparative patterns between developing countries and the more developed countries.

Prerequisites: Six semester hours in human behavior or permission of the instructor

SOC 316 Juvenile Delinquency (3 Credit Hours)

A study of juvenile misbehavior in the contemporary community, its nature, extent, treatment, and control, including juvenile court procedure and philosophy.

Prerequisites: CRJS 215S or SOC 201S or permission of instructor

SOC 320 Social Inequality (3 Credit Hours)

An analysis of social differentiation, stratification, and social class. Emphasis is placed upon modern American society, with some comparison with historical and contemporary systems of other societies.

Prerequisites: SOC 201S or permission of the instructor

SOC 323 Sociology of Minority Families (3 Credit Hours)

Examination and explanation of minority families' lives in relationship to other societal institutions and historical developments. The course focuses on issues of minority families and places these issues in a sociological framework, e.g., stratification, poverty and gender.

Prerequisites: SOC 201S or permission of the instructor

SOC 325 Social Welfare (3 Credit Hours)

An introduction to the broad field of social welfare. The philosophy, values, purposes, goals, and functions of social welfare are examined.

Prerequisites: SOC 201S or permission of the instructor

SOC 326 LGBTQ People, Crime, and Justice (3 Credit Hours)

Objectives include: learning appropriate terminology to discuss LGBTQ individuals and reviewing the social issues facing these populations, such as criminalization and damaging cultural stereotypes; critically exploring the history of interactions between LGBTQ communities and agents of formal control, such as schools and the police; evaluating the experiences of LGBTQ youth and adults in the juvenile and criminal justice systems; and interrogating how changing political and social contexts affect policy regarding formal responses to LGBTQ communities.

Prerequisites: SOC 201S or CRJS 215S

SOC 330 Society and the Individual (3 Credit Hours)

Social psychological theory and research on current topics of interest on the relationship of the individual to society.

Prerequisites: SOC 201S or permission of the instructor

SOC 337 Social Research Methods (3 Credit Hours)

An overview of the scientific approach to the study of social phenomena through quantitative, qualitative and mixed methods approaches. Interviews/survey and experimental/quasi-experimental designs and other strategies of social inquiry are covered. The course includes the application of software to provide descriptive and inferential statistics to summarize data.

Prerequisites: CRJS 215S or SOC 201S, and STAT 130M

SOC 340 Sociology of Women (3 Credit Hours)

An exploration of the role and status of women in contemporary American society from a feminist sociological perspective.

Prerequisites: SOC 201S or six credits in human behavior or permission of the instructor

SOC 343 Sexualities in Society (3 Credit Hours)

This course offers an introduction to the sociological study of sexualities. This course focuses on the ways in which sexuality as a social institution and identity intersects with other hierarchies of privilege and inequality, such as race, social class, and gender. A range of topics will be covered including LGBTQ+ identities, the social construction of sexuality, historical accounts of sexual practices, and contemporary theories and research in sexualities studies.

Prerequisites: SOC 201S

SOC 344 Social Science and Crime Mapping (3 Credit Hours)

A critical exploration of applying geographic information system (GIS) to view, understand, question, interpret, and visualize social science and crime data that reveal relationships, patterns, and trends. Students will learn to 1) frame a research question or hypothesis from a location-based perspective; 2) collect, create and examine geographically referenced demographic, social, and criminological data; 3) learn to use GIS mapping software to visualize, manage and analyze this data in order to investigate the relationship between geographic, demographic, social and criminological variables; and 4) arrive upon decisions and conclusions and communicate these via the creation of publishable maps.

Prerequisites: SOC 201S or CRJS 215S or permission of the instructor

SOC 347 Sport Sociology (3 Credit Hours)

This course applies the sociological perspective to the world of sports. It provides the student with a better understanding of the social processes involved in sports. The course looks at how the media, community, tradition, and privilege play an integral role in the participation of sporting events. It also covers why sports exist, who plays sports, and what will become of sports in the future.

Prerequisites: SOC 201S OR CRJS 215S

SOC 348 Film and Society (3 Credit Hours)

Sociological examination of film as an art form, an industry, and a social institution. Major topics include socialization through film, how one's unique socialization affects the film experience, social inequality (racism/ethnocentrism/sexism/ageism) as exhibited in film, and as they occur within the film industry, film as an educational tool, gender roles as exhibited in film and perpetuated within the film industry, film and copycat crime, crime in the film industry, portrayal of crime in film, international cinema and globalization.

Prerequisites: SOC 201S or permission of the instructor

SOC 350 Disasters and Society (3 Credit Hours)

The purpose of this class is to examine and compare various sociological theories/models that pertain to the study of disasters in terms of their contribution to our understanding of disasters. In addition, the class explores how disasters are studied scientifically by sociologists in order to aid students in acquiring a better understanding of the causes and consequences of disasters and the challenges they pose for modern societies.

Prerequisites: SOC 201S or SOC 226S

SOC 355 Social Work and Society (3 Credit Hours)

This course is designed to introduce students to the profession of social work. Students will investigate what social work is and how it is different from other helping professions. Students will examine the theoretical and ethical underpinnings of social work, the different levels of intervention, and the major areas of practice. This course will also focus on the importance of cultural awareness as well as the role of social work in alleviating and at times maintaining systems of inequality and oppression.

Prerequisites: SOC 201S or permission of the instructor

SOC 368 Internship (1-6 Credit Hours)

This course allows students to volunteer in an agency related to their major for pass/fail credit. Students must volunteer for 50 hours per course credit. Internships for fewer than 3 credits require prior approval by the Internship Faculty Director.

Prerequisites: Permission of the department internship director

SOC 395 Topics in Sociology (3 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major. These courses will appear in the course schedule, and will be more fully described in information distributed to academic advisors.

Prerequisites: SOC 201S or permission of the instructor

SOC 396 Topics in Sociology (3 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major. These courses will appear in the course schedule, and will be more fully described in information distributed to academic advisors.

Prerequisites: SOC 201S or permission of the instructor

SOC 400/500 War and Gender (3 Credit Hours)

In this course students grapple with issues concerning war, gender roles, and gender inequality. The course addresses gender roles in war throughout history, globally and across cultures. However, the United States military and military involvement in the 20th and 21st century remain the primary focus areas. Discussions include how social norms and ideals of masculinity and femininity shape, and in turn are shaped by, images and realities of war, including gendered aspects of nationalism and just war theories. The military involvement of men, women (and children) in war and in peacetime, as participants and observers, perpetrators and victims, supporters and opponents of war is also discussed.

Prerequisites: SOC 201S and junior standing

SOC 402/502 Sociology of Child Welfare (3 Credit Hours)

A sociological analysis of the field of child welfare. Topics include social inequality as it applies to children as a group in the U.S. and globally; understanding violence against children within the global context of children's rights; examining data on the degree to which policies, programs and research in the field fail to protect children and why; prevalence, causes and consequences of child sexual, physical and emotional abuse and neglect; evaluation of programs like 'family preservation' and of placement in 'substitute' care, i.e., foster care, adoption, institutionalization; changes that would protect and advance the interests and rights of children at the parent-child, agency, and societal level.

Prerequisites: SOC 201S

SOC 403 Violence in the World of Children (3 Credit Hours)

This 'child-centered' course examines the interaction of adults in violent conflict with the world of children, children's experience of violence and its meaning in the lives of children. Topics include: valuing children, violence toward children in culture, families, and schools; child physical and sexual abuse and neglect; gangs, violent communities, and children and war. The effects of childhood experiences of violence, children's coping with violence, and alternatives to violence are also developed.

Prerequisites: Six hours in the human behavior perspective or SOC 201S or CRJS 215S or permission of the instructor

SOC 405/505 Social Change and Social Movements (3 Credit Hours)

Analysis of the nature and causes of social change, major social movements, and their impact upon contemporary society.

Prerequisites: SOC 201S or permission of the instructor

SOC 407 Violence Against Children Internationally (3 Credit Hours)

This course focuses on the research on child maltreatment abuse internationally, in particular on the most common types of child abuse and neglect—i.e., perpetrated by parents, family members. The negative effects of child abuse and neglect are associated subsequently with every social problem from poverty, teenage motherhood, substance abuse, violent crime, domestic violence, and mental health problems, to ill-health—from cancer to diabetes.

Prerequisites: SOC 201S or CRJS 215S

SOC 408 Children's Rights and the Law (3 Credit Hours)

A study of the law concerning children from a children's rights perspective. The rights of children in the US will be compared to other nations with special emphasis being placed on the UN Convention on the Rights of the Child.

Prerequisites: SOC 201S OR CRJS 215S or related human behavior Way of Knowing or permission of the instructor

SOC 409W Sociological Theory (3 Credit Hours)

The development of sociological thought during the nineteenth and twentieth centuries. Analysis of major contributions to the development of systematic thinking in contemporary sociology. This is a writing intensive course.

Prerequisites: SOC 201S and a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C

SOC 418 Crime, Society and the Media (3 Credit Hours)

A critical exploration of media portrayals of crime and criminal justice. News and entertainment genres are examined. Connections between the mass media and crime, culture, politics, society, and individual behavior receive special attention. (cross listed with CRJS 418)

Prerequisites: SOC 201S or CRJS 215S or permission of the instructor

SOC 419 Animals and Society (3 Credit Hours)

This is a class about the role of nonhuman animals in society. Animals are used to entertain, to do work, to provide companionship, to provide food, and more. In this class, we also discuss the causes and consequences of both individual and institutional animal abuse. Society's relation to wildlife is also an important component and includes poaching, sport and trophy hunting, and society's reaction to wolves, coyotes, and wild horses in the West. Cross-listed with CRJS 419.

Prerequisites: Any human behavior (S) course, such as SOC 201S, CRJS 215S, PSYC 201S, COMM 200S, or permission of instructor

SOC 420W African American Political and Social Thought (3 Credit Hours)

This course is designed to introduce students to the historical and contemporary experiences of 'Blackness' as it has been constructed, contested and affirmed in various historical, political and narrative contexts. Embracing the theme of duality, the course examines what it means for a culture and people to be both integral to and excluded from the American political and social community. This is a writing intensive course.

Prerequisites: Grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C and a General Education human behavior course

SOC 421/521 Deviant Behavior (3 Credit Hours)

A study of various definitions and forms of deviant behavior, theoretical explanations of causes of deviant behavior and the impact of deviant behavior on society and the individual.

Prerequisites: SOC 201S or CRJS 215S or permission of the instructor

SOC 423/523 Women, Health and Healing (3 Credit Hours)

An examination of women's experiences with health and illness and women's roles in the health-care system as patients and care providers from a feminist sociological perspective.

Prerequisites: Six hours of human behavior courses or permission of the instructor

SOC 426/526 Minority Group Relations (3 Credit Hours)

The study of the process of and responses to the oppression of racial, religious, ethnic, and national minorities in a variety of countries within a historical and comparative perspective. Special emphasis given to American minorities and especially African Americans.

Prerequisites: SOC 201S or permission of the instructor

SOC 427/527 Gender-Based Violence (3 Credit Hours)

This course takes an expansive and intersectional approach to studying various forms of gender-based violence, from the interpersonal to the systemic, institutional, and cultural. Prevalence, risk factors, theoretical explanations, and legal remedies related to topics such as intimate partner violence, sexual assault on college campuses, gender-based violence in the military, sexual violence against undocumented immigrants, commercial sexual exploitation, and racism and reproductive health will be examined.

Prerequisites: SOC 201S or CRJS 215S or permission of the instructor

SOC 436 Capstone Research Project (3 Credit Hours)

Students work in groups to plan, design, and carry out a research project. Final papers which report the results of the study are presented in a formal research seminar. The projects are to reflect knowledge gained from undergraduate work and training received in STAT 130M and SOC 337.

Prerequisites: SOC 337 and STAT 130M and senior status

SOC 438 Education and Society (3 Credit Hours)

Sociological theory and research investigating contemporary education as a social institution.

Prerequisites: SOC 201S or permission of the instructor

SOC 440/540 Health, Illness, and Society (3 Credit Hours)

The study of health, illness and society. After exploring how health is conceptualized by the prevailing allopathic medical model, an emergent alternative or "integrative" health perspective is examined with a focus on how wellbeing may be understood.

Prerequisites: SOC 201S or permission of the instructor

SOC 441/541 Drugs and Society (3 Credit Hours)

The study of sociological and social psychological explanations of drug-using behaviors and of legal and medical control of drugs. Topics include changes in the legal status of drugs, cross-cultural and historical variations in the control and use of drugs, and social epidemiology of drug use in contemporary society.

Prerequisites: SOC 201S or CRJS 215S or permission of the instructor

SOC 444 Community Justice (3 Credit Hours)

This is a service learning course designed to study how the emerging field of community justice, a neighborhood-based strategy, can reduce crime and improve public safety by investing in social, human and cultural capital.

Prerequisites: SOC 201S or CRJS 215S

SOC 445 Workplace Law and Society (3 Credit Hours)

This course examines the laws of the workplace from a sociological and issue-driven approach considering two perspectives – both employer and employee. Relevant laws are identified, explored and made relevant through examples of their application in real-world situations. Sometimes the wisdom of these laws will be challenged; students will be encouraged to raise questions about a law's utility, justice or fairness, whether in principle or in application.

Prerequisites: Junior standing

SOC 451 Race, Ethnicity, Crime and Justice (3 Credit Hours)

This course will examine the intersectionality of race, ethnicity, crime, justice and the operation of the criminal justice system and will critically assess controversial issues surrounding race, ethnicity, crime, and justice. Students will discuss contemporary social justice issues as they relate to race, ethnicity, crime, and justice. The theoretical frameworks that explain the intersection between race, ethnicity, crime and justice will be examined. The course will also investigate the broad range of policy issues and recommendations impacting communities of color and the administration of criminal and social justice.

Prerequisites: CRJS 215S or SOC 201S

SOC 452 Diversity in Criminal Justice Organizations (3 Credit Hours)

This course examines the impact of diversity, culture, and ethnic origin in criminal justice organizations. The course is designed to better prepare students to meet the challenge of diversity in criminal justice organizations.

Prerequisites: SOC 201S or CRJS 215S or permission of instructor

SOC 494 Entrepreneurship in Sociology/Criminal Justice (3 Credit Hours)

This course is designed to help students enhance their personal and professional development through innovation guided by faculty members and professionals. It offers students an opportunity to integrate disciplinary theory and knowledge through developing a nonprofit program, product, business, or other initiative. The real-world experiences that entrepreneurship provided will help students understand how academic knowledge leads to transformations, innovations, and solutions to different types of problems. The course can be delivered either as an independent project for individual students or as group projects similar to those sometimes offered in topics courses.

Prerequisites: junior standing

SOC 495/595 Topics in Sociology (3 Credit Hours)

The advanced study of selected topics designed to permit students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule, and will be more fully described in information distributed to academic advisors.

Prerequisites: SOC 201S or permission of the instructor

SOC 496/596 Topics in Sociology (3 Credit Hours)

The advanced study of selected topics designed to permit students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule, and will be more fully described in information distributed to academic advisors.

Prerequisites: SOC 201S or permission of the instructor

SOC 497/597 Independent Study (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: Senior standing and approval of the department chair

SOC 498/598 Tutorial Work in Special Topics in Sociology (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: Senior standing and approval of the department chair

SPAN - Spanish

SPAN 101F Beginning Spanish I (3 Credit Hours)

This course is the first of the beginning Spanish language sequence. The course takes a task-based, content-based, communicative approach to language learning and teaching. It develops beginning skills in reading, writing, speaking and listening. The course also builds communicative competence and enhances social and cultural awareness of the Spanish-speaking world.

SPAN 102F Beginning Spanish II (3 Credit Hours)

This course is the second of the beginning Spanish language sequence. The course takes a task-based, content-based, communicative approach to language learning and teaching. It develops beginning skills in reading, writing, speaking and listening. The course also builds communicative competence and enhances social and cultural awareness of the Spanish-speaking world.

Prerequisites: SPAN 101F

SPAN 121F Intensive Beginning Spanish (6 Credit Hours)

This is an accelerated introductory-level course that combines SPAN 101 and SPAN 102. This course is designed for students planning on minoring or majoring in Spanish, or receiving a teaching license in Spanish. However, ALL students are welcome with permission of the instructor. Class is conducted in Spanish.

Prerequisites: Minimum of three years of high school Spanish and interview with instructor (please email for appointment)

SPAN 195 Topics in Spanish (1-3 Credit Hours)

A study of selected topics designed as electives for non-majors. These courses will appear in the course schedule.

SPAN 196 Topics in Spanish (1-3 Credit Hours)

A study of selected topics designed as electives for non-majors. These courses will appear in the course schedule.

SPAN 201 Intermediate Spanish I (3 Credit Hours)

This first course of the intermediate language sequence is designed to improve the speaking, listening, reading, and writing skills of students and to provide insight into the language and culture of Spanish-speaking people. Meant to integrate and extend earlier learning, the course is intended to keep building communicative competence and social and cultural awareness of the Spanish-speaking world.

Prerequisites: SPAN 102F or SPAN 121F or advanced placement

SPAN 202 Intermediate Spanish II (3 Credit Hours)

This course is a continuation of SPAN 201 that further improves the speaking, listening, reading, and writing skills of students and provides insight into the language and culture of Spanish-speaking people. It is intended to keep building communicative competence and social and cultural awareness of the Spanish-speaking world.

Prerequisites: SPAN 201 or advanced placement

SPAN 221 Intensive Intermediate Spanish (6 Credit Hours)

This is an accelerated course that combines SPAN 201 and SPAN 202 and continues the focus of SPAN 121F. This course is designed for students planning on minoring or majoring in Spanish, or receiving a teaching license in Spanish. However, ALL students are welcome with permission of the instructor. Class is conducted in Spanish.

Prerequisites: A grade of C or better in SPAN 121F or SPAN 102F and interview with instructor (please email for appointment)

SPAN 266 Spanish for Health Professions (3 Credit Hours)

This course seeks to develop Spanish language abilities for students involved in the health professions, i.e., medical fields, dentistry, physical therapy, etc. Although this course develops all skill areas (reading, writing, speaking, listening), it will concentrate on the development of oral communication and the cultural issues facing professionals and Spanish-speaking patients.

Prerequisites: SPAN 101F and SPAN 102F or SPAN 121F or 3 years of Spanish at the secondary level

SPAN 295 Topics in Spanish (1-3 Credit Hours)

A study of selected topics designed as electives for nonmajors. These courses will appear in the course schedule.

SPAN 296 Topics in Spanish (1-3 Credit Hours)

A study of selected topics designed as electives for nonmajors. These courses will appear in the course schedule.

SPAN 310 Advanced Grammar Review (3 Credit Hours)

May be taken concurrently with SPAN 312W. The objective of the course is to improve the student's knowledge of Spanish grammar and syntax through the review of grammatical rules and their application. Emphasis is placed on how grammatical forms codify meaning and how grammar and meaning interact to construct the language and textual structure of different genres. This course is recommended for students who wish to major or minor in Spanish and need a grammar review. As this course is considered a review, it will not count toward the major or minor.

Prerequisites: SPAN 202 or SPAN 221 or placement through testing

SPAN 311 Global Conversations (3 Credit Hours)

This course is primarily a conversation course to develop linguistic and cultural proficiency in verbal communication. Task-oriented communication strategies in cross-cultural training will be practiced by presenting students with models that demonstrate appropriate linguistic and cultural competencies. Students will practice these skills by role-playing, giving presentations, enriching self-awareness with practiced in-group discussions on various topics (such as, prejudice, racism, values, and customs) that dispel stereotypes and foster more in-depth social-cultural understanding, and with participation in guided cultural encounters. Students will improve their listening and comprehension skills and deepen cultural proficiency by learning how to communicate and collaborate with other people and cultures in a global age. (This is an oral skills course.)

Prerequisites: a grade of C or better in SPAN 202 or SPAN 221 or advanced placement

SPAN 312W Writing Around the World (3 Credit Hours)

This is an intensive writing course designed with writing assignments that examine various cultural contexts that enable students to understand cultural content, style, audience and organization. The main objective of the course is increased awareness of and sensitivity to appropriate word choice, and syntax in the language. Students will engage in writing for different cultural audiences and in varied contexts such as literary, artistic and media expressions around the world. Special emphasis is placed on the methodology of close reading as students hone the analytics skills and vocabulary necessary to interpret idioms, regionalism, cultural expressions and overall intercultural skills observed in various genres and cultures. Students will analyze compelling global issues and the diverse cultural perspectives that inform them.

Prerequisites: A grade of C or better in ENGL 211C, ENGL 221C or ENGL 231C and a grade of C or better in SPAN 202 or SPAN 221 or advanced placement

SPAN 323 World Cultures and Contexts (3 Credit Hours)

This course examines historical and cultural identities in Spain and Latin America, beginning with a study of the historical constructs that helped create the basis of Spanish and Latin American identities. These include the concept of *Convivencia* (co-existence) of the three religions in Medieval Spain, pre-Columbian civilizations, the Spanish Conquest, the Colonial period, and the fight for Independence. The course also addresses more modern notions of culture and identity by focusing on themes such as globalization, immigration, economic crises, political leadership, and daily life. Along with these themes, popular culture will be discussed at length in order to understand the role it plays in generating identities.

Prerequisites: SPAN 311 and SPAN 312W with a grade of C or better

SPAN 330 Introduction to Hispanic Literature (3 Credit Hours)

This course introduces students to the basic theoretical and practical aspects and approaches to literary analysis, in order to learn how to read Hispanic literature from the Middle Ages to the present. Literary texts will be examined in terms of content, style, and form. The objectives of the course are to learn how to do a close reading of the texts – a poem, a short story, a novel, or a theater play – and interpret them as a literary scholar, while developing skills of critical thinking, speaking and writing in Spanish. Discussions will focus on literary themes and their relationship to current events rather than a chronological survey of literature.

Prerequisites: SPAN 311 and SPAN 312W

SPAN 366 Business Spanish: Language and Culture (3 Credit Hours)

This course aims to equip students for the eventuality of working with or for a Spanish company here or abroad. It is a language course, with a strong cultural component, for the intermediate learner. The emphasis of the course is on Spanish language usage in personal, business, and employment situations. The course provides a background for all students regardless of specific career goals. Students learn about cultural mores and social etiquette, engage in situational role playing, and prepare for job interviews. Students will combine their various practical assignments, involving realistic employment-seeking tasks, into an electronic portfolio of neatly-kept revisions.

Prerequisites: SPAN 311 and SPAN 312W or permission of instructor

SPAN 369 Practicum (1-3 Credit Hours)

Internships in private and public organizations that provide an opportunity for students to apply and enhance language skills or cultural knowledge in a workplace setting.

Prerequisites: nine credit hours at the 300 or 400 level

SPAN 395 Topics in Spanish (1-3 Credit Hours)

Selected topics, genres, authors and/or literary, cultural, sociopolitical, or historical movements in the Spanish-speaking world. May be repeated for credit if the topic is different.

Prerequisites: SPAN 311 and SPAN 312W

SPAN 396 Topics in Spanish (1-3 Credit Hours)

Seminars engage students in in-depth study of a specified topic through readings, research and oral and written student reports. Special attention is paid to theoretical and bibliographic issues. Topics vary according to the areas of expertise and professional interests of departmental faculty. May be repeated if topics are different.

Prerequisites: SPAN 311 and SPAN 312W

SPAN 407/507 Advanced Grammar and Syntax (3 Credit Hours)

This class is designed to solidify and refine students' working knowledge of written skills in the language, with an emphasis on increasing their written sophistication. Focus is on analysis of vocabulary, grammar, and cultural nuances in the syntax to examine how language reflects the ways of life and beliefs of its speakers, contrasted with the extent of language's influence on culture. Students will refine their skills in written inter-cultural communication, paying attention to idioms and the fine points of 'cultural grammar,' communicative competence and specialized discourse to develop excellent communication skills. This course is intended to prepare students for using their knowledge of language and culture in professional settings.

Prerequisites: SPAN 311, SPAN 312W, SPAN 323, and SPAN 330

SPAN 410/510 Spanish Applied Linguistics (3 Credit Hours)

This course provides an introduction to Spanish linguistics and establishes the basis for the application of linguistic principles, including an introduction to the description and organization of data dealing with phonology (how sound patterns form words), discussion on topics in morphology (word formation and verbal inflection) and the description and organization of data dealing with syntax (how words combine to form phrases and sentences). In addition, the course analyzes the regional variations of Spanish (dialectology), and applying linguistics concepts, students contrast and compare the regional categories of Spanish use world-wide. It will provide students with a level of knowledge to make connections between the structure of Spanish and relevant issues in contemporary Hispanic linguistics, such as second language learning, language variation, bilingualism, and Spanish in the United States.

Prerequisites: SPAN 311, SPAN 312W, SPAN 323, and SPAN 330

SPAN 415/515 Spanish Phonetics (3 Credit Hours)

This class is an introduction to the descriptive analysis of Spanish sounds and provides a comprehensive presentation of phonetics concepts as well as the comparisons drawn between the sounds of Spanish and those of English from a theoretical perspective. Students will gain a solid understanding of the sound system and strengthening of their pronunciation of Spanish from engaging, culturally driven activities taken from real-life modern Spanish sources, as well as enhancing awareness through aural comprehension of the nuances of the different dialects from speakers across the Spanish-speaking world.

Prerequisites: SPAN 311, SPAN 312W, SPAN 323, and SPAN 330

SPAN 447/547 Drama of the Spanish Golden Age (3 Credit Hours)

A study of selected works of the major playwrights of the Golden Age: Lope de Vega, Calderon de la Barca, Tirso de Molina, Ruiz de Alarcón.

Prerequisites: SPAN 311, SPAN 312W, SPAN 323, and SPAN 330

SPAN 448/548 Contemporary Spanish Drama (3 Credit Hours)

Through reading and analysis of the most representative texts of Spanish drama of the last decades, this course intends to introduce students to contemporary theater production in relation to the social, political and cultural trends that dominate in Spain today. Readings will allow students to gain a deeper understanding of the debates predominating within Spanish society and of possible correlations linking Spanish and European culture today.

Prerequisites: SPAN 311, SPAN 312W, SPAN 323, and SPAN 330

SPAN 449/549 Contemporary Spanish-American Drama (3 Credit Hours)

In this course students will read at least thirteen Spanish-American plays from the twentieth and twenty-first centuries. Through class discussions and presentations, students will learn an appropriate vocabulary to converse about the plays as well as literary theory to enable them to analyze and interpret the plays. By the end of the course, students should be able to see literary trends and begin to form opinions about the direction that Spanish-American theater has taken and why.

Prerequisites: SPAN 311, SPAN 312W, SPAN 323, and SPAN 330

SPAN 453/553 Border Culture and Literature (3 Credit Hours)

Students study a variety of current cultural texts from the U.S. and Mexico to explore the multiplicity of images that surround and define the highly contested and increasingly important area of the U.S.-Mexico border. Discussions are grounded in an ideological analysis with the goal of developing a description of the historical and social parameters and strategies that are utilized in the critical revision of the Borderlands. Specifically, this course focuses on questions dealing with subaltern identities, for example women, indigenous groups, immigrants, and the poor.

Prerequisites: SPAN 311, SPAN 312W, SPAN 323, and SPAN 330

SPAN 469/569 Hispanic Film (3 Credit Hours)

A topical study of the major works of Spanish and Latin American film from Bunuel to the present. The course will explore many issues, including those related to gender, race, symbolism, and class struggle. (cross-listed with COMM 443/COMM 543)

Prerequisites: SPAN 311, SPAN 312W, SPAN 323, and SPAN 330

SPAN 471/571 Hispanic Women Authors (3 Credit Hours)

A study of fictional and non-fictional works by Spanish, Spanish-American, and U.S. Latina writers from the 16th to the 20th century. The course analyzes gender identity and roles and the interaction of gender, race, and class in literary representations of courtship and marriage, spirituality, nationalism, colonialism, and multiculturalism. (Cross-listed with WCS 471/WCS 571)

Prerequisites: SPAN 311, SPAN 312W, SPAN 323, and SPAN 330

SPAN 473/573 Contemporary Latina Literature: From Borders to Crossroads (3 Credit Hours)

The course focuses on poetry, prose fiction and theater written by Chicana, Puerto Rican, Cuban-American, and Dominican-American women authors in the last twenty years. Attention will also be paid to the very influential theoretical work written by Chicanas.

Prerequisites: SPAN 311, SPAN 312W, SPAN 323, and SPAN 330

SPAN 475W Spanish Senior Research Seminar (3 Credit Hours)

The course is designed to provide Spanish majors with a small group setting that facilitates in-depth discussion of key concepts of critical theory, literary studies, and the discipline. The seminar will encourage students to research and explore relevant topics related to Hispanic literature and the arts and experiment with the application of the different concepts under discussion. This is a writing intensive course.

Prerequisites: Senior standing; SPAN 311, SPAN 312W, SPAN 323, and SPAN 330; and a grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C

SPAN 495/595 Topics in Spanish (1-3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule.

Prerequisites: SPAN 311, SPAN 312W, SPAN 323, and SPAN 330

SPAN 496/596 Topics in Spanish (1-3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule.

Prerequisites: SPAN 311, SPAN 312W, SPAN 323, and SPAN 330

SPAN 497 Tutorial Work in Special Topics in Spanish (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: SPAN 311, SPAN 312W, SPAN 323, and SPAN 330

SPAN 498 Tutorial Work in Special Topics in Spanish (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: SPAN 311, SPAN 312W, SPAN 323, and SPAN 330

SPED - Special Education

SPED 313 Fundamentals of Human Growth and Development: Birth through Adolescence (3 Credit Hours)

This course contributes to an understanding of the physical, social, emotional, speech and language, and intellectual development of infants, toddlers, children, and adolescents. Furthermore, it promotes the ability to use this understanding in guiding learning experiences and relating meaningfully to preK-12, special education, and secondary education students. The interaction of infants, toddlers, children, and adolescents with economic, social, racial, ethnic, religious, physical, and intellectual differences is explored, as well as developmental issues related to giftedness or disability and the impact of family disruptions, child abuse, and substance abuse.

Prerequisites: junior standing

SPED 400/500 Foundations of Special Education: Legal Aspects and Characteristics (3 Credit Hours)

The course provides an introduction and overview of the field of special education from the perspective that it is a subsection of general education and that the field is in transition by virtue of philosophical, legislative, and programmatic changes. Legal aspects, regulatory requirements, and critical analyses of research are addressed. The course includes a broad overview of the characteristics, identification, instructional needs, and accommodation necessary for creating appropriate educational and vocational environments for students with disabilities.

Prerequisites: junior standing

SPED 402/502 Instructional Design I: Learner Characteristics and Assessment (3 Credit Hours)

The intent of this course is to provide pre-service and in-service teachers with: (a) knowledge of the characteristics of K-12 students with learning differences who are accessing either the general curriculum or the adapted curriculum, and (b) the ability to develop knowledge and skill in the selection, administration, scoring and interpretation of standardized/norm-referenced and criterion-referenced assessments for exceptional learners. Administering formal and informal assessment tools for the development of an IEP are emphasized. The use of assessment data to improve evidence-based instruction and student performance is discussed.

Prerequisites: Junior standing

SPED 403 Directed Field Experience in Special Education (3 Credit Hours)

This course provides variable hours of direct participation in a community or educational setting with individuals with special needs. The course includes specific skills of program planning, implementation, evaluation and classroom management. Practicum of 45 hours required.

Prerequisites: Satisfactory entry into the undergraduate teacher education program (UTEP)

SPED 404/504 Characteristics and Medical Aspects of Disabling Conditions (3 Credit Hours)

This course reviews medical conditions present among individuals with disabilities and implications for classroom instruction.

Prerequisites: Junior standing

SPED 406/506 Students with Diverse Learning Needs in the General Education Classroom (3 Credit Hours)

This course introduces general education teachers to the legal aspects and educational needs of at-risk students and those with disabilities. Emphasis is on characteristics of children with special needs and procedures for effective academic, behavioral, and social integration of these children in the general education classroom.

Prerequisites: junior standing

SPED 411/511 Classroom and Behavioral Management Techniques for Students with Diverse Needs (3 Credit Hours)

This course addresses classroom management techniques and individual interventions based upon behavioral, cognitive, affective, social, and ecological theory and practice. The course focuses on the field of applied behavior analysis, including best practices in the areas of data collection, program selection, program implementation, and data analysis. Positive behavior management, supports, and functional behavioral assessment for students with diverse learning needs will be emphasized.

Prerequisites: Junior standing or permission of the instructor

SPED 415/515 Instructional Design II: Curricular Procedures and Individualized Education Planning (3 Credit Hours)

The intent of this course is to provide preservice and in-service teachers with: (a) knowledge of research-based instruction for PreK-12 students with disabilities and those who are gifted; (b) knowledge and skill in using data collection to make decisions about student progress, instruction, program, accommodations and teaching methodology for exceptional learners, and (c) knowledge and skill in planning, developing and implementing individual educational plans and group instruction for diverse exceptional learners who are accessing the general education curriculum and the standards of learning or the adapted education curriculum and the aligned or essentialized standards of learning.

Prerequisites: Passing scores on Praxis Core Academic Skills for Educator Tests or equivalent as prescribed by the Virginia Board of Education

SPED 417/517 Collaboration and Transitions (3 Credit Hours)

This course addresses the complex issues surrounding families and children with disabilities and transitions across the lifespan, as well as effective collaboration with families and professionals to support inclusion and/or effective early intervention services, educational services, and transition services for students at-risk and students with disabilities. Emphasis is on successful professional collaboration and effective relationships in educational, transition, and family settings.

Prerequisites: Junior standing

SPED 418/518 Instructional Strategies to Meet Diverse Learning Needs in Math (3 Credit Hours)

This course covers instructional strategies necessary to teach mathematics to students with diverse learning needs in elementary and secondary settings. Students will study and apply pedagogy-based research on how learning takes place and strategies for differentiating instruction for the unique needs of diverse learners. Students will address and apply effective research-based methodology and evaluation standards.

Prerequisites: Junior standing

SPED 428/528 Instructional Strategies for Students Accessing the Adapted Curriculum (3 Credit Hours)

This course addresses the characteristics and instructional strategies of students accessing the adapted curriculum. Emphasis is on assessment, program development, academic, and functional skills instruction. This course addresses the needs of individuals with severe and/or profound multiple disabilities. 45 Hour Practicum

Prerequisites: Junior standing

SPED 432/532 Characteristics of Students with Visual Impairments (3 Credit Hours)

This course provides an overview of the characteristics of and services to persons with visual impairments, including the impact of visual impairment on infants' and children's growth and development, child and adolescent emotional and social development, and family interaction patterns. It considers the educational, conceptual, psycho-social, and physical implications of a visual impairment.

Prerequisites: SPED 400/SPED 500

SPED 433/533 Braille Code (3 Credit Hours)

This course provides instruction in the development, use, and application of the Braille literary code and its implications for educational/literacy programs for students with visual disabilities. Students will develop the skills to read and write contracted and uncontracted Braille, while acquiring instructional methodologies for teaching children who are blind to read and write. Sources of Braille materials for educational purposes are identified.

Prerequisites: Junior standing

Pre- or corequisite: SPED 400/SPED 500 and SPED 432/SPED 532

SPED 434/534 Medical and Educational Implications of Visual Impairments (3 Credit Hours)

Provides an introduction to anatomy and physiology of the visual system and the educational implications of visual pathology. Topics include anatomy of the human eye, normal visual development, pathology of the eye, examination procedures for the identification of visual pathology, and the effects of pathology on visual learning and development. Practicum requires a minimum of 25 hours.

Prerequisites: SPED 400/SPED 500 and SPED 432/SPED 532

SPED 435/535 Orientation and Mobility (2 Credit Hours)

Provides the foundation for understanding the components and essence of orientation and mobility. Establishes how the need for independent travel in the blind population created the field of O&M. Explores the philosophy and history of orientation and mobility including cane instruction, dog guides and methods of travel. Addresses techniques in developing orientation skills and basic mobility instruction. Motor and concept skill development are emphasized. Practicum of 45 hours required.

Prerequisites: Junior standing

Pre- or corequisite: SPED 400/SPED 500 and SPED 432/SPED 532

SPED 436/536 Curriculum and Assessment of Students with Visual Impairments (3 Credit Hours)

Provides students with knowledge and understanding of the educational assessment of students with visual impairments and additional disabilities including deaf-blindness. Students will practice assessing and planning educational programs for students with visual impairments. Addresses assessment of technology for students with visual impairments. Examines determination of learning needs and appropriate learning media, relationship of assessment, IEP development, and placement. Practicum requires a minimum of 25 hours.

Prerequisites: Junior standing

Pre- or corequisite: SPED 400/SPED 500 and SPED 432/SPED 532

SPED 437/537 Assistive Technology for People with Sensory Impairments (3 Credit Hours)

This course is designed for professionals and/or students interested in serving the visually impaired/blind population or hearing impaired/deaf population. It is designed to heighten the awareness of participants to specific technology and resources available to enhance and improve the ability of individuals with visual and hearing impairments to succeed in school, daily living activities and employment. Knowledge and awareness components of this course will be delivered via distance education.

Prerequisites: Junior standing

Pre- or corequisite: SPED 400 or SPED 500 and SPED 432 or SPED 532

SPED 440/540 Assistive Technology for Diverse Students (3 Credit Hours)

This course provides lectures for pre-service and in-service teachers and related service providers of special populations in the use of assistive technology (AT) devices and services, and augmentative alternative communication (AAC) systems for instructional programs and computer applications. Study will involve compliance with federal and state laws, and national and state standards related to providing assistive technology to diverse students.

Prerequisites: Junior standing

SPED 441/541 Teaching Students with Severe Physical and Sensorimotor Disabilities (3 Credit Hours)

This course reviews techniques for working with students who have severe physical and sensorimotor disabilities. Course emphasis is on proper positioning and handling for students with atypical motor/muscle development who function at developmental levels between birth and five years. Practicum of 45 hours required.

Prerequisites: Junior standing

SPED 460/560 Teaching Preschoolers With Diverse Abilities (3 Credit Hours)

This course prepares students to create high quality learning environments for preschool children (ages 2-5 years) who have diverse strengths and needs. Students will learn how to access curricula and materials, plan for and provide evidence-based instruction, collect data for progress monitoring, and provide adaptations to the environment to support the development of children with and without disabilities. Programming that addresses multiple areas of development, such as social-emotional, communication, motor, and cognition, will be discussed, and students will complete a 10-hour preschool observation.

Prerequisites: Junior standing

SPED 461/561 Developmental Assessment of Young Children with Diverse Abilities (3 Credit Hours)

This course prepares students to use recommended practices for assessing the development of young children with diverse abilities, ages birth to 5 years, in home and inclusive/classroom-based settings. Course content and discussions address the knowledge and skills needed by early intervention, early childhood, and early childhood special educators when gathering developmental information to determine a child's eligibility, plan intervention and educational activities, and monitor progress across time. Practicum of 45 hours required.

Prerequisites: Junior standing

SPED 467/567 Family-Centered Practices in Early Childhood Intervention (3 Credit Hours)

This course prepares professionals to partner with families of infants and toddlers (ages birth-three) with developmental delays and disabilities in early intervention programs. Emphasis is placed on the use of family-centered practices that support caregiver and child learning during visits in homes and other community settings. Strategies for collaborating with team members (including the family), writing Individualized Family Service Plans (IFSPs), and providing effective services that facilitate child development during natural family routines and activities will be discussed.

Prerequisites: Junior standing

SPED 469/569 Communication/Language Development/Intervention for Students with Significant Disabilities (3 Credit Hours)

This course examines symbolic and non-symbolic communication/language development and acquisition. Emphasis is on routine-based communication training, communication/language facilitation strategies, augmentative communication systems, and informal/functional communication/language assessment procedures for students in early childhood special education, students with autism, and students with multiple disabilities.

Prerequisites: Junior standing

SPED 483/583 Field Experience Seminar in Special Education (1 Credit Hour)

Explores issues, problems, concerns and processes related to teaching and entering the profession of teaching. Passing scores on the Virginia Communication and Literacy Assessment (VCLA) and Virginia Reading Assessment (VRA)/ Reading for Virginia Educators (RVE) will be required by the end of the course.

Prerequisites: SPED 313, SPED 400/SPED 500, and SPED 402/SPED 502
Pre- or corequisite: SPED 403

SPED 486/586 Teacher Candidate Internship for Special Endorsement (12 Credit Hours)

Seven weeks will be completed at the elementary level and seven weeks will be completed at the middle/secondary level.

Prerequisites: admission to ODU Teacher Education Program; completion of the approved teacher education program in the specific endorsement area; departmental approval

SPED 495/595 Topics in Special Education (1-3 Credit Hours)

This course offers selected topics designed to permit small groups of qualified students to work on subjects of mutual interest in the special education field.

Prerequisites: SPED 400

SPED 497 Independent Study (3 Credit Hours)

Independent study of special topics in special education for undergraduate students.

Prerequisites: Permission of instructor

STAT - Statistics

STAT 130M Elementary Statistics (3 Credit Hours)

Topics include: data description, elementary probability, binomial and normal distributions, interval estimation, hypothesis testing, and correlation. The role of probability in inference is emphasized.

Prerequisites: A qualifying score on a placement test administered by the University Testing Center, a qualifying SAT or ACT score, a C or better in MATH 101M, or a C or better in a higher level math course

STAT 306 Introductory Statistics (3 Credit Hours)

A general probability and statistics course designed specifically to accommodate the needs of school teachers and health professionals. Topics include: descriptive statistics, basic probability, discrete random variables, continuous random variables, interval estimation, regression and correlation, hypothesis testing, and applications. (May not be used to satisfy the upper-division elective requirement of the math major program.)

Prerequisites: A grade of C or better in MATH 102M or MATH 162M

STAT 310 Introductory Data Analysis (3 Credit Hours)

Topics include measures of location, dispersion, and strength of relationship; parametric and nonparametric tests of location; one-way analysis of variance; complete block designs; simple and multiple regression; correlation; measures of association for categorical data. Microsoft EXCEL will be used extensively as an aid in data analysis. Written interpretation of results will be a routine component of daily assignments.

Prerequisites: A grade of C or better in STAT 130M or MATH 200 or MATH 205 or MATH 211

STAT 330 An Introduction to Probability and Statistics (3 Credit Hours)

Topics include: descriptive statistics, probability theory and probability distributions, mathematical expectation and its role in decision making, hypothesis testing, point and interval estimation, numerous applications. (Not open to students with credit in STAT 331.)

Prerequisites: A grade of C or better in MATH 211

STAT 331 Theory of Probability (3 Credit Hours)

An introduction to probability theory including probability functions, continuous and discrete random variables, combinatorics, special probability distributions, moment generating functions, and limit laws.

Prerequisites: A grade of C or better in MATH 211

STAT 405/505 Introduction to Data Handling (3 Credit Hours)

This course will introduce SAS and R, two of the most widely used statistical software packages. This course will cover the basic skills needed for using computer packages to perform a variety of statistical analyses. Topics include data import/export, manipulation, descriptive statistics and visualization, advanced data handling, and the use of statistical computer packages for categorical data analysis, regression analysis, hypothesis testing, and more.

Prerequisites: grade of C or better in STAT 130M or equivalent and a grade of C or better in MATH 316 or equivalent or permission of instructor

STAT 431/531 Theory of Statistics (3 Credit Hours)

Topics include point and interval estimation, tests of hypotheses, introduction to linear models, likelihood techniques, and regression and correlation analysis.

Prerequisites: A grade of C or better in STAT 331 or departmental permission

STAT 432/532 Sampling Theory (3 Credit Hours)

Sampling from finite populations is discussed. Topics such as simple random sampling, stratified random sampling and ratio and regression estimation are included. Also discussed are aspects of systematic sampling, cluster sampling, and multi-stage sampling.

Prerequisites: A grade of C or better in STAT 431/STAT 531

STAT 435/535 Design and Analysis of Experiments (3 Credit Hours)

Topics include introduction to design of experiments, analysis of variance with a single factor, power and OC curves, and two factors with interactions, random effects models, randomized blocks, Latin square and related designs, introduction to factorial and 2k factorial designs. Statistical software will be used to analyze real life data.

Prerequisites: STAT 431/STAT 531 or STAT 437/STAT 537

Pre- or corequisite: STAT 405/STAT 505

STAT 437/537 Applied Regression and Time Series Analysis (3 Credit Hours)

Topics include introduction to regression and model building, simple linear regression, multiple regression, logistic regression, and simple time series, residual analysis, selection of variables, model adequacy checking, regression on dummy variables, analysis of covariance, regression analysis of time series data, and applications of these techniques to real life data using statistical software. Pre- or

Prerequisites: A grade of C or better in STAT 330 or STAT 310 or STAT 431/STAT 531

Corequisites: STAT 405/STAT 505

STAT 440/540 Clinical Trials (3 Credit Hours)

This course will introduce basic statistical concepts and methods used in clinical trials. Topics include phase-I trial designs including 3+3 and CRM dose-finding designs; phase-II trial designs including Gehan's two-stage and Simon's two-stage designs; phase-III trial designs including parallel, group allocation, cross-over, and factorial designs; randomization; sample size and power calculation; adaptive trials; and monitoring of trials for safety and efficacy.

Prerequisites: A grade of C or better in STAT 431/STAT 531

STAT 442/542 Environmental Statistics (3 Credit Hours)

Topics include nonlinear and generalized linear models, quantitative risk assessment, analysis of stimulus-response and spatially correlated data, methods of combining data from several independent studies. Regression settings are emphasized where one or more predictor variables are used to make inferences on an outcome variable of interest. Applications include modeling growth inhibition of organisms exposed to environmental toxins, spatial associations of like species, risk estimation, and spatial prediction. SAS is used extensively in the course.

Prerequisites: A grade of C or better in STAT 431/STAT 531 or permission of the instructor; STAT 437 or STAT 537 recommended

STAT 447/547 Analysis of Longitudinal Data (3 Credit Hours)

This course introduces statistical methods for analyzing multivariate and longitudinal data. Topics include multivariate normal distribution, covariance modeling, multivariate linear models, principal components, analysis of continuous response repeated measures, and models for discrete longitudinal data. Emphasis will be on the applications to the biological and health sciences and the use of the statistical software.

Prerequisites: A grade of C or better in STAT 431/STAT 531

Pre- or corequisite: STAT 405/STAT 505

STAT 449/549 Nonparametric Statistics (3 Credit Hours)

Topics include statistical functionals, bootstrap and jackknife techniques, elements of U-statistics, nonparametric tests (including permutation and rank tests), time-to-event analysis, nonparametric density estimation, nonparametric smoothing, regression analysis, and inference. R and/or Python software will be used for computations.

Prerequisites: A grade of C or better in STAT 330 or STAT 331 or departmental permission

STAT 450/550 Categorical Data Analysis (3 Credit Hours)

Topics include types of categorical data, relative risk and odds ratio measures for 2 x 2 tables, the chi-square and Mantel-Haenszel tests, Fisher's exact test, analysis of sets of 2 x 2 tables using Cochran-Mantel-Haenszel methodology, analysis of I x J and sets of I x J tables for both nominal and ordinal data, logistic regression including the logit and probit models. Emphasis will be on the application of these statistical tools to data related to the health and social sciences. Interpretation of computer output will be stressed.

Prerequisites: A grade of C or better in STAT 431/STAT 531

Pre- or corequisite: STAT 405/STAT 505

STAT 494 Entrepreneurship in Statistics (3 Credit Hours)

This course is designed to help students enhance their personal and professional development through innovation guided by faculty members and professionals. It offers students an opportunity to apply their knowledge of statistics to the development of a new product, business, nonprofit program, or other initiative. The real world experiences that entrepreneurs provide will help students understand how academic knowledge leads to transformations, innovations, and solutions to different types of problems. This course is administered as an independent project for individual students, or as group projects.

Prerequisites: 3.0 GPA and permission of the chief departmental advisor

STAT 497/597 Topics in Statistics (1-3 Credit Hours)

The advanced study of selected topics.

Prerequisites: permission of the instructor

STEM - Science, Technology, Engineering, and Mathematics Education

STEM 103 Foundations of STEM Teaching: An Inquiry-Based Approach (2 Credit Hours)

In this introductory STEM teacher preparation course, students delve into the 5-E Model of inquiry-based lesson design within real classroom settings. Guided by mentors and experienced master teachers, students actively engage in authentic hands-on experiences in elementary and middle school classes. Throughout the course, they develop essential skills in effective lesson design, questioning strategies, and the integration of educational technologies. Students are also introduced to mathematics or science curricula, with a focus on developing pre- and post-assessment instruments, analyzing student work, and honing classroom management skills.

STEM 110T Technology and Your World (3 Credit Hours)

An overview of the resources and systems of technology. Emphasis is on impacts that technology has on individuals and their careers. Activities explore the evolution of technology, its major systems and their impact on individuals and their careers.

STEM 201 Knowing and Learning in STEM Education (3 Credit Hours)

This course is designed to expand the students' understanding of current theories of learning and conceptual development in STEM. Students will investigate theories of knowing and learning in STEM and implications for teaching secondary mathematics and science. Students will examine their own assumptions about learning as well as critically examine the needs of a diverse student population in the classroom. Students are expected to independently register for and take the Praxis I examination while enrolled in this course.

Pre- or corequisite: STEM 101 or STEM 102 or STEM 103

STEM 202 Classroom Interactions in STEM Education (3 Credit Hours)

This course provides students with an overview of principles for teaching middle and secondary school mathematics or science through an exploration of the role of content, pedagogy, curriculum and technology as they promote learning and impact equity. Students are introduced to ways in which curriculum and technology are used in the classroom to build interrelationships among teachers and students. Frameworks for teaching students of diverse backgrounds equitably are emphasized in the course. A field component that consists of observations and teaching in the high school classroom is included.

Prerequisites: grade of C or better in STEM 101 and STEM 102, or a C or better in STEM 103

Pre- or corequisite: STEM 201

STEM 221 Industrial Materials (3 Credit Hours)

A study of materials used by industry to produce products. Emphasis is on the study of ceramics, plastics, composites, and biotechnological materials. Students learn materials identification, use and processing.

STEM 231 Materials and Processes Technology (3 Credit Hours)

A study of the production processes used with metallic and forest product materials. Industrial resources, their location, extraction, and processing into standard stocks are also covered. Students learn properties, uses and processing of metal and wood materials.

STEM 241 Energy Systems: Basic Electricity (3 Credit Hours)

A study of direct and alternating current and its use in contemporary technology. Activities include experiments and projects to supplement the theory of electricity.

STEM 242 Technological Systems Control (3 Credit Hours)

Students will develop an understanding of systems control technology for application to energy and power, manufacturing, processing and transportation systems. Emphasis will be placed on research and development, creativity and experimentation, and trouble shooting in designing control systems.

STEM 251G Computer Literacy: Communication and Information (3 Credit Hours)

A guided review of communication technology and information sources to help students discern between reliable and unreliable sources and techniques. Students develop skills in computer applications, information retrieval, filtering and analyzing data, and formatting and presenting information.

STEM 320 Manufacturing and Construction Technology (3 Credit Hours)

A study of production processes used in manufacturing and construction systems. Students will research and design manufactured products for mass production and constructed products for building. The social, cultural, environmental and economic impacts of manufacturing and constructed products on society are discussed.

Prerequisites: STEM 221, STEM 231 or permission of instructor

STEM 321 Manufacturing Technology (3 Credit Hours)

A study of the production processes used in manufacturing systems. Emphasis is placed upon planning, organizing and principles of manufacturing. Students research and design enterprise systems for mass production. Emphasis is on manufacturing design requirements and the social, cultural, and economic impacts of manufactured products on society and the environment.

Prerequisites: STEM 221, STEM 231 or permission of instructor

STEM 330 Medical, Agricultural, and Biological Technologies (3 Credit Hours)

A course for technology education majors that studies technological systems related to medical and food processing technologies. Students learn the basis of these technologies and complete activities that integrate the content with processes and products found in our technological world.

Prerequisites: junior standing or permission of department

STEM 350 Communication Technology Processes (3 Credit Hours)

The study of communication design principles and techniques for technology education. Emphasis is placed on the skills and equipment used in design, production, and distribution of communications. Print and electronic media are explored through technical illustration, video, audio, and other specialty processes of communications.

Prerequisites: STEM 251G

STEM 351 Communication Technology (3 Credit Hours)

A study of the development and impact of communication technology. Emphasis is placed on the integration of technical skills to produce information-based products such as print and telecommunications media.

Prerequisites: junior standing or permission of the instructor

STEM 360 Energy, Power, and Transportation Technologies (3 Credit Hours)

Study of the development of energy, power, and transportation systems and the movement of energy, power, people, and cargo. Areas of concern include vehicle systems design and support systems.

Prerequisites: junior standing or permission of the instructor

STEM 365 Safety and OSHA Certification (3 Credit Hours)

This course introduces safety programs used in the workplace and to increase the safety environment at work. The course covers four key topics: preliminary hazard analysis, failure modes and effects analysis, and OSHA hazard analysis and safety review requirements, which leads to an OSHA 10 Certificate.

Prerequisites: Junior status

STEM 367 Cooperative Education (1-3 Credit Hours)

Available for pass/fail grading only. Student participation for credit based on the academic relevance of the work experience, criteria, and evaluative procedures as formally determined by the department and the Cooperative Education program prior to the semester in which the work experience is to take place.

Prerequisites: Approval by department is required; Additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

STEM 370T Technology and Society (3 Credit Hours)

A multidisciplinary course designed to provide insight into the fundamental, historical, and contemporary nature of technology as an area of human knowledge. Attention is given to the positive and negative aspects of technology and how they affect society. (This is a writing intensive course.)

Prerequisites: grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C; junior standing or permission of the instructor

STEM 382 Industrial Design (3 Credit Hours)

Students will analyze and design products representative of today's industrial technological society. Emphasis will be placed upon design methodology, aesthetic value, and design thinking.

Prerequisites: junior standing

STEM 401 Project Based Instruction in STEM Education (3 Credit Hours)

Through a dynamic process of investigation and collaboration, students aim to master techniques for project-based investigations in STEM classrooms, and teach project-based lessons in the secondary classroom. Students work in teams to formulate questions, make predictions, design investigations, collect and analyze data, make products and share ideas. The use of assessments to improve student learning is emphasized in the course. This course includes a field component that consists of two observation days and three teaching days in a secondary classroom.

Prerequisites: STEM 201 and STEM 202

STEM 402 Perspectives on STEM (3 Credit Hours)

This course explores the historical, social, and philosophical implications of mathematics and science through investigations of significant episodes in their history. Students are brought to understand that science and mathematics are not merely body of facts, theories, and techniques but involve diverse processes by which they are continually generated and reformulated.

Prerequisites: Junior standing, admission to the MonarchTeach program plus 12 credit hours of science or math courses, and STEM 401

Pre- or corequisite: STEM 485

STEM 433/533 Developing Instructional Strategies PreK-6: Mathematics (3 Credit Hours)

Following a theory into practice philosophy, students explore, develop, and use instructional strategies, materials, technologies, and activities to promote children's development of attitudes, behaviors, and concepts in mathematics in grades PreK-6 in support of NCTM national instructional standards and the Virginia Standards of Learning.

Prerequisites: MATH 102M, TLED 326, and Junior standing

Corequisites: STEM 434

STEM 434/534 Developing Instructional Strategies PreK-6: Science (3 Credit Hours)

Following a theory into practice philosophy, students explore, develop, and use instructional strategies, materials, technologies, and activities to promote children's development of attitudes, behaviors, and concepts in science in grades PreK-6 in support of AAAS national instructional standards and the Virginia Standards of Learning.

Prerequisites: TLED 326 and Junior standing

STEM 485 Apprentice Teaching (9 Credit Hours)

Internship in school. Available for pass/fail grading only. Offers prospective teacher candidates a culminating experience that provides them with the tools needed for their first teaching jobs. Students are immersed in a local secondary school for 10 consecutive weeks and experience the expectations, processes, and rewards of teaching. As part of their Apprentice Teaching experience, candidates will be required to attend a one hour weekly seminar that will bring them together with master teachers to share experiences and to explore issues, problems, concerns, and processes related to their teaching experiences and to entering the profession of teaching.

Prerequisites: Completion of all course work in the MonarchTeach professional development sequence program and BIOL 468W or CHEM 468 or OEAS 468W or PHYS 468W or SCI 468, passing scores on PRAXIS I or equivalent SAT or ACT scores as established by VA Board of Education, passing scores on the appropriate PRAXIS II content examination and the Virginia Communication and Literacy Assessment, departmental approval, minimum major and overall GPA of at least 2.75 and a criminal background check

Corequisites: STEM 402

STEM 495/595 Topics (1-3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule.

Prerequisites: permission of the instructor

THEA - Theatre

THEA 152R Acting One (3 Credit Hours)

An introduction to the physical and vocal principles of performance coupled with an opportunity to increase awareness of the constructed nature of social interactions. Students will explore confident self-expression through the physical, vocal, emotional and technical aspects of acting, as an art form and a daily experience, in a format that encourages freedom of imagination and personal growth. Emphasis is on the fundamental communication skills of presence, body language, imagination, and social communication.

THEA 173+ Theatre Activities (1 Credit Hour)

This course is an activity course in which the students participate in University Theatre Activities such as set building, costume construction or running crew for season productions.

THEA 174+ Theatre Activities (1 Credit Hour)

This is an activity course in which the students participate in University Theatre Activities such as set building, costume construction or running crew for season productions.

THEA 195 Topics in Theatre (1-3 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major. These courses will appear in the course schedule, and will be more fully described in a booklet distributed to academic advisors.

THEA 196 Topics in Theatre (1-3 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major. These courses will appear in the course schedule, and will be more fully described in a booklet distributed to academic advisors.

THEA 225 Introduction to Production Technology (3 Credit Hours)

Fundamentals of construction, lighting, and production techniques in contemporary theatre and film. Students will apply acquired skills to active productions for ODU Theatre and Film productions.

THEA 227A Honors: Film Appreciation (3 Credit Hours)

This class will focus on both contextual and close text analysis of masterworks as they have influenced film art and industry. Students in this course are expected to develop basic research, communication, viewing and critical thinking skills as they apply their knowledge to the analysis of the film experience. Open to students in the Honors Program only.

THEA 230 Drama for Production (3 Credit Hours)

A practitioner-oriented examination of drama from its origins to the present. Particular emphasis is placed on plays from around the world that are associated with changes in theatre practice.

THEA 241A The Theatre Experience (3 Credit Hours)

An introductory audience-oriented examination of the elements of theatre and their historical development through study of plays and performances; emphasis will be directed to actually experiencing live theatre. Attendance at performances is required.

THEA 243H Theatre Histories (3 Credit Hours)

This course offers students a critical approach to interpreting theatre practices in history. As a fast-paced survey, it affords students a grounding in the histories of global theatre. Focusing on major political, cultural, economic, and social shifts, the course explores how those changes affected the development of theatre, drama, and performance.

THEA 244 Introduction to Production Design (3 Credit Hours)

An introduction to principles, methods, and materials used in designing stage and film productions.

THEA 248 Introduction to Stage Makeup (3 Credit Hours)

Develops skills and techniques for design and application of stage makeup.

THEA 252 Acting Two (3 Credit Hours)

Basic introduction to principles of acting which may be applied to stage and media and application of various techniques through exercises, improvisations, and performances of short scenes.

Prerequisites: THEA 152R

THEA 270A Film Appreciation (3 Credit Hours)

This class will focus on both contextual and close text analysis of masterworks as they have influenced film art and industry. Students in this course are expected to develop basic research, communication, viewing and critical thinking skills as they apply their knowledge to the analysis of the film experience.

THEA 271 Introduction to Filmmaking (3 Credit Hours)

This course will introduce the beginning student to making movies. Students will learn the basics of working with cameras, lights, sound recording, video editing and post production. This is a hands-on production course. Cross-listed with COMM 271/DANC 271.

THEA 280T Entertainment Technologies (3 Credit Hours)

This course is an introduction to the entertainment industry including working methods, processes, and equipment for live, recorded, and interactive entertainment. The exploration will include theatre, opera, dance, concert productions, theme parks, themed-retail, film production, immersive, interactive and virtual environments, and gaming technology. Attention is given to the positive and negative aspects of entertainment technologies and how they impact culture and society.

THEA 295 Topics in Theatre (1-3 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major. These courses will appear in the course schedule, and will be more fully described in a booklet distributed to all academic advisors.

THEA 320 Auditioning Technique (3 Credit Hours)

Course will examine practical audition skills and provide an orientation to the tools of procuring professional auditions, including head shots and resumes. Emphasis will be placed on effectively selecting and preparing auditions for stage, film and television.

Prerequisites: THEA 152R and THEA 252

THEA 321 Production Management for Television and Stage (3 Credit Hours)

This course will assist students in understanding the elements of production management both in television and on stage. The course emphasizes organizational and communication skills; technical production knowledge; professional rehearsal and performance protocol according to the rules of AEA, AFTRA and SAG as well as basic production budgeting and scheduling.

Prerequisites: THEA 225 or COMM 225 or permission of the instructor

THEA 325 Sound Design for Stage and Camera (3 Credit Hours)

This class will introduce the concepts and techniques of sound design and sound effects for the stage and camera. Students will learn design of sound elements in both a live and recorded environment as well as learn the current equipment and software in digital sound reproduction.

Prerequisites: Junior standing or permission of instructor

THEA 330 The Short Script (3 Credit Hours)

This course builds upon the principles taught in Screenwriting 1 (or equivalent) using the short script as a basis for the exploration. Utilizing concepts of characterization, plot, dialogue and narrative style, students should complete the course with several production-ready short scripts.

Prerequisites: COMM 346 or THEA 346

THEA 332 Making African-American Cinema (3 Credit Hours)

This introductory course on African-American cinema will focus on a variety of contemporary films, media clips, and video presentations concerning issues and topics that reflect the diversity within the African-American community of young adults between the ages of 18 to 25. The main goal of the class is to review historical films produced for African-Americans and utilize that data to conduct research and develop projects that represent the cultural diaspora of this audience, which is often not reflected in mainstream media, in Hollywood or major independent media outlets such as HBO or Showtime. Cross-listed with COMM 332.

Prerequisites: Junior standing or permission of the instructor

THEA 334 Narrative Adaptation (3 Credit Hours)

This screenwriting course explores the ways teleplays, stage plays, and screenplays can be crafted using a variety of primary source materials. Through multiple screenings, writing exercises, and deep reading, it examines what constitutes an adaptable piece of prose and how that material can be transformed. Primary weight is given to the movement from novel to film.

Prerequisites: COMM 346 or THEA 346

THEA 341 Lighting Design for Stage and Film (3 Credit Hours)

A production course introducing students to the world of light and shadow, mood and composition by surveying lighting design, its technologies for stage and camera, and such principles as basic electrical theory and stage/studio/location design aesthetics.

Prerequisites: THEA 225/COMM 225 or THEA 271/COMM 271 or permission of instructor

THEA 342 Post-Production 1 (3 Credit Hours)

This course serves as an introduction to the art of video post-production. Students explore the theory and practice of various editing styles in order to gain a better understanding of how stories are constructed in the editing room. The course covers principles of post-production of narrative, documentary, and experimental films. Through demonstrations and hands-on experience, students learn editing techniques with an in-depth examination of tools and approaches in a non-linear editing system.

Prerequisites: COMM 271 or THEA 271 or DANC 271

THEA 345 Advanced Production Design (3 Credit Hours)

This course will explore advanced principles of design for the stage in the areas of scenery. The process will include the application of various artistic styles to stage production.

Prerequisites: THEA 225 or COMM 225 or THEA 244

THEA 346 Screenwriting I (3 Credit Hours)

This course is an introduction to narrative screenwriting focusing on the traditional feature film. Students will study screenwriting principles through text reading, film viewing, script analysis and substantial writing assignments. Focus is on story structure, character development, action, dialogue, and proper screenplay format.

Prerequisites: ENGL 110C with a grade of C or better and ENGL 211C with a grade of C or better

THEA 347 Movement for the Actor (3 Credit Hours)

An examination through exercises and assignments of principles for developing a disciplined, flexible body for character creation.

Prerequisites: THEA 152R or permission of the instructor

THEA 348 Acting for the Camera (3 Credit Hours)

Course will examine the process of building characters for the camera, and the ways in which the conventions of the stage are adapted for the film or video audience.

Prerequisites: THEA 152R

THEA 349 Costume Design for Stage and Camera (3 Credit Hours)

This course explores the design aesthetic, historical context, and contemporary impact on performance of the costume garment and its accessories. Students will explore the application of design principles in a practical experience.

Prerequisites: THEA 225 or COMM 225

THEA 352 Acting Three (3 Credit Hours)

Study of and experimentation with various theories concerning the preparation of roles and special performance characteristics of different styles and types of drama. Considerable attention is directed toward scene study.

Prerequisites: THEA 152R and THEA 252

THEA 353 Animation (3 Credit Hours)

This is a project oriented, studio class that will focus on the art of animated storytelling from the traditional perspective of stop motion animation combined with digital post production. Students will engage in individual research, writing, storyboarding, editing, and sound creation to produce original short animations. Crosslisted with COMM 353.

Prerequisites: COMM 271 or DANC 271 or THEA 271

THEA 355 Costume Crafts (3 Credit Hours)

This course will develop design principles and craft techniques to create a wide variety of costume crafts. The course will focus on individual research, design elements and technical challenges. Projects will encourage students to explore textile modification, various applications for clothing design, costume crafts and art materials. Cross-listed with COMM 359.

Prerequisites: Junior standing or permission of instructor

THEA 356 3D Animation 1 (3 Credit Hours)

This is a project-oriented studio class that will focus on the art of animated storytelling through the use of computer-based 3D animation.

Prerequisites: COMM 271 or THEA 271 or DANC 271

THEA 357 3D Animation 2 (3 Credit Hours)

This is a project-oriented studio class that will focus on the art of animated storytelling from the perspective of computer-based 3D animation, building on the skills developed in 3D Animation 1. Students will engage in individual research, writing, storyboarding, editing, and sound creation to produce original short animations.

Prerequisites: COMM 356 or THEA 356

THEA 358 Color for Digital Cinema & TV (3 Credit Hours)

This course will introduce students to color workflow in the digital cinema environment. The focus will be on working with color beginning with the camera, through color correction to delivery, mixing software-specific techniques with a deepening understanding of the underlying theories of color theory and practice. Students will learn and apply industry standard best practices in the field of visual post-production. This is a hands-on workshop style post-production course.

Prerequisites: COMM 271 or DANC 271 or THEA 271

THEA 360 Voice for the Stage I (3 Credit Hours)

This course will explore facets of vocal production, speech and expression necessary for an engaging performance on stage. Through exercises and text work, the student will learn healthy vocal production, elements of clear speech and techniques for improving vocal range and expressiveness.

Prerequisites: THEA 152R

THEA 365 Internship in Film (3-6 Credit Hours)

Practicum/field experience in professional settings for students in all areas of Film. Pass/Fail only.

Prerequisites: Approval of the Director of Film and major advisor

THEA 367 Cooperative Education (1-3 Credit Hours)

Available for pass/fail grading only. Student participation for credit based on the academic relevance of the work experience, criteria and evaluative procedures as formally determined by the department and the Cooperative Education program prior to the semester in which the work experience takes place.

Prerequisites: Approval by department is required; Additional support may be provided by the Monarch Internship and Co-Op Office in the semester prior to enrollment

THEA 368 Internship (3 Credit Hours)

A structured work experience with or without remuneration, in an appropriately related disciplinary field. An ePortfolio, 150 hours of site work, plus satisfactory evaluations by supervisor and cooperating faculty member are required. Available for pass/fail grading only. Available To Communication, Theatre, and Dance majors and minors only. Cross-listed with COMM 368 and DANC 368.

Prerequisites: Approval of departmental internship director prior to registration

THEA 369 Internship at the Virginia Stage Company (3 Credit Hours)

A structured work experience with or without remuneration; a paper, a log and portfolio of work time plus satisfactory evaluations by supervisor and cooperating faculty member are required. Pass/Fail only.

Prerequisites: Approval of Director of Theatre and VSC representative

THEA 371 History of Animation (3 Credit Hours)

This course traces the evolution of the animated film worldwide, from the silent to the modern era. The purpose of the course is to provide students with a broad chronological and international overview of animated film masterworks.

Prerequisites: Junior standing or permission of the instructor

THEA 373 Production/Performance Lab (1 Credit Hour)

This course provides students opportunities to participate in productions in Theatre, Dance or Film. These positions provide hands-on experience in the discipline. Cross-listed with DANC 373.

Prerequisites: Junior standing or permission of the instructor

THEA 374 Production/Performance Lab (1 Credit Hour)

This course provides students opportunities to participate in productions in Theatre, Dance or Film. These positions provide hands-on experience in the discipline. Cross-listed with DANC 374.

Prerequisites: Junior standing or permission of the instructor

THEA 375 Television Production (3 Credit Hours)

This course explores the basic process of producing television from script to presentation.

Prerequisites: THEA 271 or COMM 271 or permission of the instructor

THEA 380 Documentary Production I (3 Credit Hours)

This course offers the student an opportunity to explore the world of documentary filmmaking. Students will perform research to develop evidence in support of a thesis, then utilize the camera to capture a narrative story based on the thesis. Through this process, the student is better able to understand documentary filmmaking. Students will develop and deliver short documentary films by the end of the semester.

Prerequisites: THEA 271 or COMM 271 or DANC 271 with grade of C or higher

THEA 383 Directing the Actor (3 Credit Hours)

This course is designed as a practical guide for directors to elicit strong performances from the actors who tell their stories. The class will establish vocabulary and practice techniques that are equally applicable to work in film or theatre. Ideally, the course will encourage students to think beyond genre as they create work that is both dramatically and humanly compelling.

Prerequisites: THEA 271 or COMM 271 or DANC 271 or THEA 152R

THEA 385 Cinematography (3 Credit Hours)

Introduces students to cinematography. The course explores camera technique, blocking actors, lighting, and cinematography fundamentals. The concepts of the course are applied to fiction and nonfiction cinema. This is a production class.

Prerequisites: THEA 271 or COMM 271 or DANC 271 with grade of C or higher

THEA 386 Post-Production 2 (3 Credit Hours)

This course builds on the fundamentals learned in Post-Production I, exploring advanced post-production techniques in picture editing, color correction and grading, sound editing and mixing, VFX editing, title and graphics editing, chroma key and compositing. The focus will be on mixing software-specific techniques with deepening understanding of the underlying theories of editing, color theory and principles of sound post-production. The students will learn and apply industry standard best practices in the field of audiovisual post-production. This is a hands-on workshop style post-production course.

Prerequisites: COMM 342 OR THEA 342

THEA 387 TV News Production (3 Credit Hours)

This course is designed to provide students with an introduction to the reporting, writing, and production aspects of a television news program. Students will learn how to create 15- and 30-minute news broadcasts by developing story ideas and news gathering. Students will also learn the intricacies of shooting and editing video along with the production process involved in recording a live news broadcast. Each student will spend time both in front of and behind the television studio cameras. The goal of this course is to produce weekly news programs worthy of broadcast on local television. Students will assume the roles of reporter, writer, producer, floor director, photojournalist, videographer, technician, and more.

Prerequisites: COMM 271 or THEA 271 or DANC 271

Pre- or corequisite: COMM 382 or ENGL 382

THEA 388 Motion Picture Aesthetics (3 Credit Hours)

This course is designed to develop within students a heightened and multifaceted awareness and appreciation for aesthetics of a particular type - motion picture aesthetics. Aesthetic considerations impact us intellectually, emotionally, psychologically, and viscerally. Professionals most definitely employ a language to filmmaking. One must learn the language of motion picture production and aesthetic design in order to convey concepts to their audiences.

Prerequisites: COMM 270A or THEA 270A

THEA 389 Sound Recording and Mixing for Film (3 Credit Hours)

This course will explore the best concepts in recording, editing and mixing audio for film and post-production. Students will be using Pro Tools hands-on to sync and mix audio to picture. Topics will include location audio, sound design, ADR, mixing, and more.

Prerequisites: THEA 271 or COMM 271 or DANC 271

THEA 390 Improvisation (3 Credit Hours)

An exploration of creativity through structured exercises, games and problems. Students participate in experiential studies that explore improvisational approaches, devices and elements to gain skills in the art of improvisation. This course also includes group discussions of reading assignments and feedback sessions following the improvisations performed in class. Through readings, journal writings, and in-class exercises, students develop the skills to articulate what they see, feel and respond to as performers and observers. Cross-listed with DANC 390.

Prerequisites: Junior standing or permission of the instructor

THEA 395 Topics in Theatre (1-3 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major. These courses will appear in the course schedule, and will be more fully described to all academic advisors.

Prerequisites: Junior standing and permission of the instructor

THEA 396 Topics in Theatre (1-3 Credit Hours)

A study of selected topics designed for nonmajors, or for elective credit within a major. These courses will appear in the course schedule, and will be more fully described in a booklet distributed to all academic advisors.

Prerequisites: junior standing and permission of the instructor

THEA 430 TV Screenwriting (3 Credit Hours)

This course concentrates on the development and delivery of industry standard one-hour long TV scripts and the associated script 'bible.' Students will study sample scripts from broadcast TV programs and develop their own spec scripts. Cross-listed with COMM 430.

Prerequisites: COMM 346 or THEA 346

THEA 439 WHRO Production (3 Credit Hours)

This is an experiential style course in the art and business of documentary production in the hands-on, professional environment of WHRO, which operates Hampton Roads' PBS affiliate TV station as well as two public radio stations. Students will be guided through the production of content for WHRO by an ODU faculty member and the WHRO staff. Cross-listed with COMM 439.

Prerequisites: COMM 271 or THEA 271 or DANC 271

THEA 440 Documentary Filmmaking Study Abroad (3 Credit Hours)

This is an in-the-field study abroad course where students will, in small groups, produce a short documentary film about a local NGO (Non-Governmental Organization) creating positive change in the local community.

Prerequisites: THEA 271 or COMM 271 or DANC 271 with a grade of C or higher

THEA 442/542 Principles of Directing (3 Credit Hours)

An examination and practical application of principles of stage direction as influenced by play script, acting talent, set and lighting design, and the technical facilities of production organizations.

Prerequisites: THEA 152R and THEA 230, and THEA 244 or permission of the instructor

THEA 446 Directing for the Camera (3 Credit Hours)

This course seeks to provide students with fundamental principles and practical techniques of directing the narrative fiction film: script development and analysis, production planning, shot composition and framing, and working with actors and crew.

Prerequisites: THEA 383 or COMM 383 with a grade of C or higher

THEA 449W/549 Script and Performance Analysis (3 Credit Hours)

Approaches script analysis from a directorial perspective through the written examination of action, character, language, music, and spectacle, as well as the play's production history and historical context, to discover how plays might be staged for the contemporary audience. Plays in production will be examined from a critical perspective with attention to artistic interpretation in the areas of direction, design, and performance. This is a writing intensive course.

Prerequisites: THEA 152R, THEA 230, THEA 244, and a grade of C or better in ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C, or permission of the instructor

THEA 451 Costume Design for Opera and Musical Theatre (3 Credit Hours)

This course will provide opportunities for hands-on training for all stages of the design process. Students will learn sewing techniques, create hand-dyed fabric, construction techniques, period costume research, character analysis, wig construction, and assist with the design. Project designs will be used in a main stage production presented by the Communication & Theatre Arts and Music departments at Old Dominion University. Students will also have the opportunity to run a live performance and assist with garment care, make-up, hair design and costume props.

Prerequisites: Junior standing or permission of instructor

THEA 452/552 Acting Four (3 Credit Hours)

An advanced scene study class exploring issues of style and period pertinent to portraying characters on stage.

Prerequisites: THEA 152R, THEA 252 and THEA 352

THEA 453 Voice Over (3 Credit Hours)

This course is for students who are interested in the field of voice over for commercials, narration, industrials, animation, Internet, and gaming. Students will practice voicing copy using acting techniques, vocal techniques, building characters, and analyzing copy. Students will learn to select, edit and prepare copy for a future demo and learn to perform cold voice over auditions. This is a performance-oriented course that is a workout session each day. Crosslisted with COMM 453.

Prerequisites: Junior standing or permission of instructor

THEA 460 Voice for the Stage II (3 Credit Hours)

Course will continue the study of vocal production, speech and expression necessary for on stage performance of both classical and modern text.

Techniques for producing effective dialects will be introduced as well as the application of dialect towards character development.

Prerequisites: THEA 152R

THEA 471W/571 International Film History (3 Credit Hours)

An examination of world cinema as a technology, a business, an institution, and an art form from its inception to the present. Emphasis is on the narrative fiction film, its technological and aesthetic development, economic organization, and socio-cultural context. Representative classic and contemporary works will be screened and analyzed. This is a writing intensive course.

Prerequisites: COMM 270A or THEA 270A, a grade of C or better in ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C, and junior standing or permission of the instructor

THEA 472 Acting Five (3 Credit Hours)

An examination and advanced study of techniques relevant to specialized theatre performance. This course will allow advanced students the opportunity to explore a variety of work including experimental theatre, avant garde works, mediated performance and visual based theatre.

Prerequisites: THEA 152R and THEA 252 or permission of instructor

THEA 473 Production/Performance Lab (1 Credit Hour)

This course provides students opportunities to participate in productions in Theatre, Dance or Film. These experiences provide hands-on experience in the discipline. Cross-listed with DANC 473.

Prerequisites: Junior standing or permission of the instructor

THEA 474 Production/Performance Lab (1 Credit Hour)

This course provides students opportunities to participate in productions in Theatre, Dance or Film. These experiences provide hands-on experience in the discipline. Cross-listed with DANC 474.

Prerequisites: Junior standing or permission of the instructor

THEA 479W/579 American Film History (3 Credit Hours)

An examination of American motion pictures as an art form, a business and an institution from its inception to the present. Primary attention is accorded to the narrative fiction film, its aesthetic and technological development, economic organization and social impact. This course highlights the many connections between film history and American culture. This is a writing intensive course.

Prerequisites: A grade of C or better in ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C; THEA 270A or COMM 270A; and junior standing or permission of the instructor

THEA 480/580 Documentary Production II (3 Credit Hours)

Students will continue the work performed in THEA 380 with more advanced proposals, research, and production work.

Prerequisites: THEA 380 or COMM 380

THEA 482 Screenwriting II (3 Credit Hours)

Students will explore storytelling for cinema through screenplay analysis, scene study, character development, narrative structure, and story development. This upper-level, hands-on course applies a range of screenwriting principles to writing exercises, critique, and construction of the first half of a feature-length screenplay.

Prerequisites: COMM 346 or THEA 346 with a grade of C or better

THEA 483 Advanced Cinema Projects (3 Credit Hours)

This is an intensive capstone course in film production. Students experience pre-production, production, and post-production phases while creating a product to be entered in regional and national competitions.

Prerequisites: COMM 383 or THEA 383

THEA 485 Film and Television Genres (3 Credit Hours)

This course is designed to examine the conventions and meanings of various film and television genres within their broader aesthetic, socio-historical, cultural, and political contexts. Each time the class is offered it will focus in depth on a different genre, such as the gangster, the Western, the musical, the comedy, science fiction, among others. Class may be repeated for credit as long as the genres are different.

Prerequisites: COMM 270A or THEA 270A

THEA 486/586 Advanced Filmmaking (3 Credit Hours)

This course offers students an opportunity to collaborate on a faculty led project beyond the scope of typical classroom projects. Students will execute an assigned duty for the duration of the semester.

Prerequisites: permission of the instructor

THEA 487 Advanced TV News Production (3 Credit Hours)

This course is designed to provide students with advanced instruction in reporting, writing, and production for a television news program. Students will take on important roles in 15- and 30-minute news broadcasts and refine their skills in shooting and editing video. The goal of this course is to produce weekly news programs worthy of broadcast on local television. Students will receive significant experience in front of the camera as news, sports, and entertainment anchors/reporters as well as leadership positions in the television studio during the live broadcasts.

Prerequisites: COMM 387, THEA 387 or ENGL 387

THEA 489 Methods of Teaching Theatre (3 Credit Hours)

Focuses on conceptual foundations of theatre education including its history, and on methods and materials for classroom instruction and theatrical rehearsals and performances.

Prerequisites: Junior standing

THEA 490 Theatre Education Practicum (1 Credit Hour)

This course provides students with an opportunity to further develop their understanding of theatre instruction by personal observation and participation in the classroom setting.

Prerequisites: Junior standing and permission of the College of Education

THEA 492 Cinematography 2 (3 Credit Hours)

This course builds on the fundamentals learned in Cinematography 1, exploring advanced camera and lighting techniques primarily used in narrative cinema. Advanced cameras, grip, electric, and lighting equipment will be covered, exposing students to gear and practices beyond the scope of a standard student production. This is a production class.

Prerequisites: COMM 385 or THEA 385

THEA 493 Feature Film Production (6 Credit Hours)

This intensive course will bring students onto the set of a feature film production, working crew positions as the film is shot. Cross-listed with COMM 493.

Prerequisites: COMM 271/THEA 271/DANC 271 and two of the following: COMM 380/ THEA 380, COMM 383/THEA 383, COMM 385/ THEA 385, COMM 386/THEA 386, COMM 389/THEA 389, COMM 483/ THEA 483, COMM 486/THEA 486, COMM 492/THEA 492 with a grade of C or better

THEA 495/595 Topics in Theatre (1-3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule.

Prerequisites: Appropriate survey course or permission of the instructor

THEA 496/596 Topics in Theatre (1-3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule.

Prerequisites: appropriate survey course or permission of the instructor

THEA 497/597 Tutorial Work in Special Topics in Theatre (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor.

Prerequisites: Senior standing

THEA 498/598 Tutorial Work in Special Topics in Theatre (1-3 Credit Hours)

Independent reading and study on a topic to be selected under the direction of an instructor. Conferences and papers as appropriate.

Prerequisites: senior standing

THEA 499 Senior Project (1 Credit Hour)

Completion of a creative project leading to a written work and a presentation during a student's senior year related to student's interest area. Topic to be selected under the direction of an instructor with conferences as appropriate.

Prerequisites: Senior standing as theatre major and approval of major advisor

TLED - Teaching & Learning-Education

TLED 195 Topics in Education (1-3 Credit Hours)

Explores contemporary problems and trends in education. Emphasis is placed upon topics related to curriculum, instructional strategies, and evaluation.

TLED 301 Foundations and Introduction to Assessment of Education (3 Credit Hours)

Introduces the historical, philosophical, and sociological foundations and contemporary issues of American public education. Includes the use and analysis of assessment data and the construction and interpretation of assessments. Students are expected independently to register for and take the Praxis Core examination while enrolled in this course. Students in PreK-6 programs will complete a 15 hour observation/participation experience in a primary setting (preK-3) and a 15 hour observation/participation experience in an upper elementary (4-6) setting; students in 6-12 or 6-8 programs will complete a 30 hour observation/participation experience in an appropriate 6-12 setting.

Prerequisites: sophomore standing

TLED 320 Perspectives on the Young Child and the Family (3 Credit Hours)

This course examines the familial lives of young children (Birth through Grade 3) and supports understandings of working with parents and families in early childhood settings. Family systems theory provides the basis for study and guides understandings of contemporary family structures. The stages of the family life cycle are explored; principles of healthy family functioning are emphasized to promote healthy growth for children.

Prerequisites: FOUN 301 and TLED 301

TLED 326 Socio-Cultural Perspectives in Education (3 Credit Hours)

This course will utilize a framework of sociocultural theory situated within culturally sustaining pedagogical practices to explore issues related to race, ethnicity, class, gender, sexuality, religion, and language use. Students will learn to create an educational environment that values diversity and employs research-based strategies. The course also examines and evaluates multicultural and global literature that explores issues of diversity.

Prerequisites: ENGL 110C

TLED 328 Observation and Assessment in Early Childhood (3 Credit Hours)

This course examines the observation/assessment techniques used in early childhood classrooms as part of a coordinated approach to implement a reflective, high quality early childhood classroom. The purpose of this course is to introduce and support students' development of skills related to the observation and interpretation of children's daily activities and behaviors. This course includes a 20-hour practicum.

Prerequisites: TLED 320

TLED 330 The Arts in Early Childhood and Elementary Education (3 Credit Hours)

An exploration of principles, methods, and materials for teaching the arts to young children. Emphasis is on making, interpreting, and designing meaningful art experiences for young children pre-K-grade 3. Students will be asked to participate in activities associated with making and viewing art, as well as design comprehensive learning experiences that encourage children to make and respond to art through conversation, storytelling, play, dramatics, movement, music, and art making.

Prerequisites: TLED 301

TLED 333 Measurement and Geometry for Teachers (3 Credit Hours)

Math content for educators including pre-algebra, geometry, counting techniques and probability as needed for future teachers. The course will emphasize problem-solving processes and their application to the learning of the appropriate math content.

Prerequisites: MATH 102M

Pre- or corequisite: TLED 326

TLED 337 Literature for Young Children (3 Credit Hours)

This course is designed to provide students with approaches for introducing young children to literature and reading. The course will examine a variety of children's literature genres and explore relationships between language, theory, politics, ideology and print material. Students will design activities that extend children's literacy experiences, reading enjoyment, writing capabilities, and incorporate cultural and linguistic diversity in social studies, math, science, and the arts.

Prerequisites: TLED 301

TLED 338 Integrated Methods & Curriculum in Early Childhood Ed: Birth-Pre-K (4 Credit Hours)

This course examines the development of curriculum and instructional practices for children in infant, toddler, and preschool settings. The course will focus on the principles and methods of understanding and working with the young child across the content areas of early mathematics, science, literacy, social studies, and the arts. Course includes a 40 hour practicum placement in an early care classroom.

Prerequisites: TLED 330

TLED 360 Classroom Management and Discipline (2 Credit Hours)

Examines theories, research, and practices involved in classroom management, motivation, and discipline. Explores techniques for organizing and arranging classroom environments that are most conducive to learning.

Prerequisites: TLED 301 or MUSC 300 with a C- or higher

TLED 395 Topics in Education (1-3 Credit Hours)

Explores contemporary problems and trends in education. Emphasis is placed upon topics related to curriculum, instructional strategies, and evaluation.

Prerequisites: junior standing

TLED 408 Reading and Writing in Content Areas (3 Credit Hours)

This course examines and promotes literacy development in all content areas, including the development and use of disciplinary comprehension and writing/production skills. Students will explore and consider a repertoire of questioning strategies, and strategies in literal, interpretive, critical, analytical, and evaluative comprehension across the curriculum, grades 6-12.

Prerequisites: a grade of C- or higher in TLED 430W and SPED 313 or a grade of C- or higher in one of the following: SEPS 297, MUSC 300, TLED 301, STEM 351, MUSC 335T, ARTS 279, HPE 200, HPE 317, SPED 400, and TLED 474

TLED 426 Introduction to Literacy, Linguistics and Practice in the Classroom (3 Credit Hours)

This course will provide students with an overview of the foundations of theory and best practices in literacy instruction. Emphasis is placed on Science of Reading (SOR), including phonemic awareness, phonics, developing decoding foundational skills, vocabulary, fluency, and comprehension. This course adopts an approach rooted in culturally sustaining pedagogy, aiming to create a learning environment that promotes equity and engagement for all learners. The course will support student's professional preparation as a teacher who promotes the success of all students through the implementation of excellent literacy instruction.

Prerequisites: FOUN 301

TLED 430W PK-12 Instructional Technology (3 Credit Hours)

Classroom technology and learning strategies are explored through authentic technology and writing activities. This writing intensive (W) course uses contemporary productivity tools and Internet resources to develop and evaluate progressive instructional techniques and K-12 standards-based curriculum materials, which have changed as a result of the development and integration of technology in the classroom.

Prerequisites: ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C with a grade of C or better and TLED 301 or HPE 200 or TLED 474 or SPED 400

TLED 432/532 Developing Instructional Strategies PreK-6: Language Arts (3 Credit Hours)

Following a theory into practice philosophy, students explore, develop, and use instructional strategies, materials, technologies, and activities to promote children's development of attitudes, behaviors, and concepts in language arts in grades PreK-6 in support of NCTE national instructional standards and the Virginia Standards of Learning.

Prerequisites: ENGL 110C, ENGL 211C or ENGL 221C or ENGL 231C, TLED 326, and Junior standing

Pre- or corequisite: TLED 426

TLED 435/535 Developing Instructional Strategies PreK-6: Social Studies (3 Credit Hours)

Following a theory into practice philosophy, students explore, develop, and use instructional strategies, materials, technologies, and activities to promote children's development of attitudes, behaviors, and concepts in social studies in grades PreK-6 in support of NCSS national instructional standards and the Virginia Standards of Learning.

Prerequisites: GEOG 100S, TLED 326, and Junior standing

Corequisites: TLED 432

TLED 451/551 Developing Instructional Strategies for Teaching in the Middle/High School: English (3 Credit Hours)

Following a theory/research-into-practice philosophy, students explore, develop, and use instructional strategies, materials, technologies, and activities to promote the development of attitudes, behaviors, and concepts in English, grades 6-12, informed by national instructional standards and the Virginia Standards of Learning; 35 hours of teaching practicum required.

Prerequisites: TLED 301 or TLED 430W or SPED 313, a criminal background check, acceptance into teacher education, no grade less than C- in content area and professional education core, minimum major and overall GPA of at least 2.75

Corequisites: TLED 483

TLED 452/552 Developing Instructional Strategies for Teaching in Middle/High School: Math and Science (3 Credit Hours)

This science and mathematics course will provide methods for teaching diverse learners through culturally sustaining pedagogy, inquiry-oriented, and problem solving strategies using technology and engineering design principles. Students in this course take a required practicum (35 hours) in a secondary science or mathematics classroom to complete assigned content-focused activities.

Prerequisites: TLED 301, TLED 430W and SPED 313

Corequisites: TLED 483

TLED 455/555 Developing Instructional Strategies for Teaching in the Middle/High School: Social Studies (3 Credit Hours)

Following a theory/research-into-practice philosophy, students explore, develop, and use instructional strategies, materials, technologies, and activities to promote the development of attitudes, behaviors, and concepts in social studies, grades 6-12, informed by national instructional standards and the Virginia Standards of Learning; 35 hours of teaching practicum required.

Prerequisites: TLED 301, TLED 430W, SPED 313, a criminal background check, acceptance into teacher education, no grade less than C- in content area and professional education core, minimum major and overall GPA of at least 2.75

Corequisites: TLED 483

TLED 468/568 Language Acquisition and Reading for Students with Diverse Learning Needs (3 Credit Hours)

This course provides an overview of normal language development and language disorders which impact the acquisition of language based curriculum skills such as listening, speaking, reading, and written expression. Emphasis is on instructional techniques to assist students with diverse learning needs to achieve reading and comprehension skills. Effective reading strategies and curricula for individuals with disabilities will also be reviewed.

Prerequisites: junior standing

TLED 474/574 Foundations and Contemporary Issues in Early Childhood Education (3 Credit Hours)

This course addresses current issues related to children and families in early childhood settings. Contemporary research on pedagogical and formative assessment practices related to the education of young children will be discussed through critical exploration. This course will also have an associated 40 hour practicum (20 hours in an infant or toddler classroom and 20 hours in a preschool age classroom).

Prerequisites: Instructor approval required

TLED 478/578 Integrating Instruction Across the Curriculum PreK-6 (3 Credit Hours)

Following a theory into practice philosophy and building on the instructional strategies for specific disciplines, students explore, develop, and use advanced instructional materials, technologies, and activities to promote interdisciplinary and multidisciplinary instruction across the curriculum in grades PreK-6 in support of national standards and the Virginia Standards of Learning. The field experience component (40 hours) includes participation in preK-3 and 4th-6th grade classrooms in an accredited public or non-public school, per program requirement.

Prerequisites: Admission to an approved teacher education program and any two of the following courses: TLED 432, TLED 435, STEM 433, or STEM 434

TLED 479/579 Classroom Management and Practice PreK-3; PreK-6 (3 Credit Hours)

Course prepares prospective PreK-3 and PreK-6 teachers to provide instruction and management addressing the intellectual, physical, emotional and social needs of PreK-6 learners founded in empirically based practice. The field based component (70 hours) includes participation in PreK-3 and 4th-6th grade classrooms in an accredited public or non-public school. Students in the PreK-3 program are required to complete 35 hours in the Children's Learning and Research Center. Attendance at seminars and debriefing sessions is required.

Prerequisites: Admission to an approved teacher education program and any two of the following courses: TLED 432, TLED 435, STEM 433, or STEM 434

TLED 480/580 Multicultural Young Adult Literature in Schools (3 Credit Hours)

This course will explore the reading and teaching of diverse young adult literature. Topics addressed include ideas about adolescents and their learning practices; characteristics of young adult literature and literary criticism; analysis of texts from a range of young adult genres; methods for teaching young adult literature; and lesson and unit design.

Prerequisites: Junior standing

TLED 483/583 Seminar in Teacher Education (1 Credit Hour)

Explores issues, problems, concerns, and processes related to teaching and to entering the profession of teaching. Passing scores on Elementary Education Multiple Subjects Assessment in licensure content area, and where appropriate passing scores on Reading for Virginia Educators are required to pass this course.

Prerequisites: Admission to an approved teacher education program and Senior standing

TLED 485 Teacher Candidate Internship (12 Credit Hours)

Internship in school. Available for pass/fail grading only.

Prerequisites: completion of all program requirements and admission into an approved program in teacher education

TLED 486/586 Student Teaching for Special Endorsement (3-6 Credit Hours)

Internship in school. Available for pass/fail grading only.

Prerequisites: Collegiate Professional Certificate and/or completion of an approved program in teacher education, passing scores on Praxis Core examination or equivalent SAT or ACT scores as established by VA Board of Education, passing scores on the appropriate Praxis II content examination, passing score on the Virginia Communication and Literacy Assessment, departmental approval, permission of the director of teacher education services, meet grade requirement in the specific content area and professional education core, minimum major and overall GPA of at least 2.75, and a criminal background check

TLED 487 Teacher Candidate Internship for Early Childhood Education (12 Credit Hours)

Field-based 14-week experiences in the early childhood setting that include a minimum of 150 hours of direct instruction. The teacher candidate internship is the culminating experience of all teacher education programs. This experience is a crucial part of a teacher candidate's preparation to becoming a professional educator.

Prerequisites: TLED 493 and admission to an approved teacher education program

TLED 488 Teacher Candidate Internship - Elementary Education (12 Credit Hours)

Five days per week for 14 weeks. Available for pass/fail grading only. Provides practice in teaching in grades PK-6 and in analyzing teaching approaches and behaviors. Examines instructional problems and concerns.

Prerequisites: TLED 478 and TLED 479; completion of an approved program in teacher education PreK-6; passing scores on the appropriate PRAXIS multiple subject assessment content examination, Reading for Virginia Educators examination, and the Virginia Communication and Literacy Assessment; no grade less than C- in content area and professional education core; and minimum major and overall GPA of at least 2.75

TLED 490 The Child and the Family: PreK-3 (3 Credit Hours)

This course examines the familial lives of young children (Birth through Grade 3) and supports understandings of working with parents and families in early childhood. Family systems theory provides the basis for study and guides understandings of contemporary family structures. The stages of the family life cycle are explored; principles of healthy family functioning are emphasized to promote healthy growth for children.

Prerequisites: instructor approval required

TLED 492 Integrating Instruction: Mathematics and Science Across the Early Childhood Curriculum (3 Credit Hours)

This course emphasizes the development of young children's problem solving skills, strategies, and abilities and the promotion of active science and math explorations within early childhood classrooms. Multiple perspectives and approaches to planning, teaching, and assessing science and mathematics in the early childhood classroom are explored and practiced. This course includes a 40 hour practicum experience in an early childhood classroom.

Prerequisites: MATH 302, TLED 328, and admission to an approved teacher education program

TLED 493 Integrating Literacy and Social Studies Across the PreK - 3 Curriculum (3 Credit Hours)

This course emphasizes the development of young children's multiple literacies and the promotion of active literacy and social studies explorations within early childhood classrooms. Multiple perspectives and approaches to planning, teaching, and assessing literacy and social studies in the early childhood classroom are explored and practiced. This course includes a 40 hour practicum experience in an early childhood classroom.

Prerequisites: TLED 492, HIST 104H, GEOG 100S, TLED 337, and admission to Teacher Education

Pre- or corequisite: TLED 426

TLED 495/595 Topics in Education (1-4 Credit Hours)

Explores contemporary problems and trends in education. Emphasis is placed upon topics related to curriculum, instructional strategies, and evaluation.

Prerequisites: junior or graduate standing

TLED 496/596 Topics in Education (1-3 Credit Hours)

Cannot be applied to a Master of Science in Education degree in the Department of Teaching and Learning. Explores contemporary problems and trends in education. Emphasis is placed upon topics related to curriculum, instructional strategies, and evaluation.

Prerequisites: junior or graduate standing

TLED 497/597 Independent Study (1-3 Credit Hours)

Hours to be arranged. Allows the student to engage in independent study of issues and trends in education. Emphasis is placed upon topics related to curriculum, instructional strategies, and evaluation.

Prerequisites: junior standing

UNIV - University

UNIV 068 Internship (0 Credit Hours)

Student participation in a professional work experience for which credit will not apply to the degree. Approval for enrollment is determined by Monarch Internship and Co-Op Office. Experience must be related to the student's major or career area of interest, include adequate supervision by a professional, and include at least an average of 8 hours per week.

Prerequisites: good academic standing

UNIV 094 Entrepreneurship (0 Credit Hours)

Student participation in an entrepreneurial experience for which credit will not apply to the degree. Approval for enrollment is determined by the Center for High Impact Practices. Experience must be related to the student's major or career area of interest, include adequate supervision by faculty member or a professional, and include at least an average of eight hours per week.

Prerequisites: good academic standing

UNIV 100 University Orientation (1 Credit Hour)**UNIV 101 Introduction to the College of Sciences (1 Credit Hour)**

Presents the relationship between majors in the College of Sciences and the students' career goals for students planning to major in a science. Provides an orientation to the University emphasizing the learning skills needed for Science majors.

UNIV 110 Academic Success (0 Credit Hours)**UNIV 111 Sophomore Seminar (0 Credit Hours)**

This seminar provides resources and opportunities for students to build relationships with other sophomores and faculty and to explore individual strengths, values, skills, and interests.

UNIV 112 Transfer Seminar (0 Credit Hours)

This seminar provides resources and opportunities for students to build relationships with other transfer students and faculty and to explore individual strengths, values, skills, and interests.

UNIV 115 Learning Communities Seminar (0 Credit Hours)

This course serves as the common course for learning communities. Students will develop a sense of community as they attend, study, and participate in various activities and events with other students, peer mentors, faculty or advisors.

UNIV 120 Career Exploration (1 Credit Hour)

A systematic exploration of individual interests and skills and career resources. Emphasis is placed on defining goals and developing strategies to achieve goals. Career testing and individual conferences are included.

UNIV 130 Learn and Earn Advantage Program (1 Credit Hour)

The purpose of this course is to engage students in self-reflection and work place skill enhancement, applicable to experiences encountered as part of the LEAP, as well as in the world of work. The course will help students to develop and be able to apply skills in the areas of self-presentation, work ethic, team membership, professional communication, independence and initiative, and seeing the "Big Picture" in relation to everyday workplace issues.

UNIV 195 Topics in Career Management (1-3 Credit Hours)

A study of selected career-related topics. Titles for specific course offerings will appear in the course schedule.

UNIV 200 Career Implementation (1 Credit Hour)

A practical examination and application of resume and cover letter writing, job search strategies, including electronic job search and networking, interview skills, and evaluating employment offers. Designed to prepare students for internships or cooperative education experiences and/or for post graduation employment.

UNIV 295 Topics in Career Management (1 Credit Hour)

A study of selected career-related topics. Titles for specific course offerings will appear in the course schedule.

UNIV 300 Introduction to Entrepreneurship Across the Disciplines (3 Credit Hours)

This course is a survey of entrepreneurship and is designed to introduce upper-level undergraduate students (juniors and seniors) to a wide range of approaches designed to facilitate innovation, foster start-up businesses, enable growth and ensure the continued viability of emerging and mature technical enterprises. The course will focus on entrepreneurial thinking and action and will explore the attitudes and behaviors that most frequently result in entrepreneurial success. This course will address the theories that underlay successful venture creation as well as practices that have proven to be effective.

Prerequisites: ENGL 110C

UNIV 395 Topics in Career Management (1 Credit Hour)

A study of selected career-related topics. Titles for specific course offerings will appear in the course schedule.

Prerequisites: Sophomore standing

UNIV 396 Topics: Study Abroad (1-3 Credit Hours)

A study of selected topics examined in an international setting. These courses are designed to help students gain new perspectives on their fields of study, develop intercultural competencies and communication skills, and engage with situations and questions that challenge their own assumptions/values. The courses will appear in the course schedule and will be more fully described by academic advisors.

Prerequisites: Sophomore standing

UNIV 400 Career Engagement (1 Credit Hour)

A practical examination and application of resume and cover letter writing, job search strategies including the electronic job search, networking, interview skills, and negotiating a job offer. Topics will also include the transition to the world of work and professional development. Designed for students seeking post-graduation employment.

UNIV 407/507 Design Thinking (3 Credit Hours)

Design thinking is a human-centered approach to innovation that uses design methods and tools to integrate the needs of people and organizations, the opportunities of technology, and the requirements for personal, organizational, and business success. The design thinking course introduces students to a robust process for understanding problems, ideation, innovation, and entrepreneurship. This course is facilitated using workshops where students will work in project teams in a design thinking innovation challenge.

Prerequisites: ARTH 121A, ARTS 122A, COMM/THEA 270A, DANC 185A, MUSC 264A, or THEA 241A

UNIV 495 Topics in Career Management (1-3 Credit Hours)

A study of selected career-related topics. Titles for specific course offerings will appear in the course schedule.

Prerequisites: Junior standing

WCS - World Cultural Studies

WCS 100L Introduction to World Literatures and Cultures (3 Credit Hours)

This multicultural course introduces the student to the forms and meanings of cultural expressions from around the world, with an emphasis on world literature. It provides students with the skills necessary for the appreciation and comparative analysis of these works as representations of rich and diverse cultural values. A primary focus of the course will be the role of culture in the formation of national and individual identity, paying special attention to gender, sexuality, race, class, and struggles for social justice. All works will be read in English.

WCS 120L Honors: Introduction to World Literatures and Cultures (3 Credit Hours)

This multicultural course introduces the student to the forms and meanings of cultural expressions from around the world, with an emphasis on world literature. It provides students with the skills necessary for the appreciation and comparative analysis of these works as representations of rich and diverse cultural values. A primary focus of the course will be the role of culture in the formation of national and individual identity, paying special attention to gender, sexuality, race, class, and struggles for social justice. All works will be read in English. This course is reserved for students enrolled in the Honors College.

WCS 196 Topics in World Cultural Studies (1-3 Credit Hours)

A study of selected topics for elective credit. These courses will appear in the course schedule.

WCS 307 Understanding European Culture through Film (3 Credit Hours)

This course provides students with an historic overview of films from a variety of European countries. Students will gain the vocabulary necessary to analyze individual films and for the comparative analysis of films from different cultural and historical contexts. The course will focus on issues such as national and individual identity, film as aesthetic form, gender and sexuality, and popular culture. (cross-listed with COMM 307)

Prerequisites: Junior standing or permission of instructor

WCS 310 Japan: A Cultural Odyssey (3 Credit Hours)

Exploration of Japanese culture and society from local and global perspectives. Topics may include language, arts, literature, music, food, traditional and contemporary culture, entertainment, media, religion, gender, education and work. The course aims to foster in-depth cultural understanding beyond stereotypes and to develop critical thinking and analytical skills to reflect on one's own experiences and assumptions about cultural similarities and differences. All readings, discussions, and lectures in English. No knowledge of Japanese is necessary. Cross-listed with JAPN 310.

Prerequisites: ENGL 110C and junior standing or permission of instructor

WCS 311 Global Conversations (3 Credit Hours)

This course is primarily a 'hands on' communicative course to develop cultural competence (verbal communication). Task-oriented communication strategies in cross-cultural training will be practiced by presenting students with models who demonstrate appropriate cultural skills. The course will include cognitive learning with lectures from experts (invited speakers), analysis of critical incidents and assigned readings, and application of sophisticated concepts from the behavioral and social sciences. Students will practice these skills by giving presentations, enriching self-awareness with group discussions on prejudice, racism, values and customs, and participation in guided cultural encounters (such as field trip assignments that demand new behaviors). Students will participate in role-playing and in simulations of real-life demands in extended experimental encounters with another culture or complex approximations of another culture. Effectively, students will learn how to communicate and collaborate with other people and cultures in a global age.

Prerequisites: ENGL 110C

WCS 312W Writing Around the World (3 Credit Hours)

This is an intensive writing course designed with writing assignments that examine various cultural contexts that enable students to understand cultural content, style, audience and organization. The main objective of the course is increased awareness of and sensitivity to appropriate word choice, and syntax in the targeted languages. Students will engage in writing for different cultural audiences and in varied contexts such as literary, artistic and media expressions around the world. Special emphasis is placed on the methodology of close reading as students hone the analytics skills and vocabulary necessary to interpret idioms, regionalism, cultural expressions and overall intercultural skills observed in various genres and cultures. Students will analyze compelling global issues and the diverse cultural perspectives that inform them.

Prerequisites: A grade of C or better in ENGL 110C

WCS 323 World Cultures and Contexts (3 Credit Hours)

Struggles for human rights and social justice often find their most evocative expression in creative works from around the world. In this course, students will work toward an understanding of different cultural perspectives that inform global concepts of human rights. The course will focus on literary texts, film, testimonies, visual art, and other cultural forms of bearing witness. Students will also consider the fundamental value of these artistic expressions as both spaces of empathy and agents of change in society. Overall, students will consider how these narratives, embedded within, and coded by, sociopolitical contexts, contribute to today's language of human rights and its application in struggles for social justice.

Prerequisites: A grade of C or better in ENGL 110C

WCS 330 Contemporary Cultures and Media (3 Credit Hours)

A study of film as a means of communication from an intercultural perspective. The course is designed to cultivate an ability to deal with film in a critical way, as well as broaden understanding of film and culture in a global context. A variety of cinematic traditions will be examined including film works from Europe, the Middle East, Asia, Africa, and North and South America.

Prerequisites: A grade of C or better in ENGL 110C

WCS 350 Global Communications for International Business (3 Credit Hours)

In this course, students learn to value diverse global perspectives, and to seek multiple approaches to defining and solving problems based on intercultural awareness. This course will focus on the ways that culture and language influence human behavior, and on the practical development of communicative strategies, from compelling writing to effective discussion and collaboration.

Prerequisites: ENGL 211C, ENGL 221C, or ENGL 231C

WCS 369 Practicum (1-3 Credit Hours)

Internships in private, public, non-profit and business organizations that deal with global communications and world cultures.

Prerequisites: nine credit hours at the 300 or 400 level

WCS 395 Topics in World Cultural Studies (3 Credit Hours)

This course invites students to discover approaches to global problems and concerns through an analysis of cultural expressions from around the world. Students will consider the ways in which literary and artistic expression (literature, film, visual art, music) draw from and impact broader social and political contexts.

Prerequisites: A grade of C or better in ENGL 110C

WCS 400 Global Cultural Studies (3 Credit Hours)

This course will examine selected cultural studies perspectives on mass communication. It will cover cultural studies philosophies, theories, and/or approaches to the study of cultural artifacts and practices that may include some of the following: postmodernism, deconstruction, feminism, and post-colonialism. The readings will include theoretical texts as well as artistic or cultural texts that will more clearly illustrate the theoretical positions.

Prerequisites: A grade of C or better in ENGL 110C

WCS 407 Global Communication in Practice (3 Credit Hours)

A study of communication styles and strategies around the world. Students will analyze how global concerns and national priorities are articulated across cultures and languages, and they will navigate techniques necessary for effective communication within intercultural contexts. This course, through interactive lectures, discussions, guest speaker presentations and case studies, is intended to prepare students to be fluent in intercultural understanding and global collaboration and to apply these skills in professional settings.

Prerequisites: A grade of C or better in ENGL 110C

WCS 410/510 Berlin-Paris: Crucibles of European Ideas (3 Credit Hours)

This course explores the cultural movements that have characterized the German-French commonalities and differences from the early 1900s through the 1990s in cross-disciplinary discourses such as film, literature, art, politics, and economics.

Prerequisites: A grade of C or better in ENGL 110C

WCS 421/521 The Question of Memory in World Cultures (3 Credit Hours)

This class explores how societies across the world choose to remember people and events through culture. Students will consider 'official' manifestations – government-sponsored or public memorials and art – as well as general and popular culture such as museums, literature, film, TV, music, etc. The class will interrogate not only what is chosen to be memorialized but how it is memorialized, and how public memory of events is shaped by such choices. Students will consider what decisions are made at the local and national level, how those decisions are made, and what consultations or processes are considered necessary or desirable when deciding public memorials and artwork.

Prerequisites: WCS 100L or ENGL 112L

WCS 445/545 German Cinema I (3 Credit Hours)

The first half of the 20th century was the most creative and destructive period in German and European history. Its rich cultural achievements included Viennese psychoanalytical theory of the turn of the century, Art Nouveau, German Expressionism, and the avant garde aesthetics of the Weimar Republic. Conversely, World War I and II exposed the cultural agony and human depravity of modern civilization. This course will trace these various aspects and developments in a variety of exemplary genres. Readings and discussions in German. (Cross-listed with GER 445/GER 545 and COMM 444/COMM 544)

Prerequisites: A grade of C or better in ENGL 110C

WCS 471/571 Hispanic Women Authors (3 Credit Hours)

A study of fictional and non-fictional works by Spanish, Spanish-American, and U.S. Latina writers from the 16th to the 20th century. The course analyzes gender identity and roles and the interaction of gender, race, and class in literary representations of courtship and marriage, spirituality, nationalism, colonialism, and multiculturalism.

Prerequisites: A grade of C or better in ENGL 110C

WCS 476/576 German-Jewish Literature and Culture (3 Credit Hours)

A survey of seminal texts by German-Jewish philosophers and writers from the Enlightenment to the present day, including Marx, Kafka, Freud, Schnitzler and Arendt.

Prerequisites: A grade of C or better in ENGL 110C

WCS 480W Senior Seminar in International Studies (3 Credit Hours)

Interdisciplinary research and the preparation of a senior thesis in international studies. This is a writing intensive course.

Prerequisites: Grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, senior standing in the BAIS degree program or permission of the instructor and the director of the BAIS program

WCS 494 Entrepreneurship in World Languages and Cultures (3 Credit Hours)

This course is designed to help students enhance their personal and professional development through innovation guided by faculty members and professionals. It offers students an opportunity to integrate disciplinary theory and knowledge related to world languages and cultures through developing a nonprofit program, product, business, or other initiative with other students.

Prerequisites: Junior standing

WCS 495/595 Topics in World Cultural Studies (3 Credit Hours)

This course invites students to discover approaches to global problems and concerns through an analysis of cultural expressions from around the world. Students will consider the ways in which literary and artistic expression (literature, film, visual art, music) draw from and impact broader social and political contexts.

Prerequisites: A grade of C or better in ENGL 110C

WCS 496/596 Topics in World Cultural Studies (3 Credit Hours)

This course invites students to discover approaches to global problems and concerns through an analysis of cultural expressions from around the world. Students will consider the ways in which literary and artistic expression (literature, film, visual art, music) draw from and impact broader social and political contexts.

Prerequisites: A grade of C or better in ENGL 110C

WCS 497 Tutorial Work in Special Topics in World Cultural Studies (1-6 Credit Hours)

Independent readings and study on a topic to be selected under direction of professor.

Prerequisites: appropriate survey course or permission by the instructor

WCS 498 Tutorial Work in Special Topics in World Cultural Studies (1-6 Credit Hours)

Independent readings and study on a topic to be selected under direction of professor.

Prerequisites: Appropriate survey course or permission by the instructor

WGS - Women's and Gender Studies

WGS 201S Introduction to Women's, Gender, and Sexuality Studies (3 Credit Hours)

An introduction to the interdisciplinary field of Women's, Gender, and Sexuality Studies, drawing on materials from the humanities and social sciences. Topics include the social construction of gender, cross-cultural variations in women's lives, media representations, work, health, women's roles in politics and sexuality.

Prerequisites: Must qualify to enroll in ENGL 110C

WGS 226S Honors: Gender and Sexuality in a Changing World (3 Credit Hours)

A special honors version of WGS 201S open only to students in the Honors College.

Prerequisites: ENGL 110C

WGS 301 Feminist Foundations (3 Credit Hours)

This course is designed to develop students' skills in writing, critical reading, research, and argument while examining topics in Women's, Gender, and Sexuality Studies. The course also covers the history of Women's, Gender, and Sexuality Studies as a discipline and current opportunities for majors and minors.

Prerequisites: WGS 201S

WGS 302W Dimensions of Diversity: Intersectionality Among Women (3 Credit Hours)

This course explores the intersections of gender, race, class, and sexuality within society; it examines how identity has been a key site for generating knowledge and political action. Students will learn the histories and nuances of topics such as intersectionality, privilege, allyship, and cultural appropriation. Finally, the course will examine how concepts such as 'diversity' are mobilized in relation to different institutions, such as the law and education. This is a writing intensive course.

Prerequisites: WGS 201S, a grade of C or better in ENGL 211C or ENGL 231C, and 6 semester hours in literature, history, social sciences, or performing arts courses

WGS 303 Queer Studies (3 Credit Hours)

This course is an interdisciplinary study of LGBTQ+ (lesbian, gay, bisexual, transgender, queer) experiences. It introduces students to personal, cultural, and political aspects of queer life while examining social forces such as heteronormativity, the social construction of gender, and homophobia and their impact on queer lives.

Prerequisites: WGS 201S or instructor approval

WGS 304 Gender and Sexuality in Film (3 Credit Hours)

This course introduces students to feminist methods of analyzing media, with a focus on gender and sexuality in film. Key questions include: How do films influence and reflect our social locations? What are the points that they raise about the intersections of gender, race, and sexuality? Students will interrogate if, and in what ways, film can be a tool to effect social change.

Prerequisites: WGS 201S or instructor approval

WGS 305 Queer Literature (3 Credit Hours)

This course provides a historical sampling of queer literary voices in the U.S. Students explore fiction, poetry, drama, and visual literary forms through the lens of queer theory. Students investigate the ways in which queer authors and subjects have been excluded from the traditional canon and how readers, academics, critics, and authors of anthologies have ignored or obscured queer possibilities and homoeroticism in literary works. Students also explore the benefits of thinking of queer literary works as queer literatures (in the plural sense rather than the singular Queer Literature) and attempt to answer the question, is there such a thing as Queer Literature?

Prerequisites: ENGL 112L, ENGL 114L, or WCS 100L

WGS 306 Women, the Environment, and Climate Change (3 Credit Hours)

This course will examine ways that women have been actively involved in environmental issues from earliest history through today. Students will assess their own connection to place and examine and access ecofeminist theory and national and global environmental justice movements, along with briefly reviewing gender and farming practices. Finally, the course will examine how climate change issues are affecting lives around the globe, including ours, and question how gender-, race-, and class-sensitive responses to the environmental challenges facing our planet can be created.

Prerequisites: ENGL 110C

WGS 368 Internship (3-6 Credit Hours)

This course provides an opportunity to gain experience working in organizations and government agencies. Students' work should engage with women's issues at the local, regional, national, and/or global levels. Students must work for at least 50 hours per course credit.

Prerequisites: A minimum of one WGS course, junior standing and instructor approval

WGS 390T Women, Gender, and Technology Worldwide (3 Credit Hours)

An exploration of women as designers and users of technology and of the impact of technology on women's lives across the world. Variations in women's experiences by race, class, culture, and sexuality will be stressed, along with particular focus on global developments that shape the context of people's lives.

Prerequisites: Three semester hours in human behavior or history

WGS 395 Topics in Women's, Gender, and Sexuality Studies (1-3 Credit Hours)

A study of selected topics in Women's, Gender, and Sexuality Studies. These courses are usually interdisciplinary and align with faculty teaching and research strengths.

Prerequisites: WGS 201S or instructor approval

WGS 396 Topics in Women's, Gender, and Sexuality Studies (1-3 Credit Hours)

A study of selected topics in Women's, Gender, and Sexuality Studies. These courses are usually interdisciplinary and align with faculty teaching and research strengths.

Prerequisites: WGS 201S and sophomore standing or permission of the instructor

WGS 400/500 History of U.S. Women's Activism (3 Credit Hours)

This course historicizes U.S. women's social, political, and rhetorical activism over the last 200 years, tracing their entry into and shaping force upon public life. The course examines the development of women's activism in the nineteenth century, the twentieth century women's (or feminist) movement, and its current status, particularly in relation to postfeminism and a 'third' wave.

Prerequisites: WGS 201S

WGS 401W/501 Women: A Global Perspective (3 Credit Hours)

An analysis of the global forces that impact women's lives throughout the world. Particular emphasis is placed on the status of women in the developing world, international institutions that protect women's rights, and efforts to promote gender equality worldwide. This is a writing intensive course.

Prerequisites: WGS 201S and a grade of C or better in ENGL 211C or ENGL 231C

WGS 402/502 Feminisms and Sexualities (3 Credit Hours)

This course will examine feminist approaches to the subject of sexuality in the twentieth and twenty-first centuries. The course examines theorizations of sexuality, such as radical, critical race, and transnational feminisms, queer theory, and trans studies. Key questions will be: how have feminists theorized sexualities? What does sexuality have to do with feminist studies or practices? How do other identities, such as race and class, inform sexuality?

Prerequisites: WGS 201S, WGS 390T, or instructor approval

WGS 405/505 Gender and Media (3 Credit Hours)

This course examines media-based sites of knowledge production using a feminist approach, in order to imagine new and more complex ways to think about media rhetorics; celebrity culture; digital media; and the politics of representation. Key questions will be: What roles do media play in shaping social movements? What are the promises and pitfalls of activist interventions in the realm of commercial culture? In what ways might we complicate narratives of co-optation or selling out? The class explores these questions using an intersectional lens attentive to the complex interconnections of race, class, gender, and sexuality. Case studies will include national, international, and transnational media events.

Prerequisites: WGS 201S, WGS 390T, or instructor approval

WGS 406/506 Gender, Fashion & the Body (3 Credit Hours)

This interdisciplinary class explores the body as a canvas for both history and the future of our concept of individualism. Students will have the opportunity to reflect not only on their own understanding of the body but also that of the body across a variety of experiences. Students will complete auto-ethnographic essays and a course paper on the body relating to her/his/their academic research interests.

Prerequisites: WGS 201S

WGS 410/510 Sexing the Body (3 Credit Hours)

This course will explore the spectrum of what it means when we consider humans to exist in a gendered and sexed world. Students will critique their own preconceived notions of sex, probe issues of equality and social justice, and discuss what these questions mean both in the United States and globally. The course will culminate with a restructuring of how we understand the ways in which we define sex, sexuality, and sexual practice, taking into consideration how our own identities are impacted by culture and society.

Prerequisites: WGS 201S

WGS 415/515 Migration and Refugee Studies (3 Credit Hours)

This course explores the international context of refugees and migrants from a humanitarian perspective. Global conditions that lead to forced migration are analyzed to inform a larger understanding of human displacement. The course works directly with refugee resettlement organizations at the national and local levels.

Prerequisites: WGS 201S

WGS 460W/560 Feminist and Queer Theory (3 Credit Hours)

This course will examine feminist and queer theories, specifically intersectional, transnational, and radical perspectives. It explores how feminist and queer scholars approach research, writing, and knowledge production, and applies these insights to students' own interests. The course analyzes how feminist and queer scholars have written about storytelling, the body, and desire, and links these discussions to how to produce positive social change in our world. This course is fundamentally interdisciplinary; students are encouraged to make connections between the course materials, their research interests, and other fields of study. This is a writing intensive course.

Prerequisites: WGS 201S, WGS 302W or QUST 302W, and a grade of C or better in ENGL 211C or ENGL 231C

WGS 470/570 Feminist Research Methods (3 Credit Hours)

The course explores the ethics, practice, and multiple forms of conducting feminist research. Narrative research methods are practiced through hands-on oral history assignments. Throughout the course, the process of knowledge construction is interrogated from a feminist perspective.

Prerequisites: WGS 460W

WGS 495/595 Topics in Women's, Gender, and Sexuality Studies (3 Credit Hours)

Advanced seminars on selected topics. The subject matter is usually interdisciplinary and aligns with faculty teaching and research strengths.

Prerequisites: WGS 201S or instructor approval

WGS 496/596 Topics in Women's, Gender, and Sexuality Studies (3 Credit Hours)

Advanced seminars on selected topics. The subject matter is usually interdisciplinary and aligns with faculty teaching and research strengths.

Prerequisites: WGS 201S or instructor approval

WGS 497/597 Independent Study (1-6 Credit Hours)

Independent study of an interdisciplinary topic in Women's, Gender, and Sexuality Studies, or a reading plus internship project to be selected under the direction of a faculty member. Conferences and papers as appropriate.

Prerequisites: WGS 201S and approval of instructor and chair of department

WGS 498/598 Independent Study (1-6 Credit Hours)

Independent study of an interdisciplinary topic in Women's, Gender, and Sexuality Studies, or a reading plus internship project to be selected under the direction of a faculty member. Conferences and papers as appropriate.

Prerequisites: WGS 201S and approval of instructor and chair of department

WLC - World Languages Cultures

WLC 195 Topics in World Languages & Cultures (1-3 Credit Hours)

A study of selected topics for elective credit. These courses will appear in the course schedule.

WLC 196 Topics in World Languages & Cultures (1-3 Credit Hours)

A study of selected topics for elective credit. These courses will appear in the course schedule.

WLC 210 Language in Motion (1 Credit Hour)

This course provides opportunities for world language students with study-abroad and international experience to expand their knowledge of language and culture-learning experiences, and to enrich local public school language classrooms. In addition to attending training workshops on topic section, methodology, and techniques, students will confer with the instructor and host teachers/community partners to develop individual projects for presentations in school classrooms. Particular activities will depend on the knowledge and interests of the students and the requests of the host teachers (International Education Week, National French Week, etc.).

Prerequisites: Undergraduate or graduate level world language study and study/sojourn abroad experience

WLC 369 Foreign Language Practicum (3 Credit Hours)

Internships in private, public and business organizations that deal with foreign nationals, foreign products or are involved in teaching a foreign language.

Prerequisites: Nine credit hours of upper-level language at ODU and junior standing

WLC 452 Methods for Teaching World Languages in Pre-K through Grade 12 (3 Credit Hours)

This course provides students with a foundation of major theoretical methods of teaching and learning a world language, focusing mainly on current theories; laws, regulations, and policies in Virginia; language advocacy; and a systematic approach to the practical tools of creating a positive learning environment, designing a pacing guide, syllabus, unit and lesson plans, rubric and assessment guides, formulating a personal teaching philosophy, teaching mini lessons, and creation of a professional e-Portfolio based on VDOE Performance Standards and Evaluation Criteria for Teachers. Offered in asynchronous format with a few meetings with the professor and classmates, this course precedes student teaching.

Prerequisites: Admission to the Teacher Preparation Program, a cumulative and major GPA of 2.75 with grades of C or higher, SAT or ACT scores, qualifying score of the VCLA; teachers with provisional licenses need only to provide a copy of the letter from VDOE listing a methods course requirement

Pre- or corequisite: ACTFL certification or oral proficiency assessments (OPI) at the Advanced low level or higher and certificates for dyslexia, first aid, and child abuse and neglect

WLC 456 Seminar in World Languages Teacher Education (1 Credit Hour)

Students complete 30-hours of observation and may practice teaching methods under supervision in a PreK-12 world language classroom. By the end of the semester, students must provide qualifying scores on the VCLA, PRAXIS II Subject Area Assessment of Spanish, French, or German, ACTFL Oral and Writing Proficiency Assessments, and certificates for Child Abuse and Neglect Recognition and Intervention Training, Emergency First Aid, CPR & AED Certification, Dyslexia Awareness Training, and Behavior Intervention and Support Training. Available for pass/fail grading only.

Prerequisites: Admission to the Teacher Preparation program, a cumulative and major GPA of 2.75 with grades of C or higher, SAT or ACT scores, and qualifying score of the VCLA

Pre- or corequisite: ACTFL certification or oral proficiency assessments (OPI) at the Advanced low level or higher and certificates for dyslexia, first aid, and child abuse and neglect

WLC 480W Senior Seminar in International Studies (3 Credit Hours)

Interdisciplinary research and the preparation of a senior thesis in international studies. This is a writing intensive course.

Prerequisites: Grade of C or better in ENGL 211C or ENGL 221C or ENGL 231C, senior standing in the BAIS degree program or permission of the instructor and the director of the BAIS program

WLC 495/595 Topics in World Languages & Cultures (1-3 Credit Hours)

The advanced study of selected topics designed to permit small groups of qualified students to work on subjects of mutual interest which, due to their specialized nature, may not be offered regularly. These courses will appear in the course schedule.

Prerequisites: Permission of the instructor

WLC 497 Tutorial Work in Special Topics in World Languages & Cultures (1-6 Credit Hours)

Independent readings and study on a topic to be selected under direction of professor.

Prerequisites: Appropriate survey course or permission by the instructor

WLC 498 Tutorial Work in Special Topics in World Languages & Cultures (1-6 Credit Hours)

Independent readings and study on a topic to be selected under direction of professor.

Prerequisites: Appropriate survey course or permission by the instructor

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