Nature of Announcements

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.

It is the policy of Old Dominion University to provide equal employment, educational and social opportunities for all persons, without regard to race, color, religion, sex (including pregnancy), national origin, age, veteran status, disability, political affiliation, sexual orientation or genetic information. Old Dominion University complies with the Family Rights and Privacy Act of 1974 (as amended).

The University is an Affirmative Action Equal Opportunity employer.

Student Responsibility for Catalog Information

Students are held individually responsible for the information contained in the University Catalog. Failure to read and comply with University regulations will not exempt students from whatever penalties they may incur.
Welcome to Old Dominion University! Located in the City of Norfolk, in the Hampton Roads Metropolitan area of coastal Virginia, ODU is a vibrant multi-cultural and student-centered campus community. Although well over 80% of our undergraduate students are from the Commonwealth of Virginia, our nearly 6,000 graduate students include more than 1,000 international students who represent over 110 foreign countries. Ours is a truly diverse campus!

At Old Dominion University we offer a broad range of postgraduate licensures, certificates, Master’s, Ph.D., and professional doctoral degree programs from our colleges of Arts & Letters, Business & Public Administration, Education, Engineering & Technology, Health Sciences, and Sciences. ODU is a leader in interdisciplinary programs too, such as our graduate degree program and certificates in Modeling & Simulation and our Graduate Program in International Studies. Our campus extends well beyond Norfolk. We offer numerous distance learning courses and degree programs using Internet technologies. Students have the opportunity to take courses “Right Where You Are,” whether you are located at a community college site or higher education center within the Commonwealth of Virginia, on one of the various military bases or corporations that we serve, or at one of our out-of-state locations.

ODU’s faculty brings a wealth of talent and enthusiasm to our classrooms each day. Our graduate students have the opportunity to work collaboratively on cutting-edge research projects with faculty who have been recognized on the state, national, and international level with prestigious awards for teaching, research and service. Our Frank Reidy Research Center for Bioelectrics, the Computational Intelligence & Machine Vision Laboratory, the Center for Accelerator Science, and the Maritime & Supply Chain Management program, are just a few examples of the cutting edge, interdisciplinary research areas that our faculty engage in with their students. Their lively and provocative teaching, innovative scholarship and research that is both fundamental and applied, along with their commitment to academic excellence and creativity, combine into a fusion of ideas and practice that makes the Old Dominion experience a truly rewarding one for all students.

I look forward to seeing you on the Old Dominion University campus or at one of our distance learning sites.

Carol Simpson
Provost
# Table of Contents

General Information .................................................................................................................................................................................. 6
Policies and Procedures .............................................................................................................................................................................. 15
Academic Resources ................................................................................................................................................................................... 16
Research Resources .................................................................................................................................................................................... 19
Graduate Admission ................................................................................................................................................................................... 21
Graduate Registration Requirements ......................................................................................................................................................... 24
Tuition Fees & Financial Information .......................................................................................................................................................... 32
Graduate Financial Aid ................................................................................................................................................................................ 36
Financial Awards .......................................................................................................................................................................................... 44
Graduate Policies & Procedures ................................................................................................................................................................. 47
Graduate Degree University Requirements ............................................................................................................................................... 51
Campus Services ........................................................................................................................................................................................... 58
Synopsis of Degrees & Programs ................................................................................................................................................................. 63
College of Arts & Letters ............................................................................................................................................................................... 65
  Communication & Theatre Arts ............................................................................................................................................................... 65
  English .................................................................................................................................................................................................................. 66
  History .......................................................................................................................................................................................................... 73
  Humanities ....................................................................................................................................................................................................... 74
  International Studies .................................................................................................................................................................................. 75
  Music ................................................................................................................................................................................................................ 78
  Political Science & Geography ............................................................................................................................................................. 79
  Sociology & Criminal Justice ............................................................................................................................................................... 79
  Women’s Studies ..................................................................................................................................................................................... 82
  Centers and Institutes ............................................................................................................................................................................ 84
College of Business and Public Administration ............................................................................................................................................... 84
  Accounting .................................................................................................................................................................................................. 90
  Economics .................................................................................................................................................................................................... 91
  Information Technology & Decision Sciences ........................................................................................................................................ 91
  Urban Studies & Public Administration ............................................................................................................................................... 92
Darden College of Education .......................................................................................................................................................................... 97
  Communication Disorders & Special Education .................................................................................................................................. 98
  Counseling & Human Services ......................................................................................................................................................... 107
  Educational Foundations & Leadership .............................................................................................................................................. 110
  Human Movement Sciences ............................................................................................................................................................... 118
  STEM ........................................................................................................................................................................................................ 124
  Teaching and Learning ......................................................................................................................................................................... 133
  Teacher Education Services ............................................................................................................................................................. 154
Frank Batten College of Engineering & Technology ..................................................................................................................................... 157
<table>
<thead>
<tr>
<th>Department/College</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomedical Engineering</td>
<td>162</td>
</tr>
<tr>
<td>Civil &amp; Environmental Engineering</td>
<td>163</td>
</tr>
<tr>
<td>Electrical &amp; Computer Engineering</td>
<td>166</td>
</tr>
<tr>
<td>Management &amp; Systems Engineering</td>
<td>168</td>
</tr>
<tr>
<td>Mechanical &amp; Aerospace Engineering</td>
<td>172</td>
</tr>
<tr>
<td>Modeling, Simulation, &amp; Visualization Engineering</td>
<td>175</td>
</tr>
<tr>
<td>College of Health Sciences</td>
<td>179</td>
</tr>
<tr>
<td>School of Community &amp; Environmental Health</td>
<td>182</td>
</tr>
<tr>
<td>Gene W. Hirschfeld School of Dental Hygiene</td>
<td>185</td>
</tr>
<tr>
<td>School of Medical Laboratory &amp; Radiation Sciences</td>
<td>186</td>
</tr>
<tr>
<td>School of Nursing</td>
<td>187</td>
</tr>
<tr>
<td>School of Physical Therapy</td>
<td>192</td>
</tr>
<tr>
<td>College of Sciences</td>
<td>194</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>195</td>
</tr>
<tr>
<td>Chemistry &amp; Biochemistry</td>
<td>198</td>
</tr>
<tr>
<td>Computer Science</td>
<td>199</td>
</tr>
<tr>
<td>Mathematics &amp; Statistics</td>
<td>203</td>
</tr>
<tr>
<td>Ocean, Earth &amp; Atmospheric Sciences</td>
<td>205</td>
</tr>
<tr>
<td>Physics</td>
<td>208</td>
</tr>
<tr>
<td>Psychology</td>
<td>210</td>
</tr>
<tr>
<td>Officers of the Administration and Department Chairs</td>
<td>216</td>
</tr>
<tr>
<td>Faculty</td>
<td>221</td>
</tr>
<tr>
<td>Faculty Emeriti</td>
<td>241</td>
</tr>
<tr>
<td>Index</td>
<td>245</td>
</tr>
</tbody>
</table>
General Information

History
Old Dominion University began its tradition of excellence when it was founded in 1930 by the College of William and Mary, the second oldest university in the United States. Established as an extension of William and Mary in Williamsburg, Virginia, and Virginia Polytechnic Institute in Blacksburg, Virginia, Old Dominion began educating teachers and engineers. The two-year school rapidly evolved into a four-year institution, and was granted independence in 1962 as Old Dominion College.

Considerable growth in enrollment, the expansion of research facilities and preparation for the addition of graduate programs led the Board of Visitors to approve the name change to Old Dominion University. Now Old Dominion is a powerhouse for higher education with six colleges: Arts and Letters, Business and Public Administration, Education, Engineering and Technology, Health Sciences and Sciences. Old Dominion has offered master’s degrees since 1964 and Ph.D.s since 1971. Students currently choose from 69 baccalaureate programs, 54 master’s programs, two education specialist programs and 42 doctoral programs. The University has achieved designation as a Research University (high research activity) from the Carnegie Foundation for the Advancement of Teaching.

Proud of its past, Old Dominion constantly looks to the future and prides itself on its continually expanding research and teaching programs. An ever-evolving university, Old Dominion is an agent of change for its students, for the region and the nation it serves. Old Dominion is Virginia’s forward-focused, public doctoral research university for students from around the world who want a rigorous academic experience in a profoundly multicultural community. Our nationally recognized faculty use real-world expertise and innovative teaching methods to challenge students to achieve their highest goals. Our determined entrepreneurial approach to problem-solving drives cutting-edge research, eminent scholarship and strategic partnerships with government, business, industry, organizations and the arts.

Students
The students at Old Dominion share a special sense of excitement derived in part from the rich tapestry of backgrounds, cultures and ages represented here. Our students hail from all 50 states and more than 100 countries. Studying in this multicultural, international environment, and taking advantage of our guaranteed internship program, offers students a true edge after they graduate and begin to compete for jobs in the “real world.”

Among ODU’s outstanding students in recent years are a Rhodes Scholar, Truman Scholar and three USA Today Academic All-Americans, as well as the first undergraduate in the commonwealth of Virginia to earn a patent. The University’s alumni ranks include an Emmy Award-winning television producer, a United States Air Force astronaut, the former Vice Chief of Naval Operations, the commander, U.S. Central Command, the former chief of surgery at Walter Reed Army Medical Center, award-winning authors, engineers and scientists, and professional coaches and athletes.

More than 19,000 undergraduates and nearly 5,500 graduate students comprise the Old Dominion student body. Residence halls and apartments on campus house more than 4,500 students, while many other students live nearby within walking distance of the campus. Another 6,500 are distance learners located throughout Virginia and other states - even on ships at sea - who rarely ever set foot on the campus. A significant percentage of students are in some way connected to the military.

Students in search of extracurricular activities don’t have far to look. The University boasts more than 300 student clubs and organizations. The Office of Student Activities and Leadership (OSAL) sponsors a wide variety of programs that complement academic excellence, offer a supportive environment, engage students in various learning experiences and provide them with opportunities to interact with a diversity of groups and individuals. OSAL is primarily responsible for commuter services, clubs and organizations, Greek-letter organizations, leadership programs, service and volunteerism, and weekend activities.

The Norfolk Campus and Region
Situated on 251 acres near downtown Norfolk, Old Dominion University’s main campus stretches from the Elizabeth River to the Lafayette River, and watching sunsets on the water is a natural pastime for our students. With its garden areas, reflecting pools and spacious green lawns bordered by tree-lined walkways, the campus offers the best of both worlds – a beautiful setting and just minutes away from Hampton Roads’ largest cities.

One of the most exciting developments on the campus today is the University Village, with its impressive centerpiece, the Ted Constant Convocation Center, which opened its doors in 2002 and hosts everything from basketball games to concerts to commencements. This 75-acre development at the east end of campus is home to 960 modern student apartments, a variety of restaurants and shops, a hotel, research facilities, an art gallery, and bookstore.

On the main campus, at the west end of the grassy, five-acre Kaufman Mall, lies Webb University Center, a spacious facility that dazzles with its two-story glass facade, creating an outdoor ambiance and providing a sunny home - in any season - for student life. At the north end of campus, a stroll along the brick sidewalks of the Williamsburg Lawn, with its towering willow oak trees, offers students and visitors a trip back in time to the beginnings of the University.

Old Dominion’s 75th anniversary in 2005 found an impressive array of cutting-edge facilities that have created a campus that’s ideal for the pursuit of a diverse number of majors. Among these are the fully automated Perry Library, with more than 2.1 million titles, state-of-the-art laboratories in the sciences and engineering, and the new E.V. Williams Engineering and Computational Sciences Building. The campus is also home to Pretlow Planetarium, the Lions Child Study Center, new, superior facilities for clinical work in the health sciences, a modern Oceanography and Physics Building, the Gornto TELETECHNET Center and the Diehn Fine and Performing Arts Center. Recent additions include the Student Success Center and Learning Commons, an orchid conservatory and research building, as well as renovation to the Technology Building and the Batten Arts and Letters Building, all of which will further provide expanded opportunities for our students in the arts, sciences, health sciences and engineering. The campus boasts a variety of indoor and outdoor sports facilities. A completely new student recreational center opened in 2009.

Further enhancing the on-campus engineering and science curricula, the University operates the Mid-Atlantic Regional Spaceport located at Wallops Island on Virginia’s Eastern Shore; has a significant presence in the Applied Research Center at the Department of Energy’s Jefferson Laboratories in Newport News; continues to expand its Reidy Research Center for Bioelectronics and the Virginia Modeling, Analysis, and Simulation Center on the Portsmouth-Suffolk border; and owns and manages the Blackwater Ecological Preserve in Zuni.

Only 20 miles from the sand and surf of Virginia Beach and just 40 miles from historic Williamsburg, ODU’s Norfolk campus, in one of the nation’s oldest seaports and one of today’s busiest international seaports on the east coast, offers an attractive location for study and leisure. Prospective students and families are welcome to visit the campus Monday through Saturday throughout the year.

Faculty
Almost 800 full-time and 650 part-time faculty bring a wealth of talent to our classrooms each day. Their lively, provocative teaching, research and applied experience, along with their commitment to academic excellence, combine to make the Old Dominion experience a rewarding one for students.

Many of our faculty have been recognized on the state and national levels with awards for teaching, research and service. Since 1990, Old Dominion University faculty have won three professor of the year awards from the Carnegie Institute for the Advancement of Teaching, one Humboldt Award, three Virginia Outstanding Scientist awards sponsored by the Science Museum of Virginia, and 26 Virginia Outstanding Faculty Awards that are sponsored by the State Council of Higher Education for Virginia. Among
our faculty ranks you will find nationally and internationally recognized scientists, engineers, educators and authors.

Faculty also serve as the primary academic advisers to our students, beginning in the freshman year. These relationships offer a special opportunity for new students to understand their chosen majors from the perspective of extensive experience and insight that only a professor can offer.

Because of our location and our relationship with dozens of corporations, federal facilities, the armed services, health care services and the tourist industry, faculty at Old Dominion bring a real-world, problem-solving focus to the classroom that makes learning come to life.

A Global Vision

Old Dominion University has made an extraordinary commitment to be recognized as a globally focused institution. This commitment is reflected in a series of recent innovations including:

- International Student Leadership Awards for outstanding leadership and academic achievement to Old Dominion’s diverse international student community
- Provost Award for Leadership in International Education, recognizing faculty leadership in program innovation
- Dean’s Education Abroad Awards, expanding financial support to bring study abroad within reach for more undergraduates
- ICAP, adding a global dimension to the University’s innovative Career Advantage Program
- The Office of International Programs, a comprehensive support office that facilitates continued global exploration and innovation

For more information visit www.odu.edu/oduhome/international.shtml.

Outside the Classroom

Clubs and organizations for nearly every interest—more than 300 in all—thrive at Old Dominion, nurturing the personal and social development that is essential to the University experience. Clubs for every college and most majors, sororities and fraternities, an Honor Council, Student Government, Student Activities Council, and numerous recreational sports teams and athletic clubs make it easy to get involved at Old Dominion. In addition, ROTC programs are available for the Navy, Army and Marine Corps.

The benefits and rewards of joining one or more student organizations vary depending on you! Some of the best reasons for getting involved are making new friends, leadership development, taking advantage of opportunities, exploring careers and gaining that Monarch Pride!

Eighteen NCAA Division I sports bring pride and spirit to campus life each year, including Division 1-AA football, and Old Dominion Monarchs have won 32 team and individual national titles, including four in basketball, nine in field hockey and 15 in sailing.

The Mission of the University

Mission

Old Dominion University, located in the City of Norfolk in the metropolitan Hampton Roads region of coastal Virginia, is a dynamic public research institution that serves its students and enriches the Commonwealth of Virginia, the nation and the world through rigorous academic programs, strategic partnerships, and active civic engagement.

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.

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. Distance 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 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

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 without regard to race, color, religion, national origin, sex (including pregnancy), age, veteran status, disability, political affiliation, sexual orientation, or genetic information; 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 assistant vice president for institutional equity and diversity.

Accreditations
Old Dominion University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award baccalaureate, master’s, education specialist, and doctoral degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Old Dominion University.

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 baccalaureate degrees in civil engineering, computer engineering, electrical engineering, environmental engineering, and mechanical engineering are accredited by the Engineering Accreditation Commission (EAC) 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 Technology Accreditation Commission (TAC) of ABET, http://www.abet.org.

The graduate and undergraduate teacher education degree programs in the Colleges of Arts and Letters, Education and Sciences are accredited by the National Council for Accreditation of Teacher Education. The Child Study and Child Development Centers are accredited by the Southern Association of Colleges and Schools (SACS) and Council on Accreditation and School Improvement (SACS/CASI).

The park, recreation and tourism studies program is accredited by the Council on Accreditation for Parks, Recreation, Tourism and Related Professions. Both the undergraduate and graduate program emphasis areas in sport management have received program approval through the North American Society for Sport Management (NASSM) and the National Association for Sport and Physical Education (NASPE). The graduate program emphasis area in athletic training is accredited by the National Athletic Trainers Association (NATA). The undergraduate program in exercise science is accredited by the Commission on Accreditation of Allied-Health Programs (CAAHEP). The graduate program in speech-language pathology is accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association. The community, mental health, school, and college counseling master’s and counselor education doctoral degree programs located on the Norfolk campus are accredited by the Council on Accreditation of Counseling and Related Educational Programs (CACREP).

The doctoral program in clinical psychology is accredited by the American Psychological Association. The undergraduate program in chemistry is American Chemical Society certified.

The undergraduate and graduate business programs of the College of Business and Public Administration 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.

The program in dental hygiene is accredited by the American Dental Association Commission on Dental Accreditation. The baccalaureate and master’s nursing programs are accredited by the Commission on Collegiate Nursing Education and approved by the Virginia Board of Nursing. Graduate nursing programs are accredited and approved by the Commission on Collegiate Nursing Education, 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 is accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs. The medical technology program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences, 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 environmental health programs have been awarded accreditation from the National Environmental Health
Science and Protection Accreditation Council. The nuclear medicine technology program is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology. The Master of Public Health program has received accreditation from the Council on Education for Public Health. The cytotechnology certificate program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAAHEP). The ophthalmic technology certificate program is accredited by the Committee on Accreditation for Ophthalmic Medical Personnel (CoA-OMP). The health services administration track in the Bachelor of Health Sciences is certified by the Association of University Programs in Health Administration (AUPHA).

The Department of Music is a full member of the National Association of Schools of Music. The Department of Art is a full member of the National Association of Schools of Art and Design. The theatre program is accredited by the National Association of Schools of Theatre.

Affiliations
The University is a member of the Southern Association of Colleges and Schools, the American Council on Education, the National Commission on Accrediting, 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 Association of Urban Universities, the Council for the Advancement and Support of Education, the National Association of State Universities and Land Grant Colleges, the National Commission for Co-op Education, the Southeastern University Research Association, the American Association of University Women, the University Extension Association, the National Society for Experiential Education, the Universities Space Research Association, the American Association of Collegiate Schools of Business, the National Council for Accreditation of Teacher Education, the Association of University Evening Colleges, the National Association of College and University Summer Sessions, the Association of Virginia Colleges, the Association of Schools of Allied Health Professions, the American Association of Dental Schools, the American Society for Engineering Education, the Consortium for Oceanographic Research and Education, and the Conference of Southern Graduate Schools. The University is also a Division I member of the Collegiate Athletic Association (NCAA) and the Colonial Athletic Association (CAA).

Old Dominion University is authorized by the Washington Higher Education Coordinating Board (HECB) 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 the following degree programs: Bachelor of Science in Business Administration: Accounting, Finance, Information Systems and Technology, Management, Marketing; Bachelor of Science in Communication; Bachelor of Science in Computer Science; Bachelor of Science in Criminal Justice; Bachelor of Science in Engineering Technology: Civil Engineering Technology, Electrical Engineering Technology, General Engineering Technology, Mechanical Engineering Technology; Bachelor of Science in Health Sciences; Bachelor of Science in Human Services; **Bachelor of Science in Interdisciplinary Studies; Bachelor of Science in Nursing (RN to BSN); Bachelor of Science in Occupational and Technical Studies; Master of Engineering Management; Master of Science in Community Health; *Master of Science in Education: Military Career Transition Program (MCTP), Pre-K through 6, Middle School Education (Grades 6-8), Secondary Education (Grades 6-12), Secondary Education – Field Based, Special Education, Special Education – General Curriculum K-12*; Master of Science in Nursing: Family Nurse Practitioner Role, Nurse Administrator Role, Nurse Educator Role, Women’s Health Nurse Practitioner Role; Master of Science in Occupational and Technical Studies; Doctor of Philosophy in Community College Leadership; and **Doctor of Philosophy in Education. Authorization by the HECB does not carry with it an endorsement by the board 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 HECB office at P.O. Box 43430, Olympia, WA 98504-3430.

*Eligibility for initial educator certification in Washington is based on completion of a state approved educator preparation program. This program is approved in Virginia and is authorized for field placements in Washington by the Professional Educators Standards Board. Even though students may be residing in Washington while in this program, their application for educator certification in Washington will be processed as an out-of-state application. Go to http://pathway.pesb.wa.gov/outofstate for more information. Teachers are advised to contact their individual school districts as to whether this program may qualify for teacher advancement.

**The Bachelor of Science in Interdisciplinary Studies-Teacher Preparation (Primary/Elementary) and the Doctor of Philosophy in Education with a concentration in Occupational and Technical Studies are not intended to lead to teacher certification. Teachers are advised to contact their individual school districts as to whether these programs may qualify for salary advancement.

Distinguished Faculty Chairs and Professorships
In 1964, Virginia became the first state in the nation to establish an Eminent Scholars Program. Virginia encourages donors to create endowed funds to attract and retain outstanding faculty members by matching the income from these endowments, thus doubling the impact of the donors’ gifts.

The generosity of several individuals and groups has made it possible for the University to establish chairs and professorships to support faculty members and their scholarly activities through this program. Included in these gifts are the following:

The P. Stephen Barna Professorship Endowment
Mr. E. James Hayes, a 1989 alumnus of Old Dominion University, established a professorship for aerospace engineering in the Frank Batten College of Engineering and Technology in 2003.

The Richard F. Barry, Jr. Chair
Established in 1997, this endowment provides support for a chair in the College of Sciences Department of Mathematics and Statistics. Richard F. Barry III, a former rector and member of the University’s Board of Visitors and former Vice Chairman of Landmark Communications, Inc., created the endowment in honor of his father who taught mathematics at the University.

The Batten Chairs
The Batten Chairs were established in 2003 by Frank and Jane Batten. Mr. Batten, who passed away in 2009, was the retired Chairman and CEO of Landmark Communications and the first rector of the Board of Visitors. The Batten’s $32 million gift, the largest in Old Dominion’s history, benefits all six of the University’s colleges with emphasis to the Frank Batten College of Engineering and Technology and the College of Sciences. The Batten Chairs include:

• Batten Endowed Chair in Jewish Studies
• Batten Endowed Chair in Counseling
• Batten Endowed Chair in Computer Engineering
• Batten Endowed Chair in System of Systems Engineering
• Batten Endowed Chair in Bioelectronics Engineering
• Batten Endowed Chair in Micro- and Nano-electronics Engineering
• Batten Endowed Chair in Biomedical Engineering
• Batten Endowed Chair in Advanced Transportation Engineering
• Batten Endowed Chair in Science
• Batten Endowed Chair in Health Sciences
The Frederick Wharton Beazley Professorship
Created by an anonymous donor in 1988, the professorship in the College of Business and Public Administration was established to honor Portsmouth philanthropist, Mr. F. W. Beazley.

The Bioinformatics Professor
The Bioinformatics Professor endowment was established in 1992 within the College of Sciences by the Department of Computer Science.

The CBPA Endowed Professorship in Accounting
The Dean of the College of Business and Public Administration established a professorship in 2006 to attract or retain an accounting scholar. The endowment was funded initially by KPMG Partners.

The Richard T. Cheng Chair in Computer Science
In 1998, former faculty member Dr. Richard Cheng endowed a chair in the department in which he helped establish accreditation. He is the former Chairman and CEO of ECI Systems and Engineering.

The Commonwealth Professorships
Provided by an anonymous donor as a substantial endowment gift in 1967, the endowment supports professorships in any of the University’s six colleges.

The Constance F. and Colgate W. Darden Professorships
The Dardens endowed two professorships, one in education and one in history, in 1976. The Darden College of Education was named in honor of Mr. Darden, a U.S. Congressman, former Virginia Governor and President of the University of Virginia.

The Mina Hohenberg Darden Chair in Creative Writing
This endowed English department professorship was initiated in 1997 as a memorial to Mina Hohenberg Darden by her family and friends. Mrs. Darden received three M.A. degrees from Old Dominion and was working toward an M.F.A. in poetry.

The Diehn Chair in Music
The Diehn Fund, established by the estate of F. Ludwig Diehn, provided the funding in 1999 for a chair in music. The Diehn Fund also supports the Diehn Concert Series and the Diehn Fine and Performing Arts Center.

The Dragas Professorship in International Studies Endowment
This endowment was established in 1996 by the George and Grace Dragas Foundation to create a professorship in international studies. Mr. Dragas is an alumnus and former rector of the University’s Board of Visitors.

The Ray Ferrari Endowed Professorship
Mr. E. James Hayes, a 1989 alumnus of Old Dominion University, instituted an engineering department professorship in 1997 to honor his mechanical engineering technology professor and mentor, Ray Ferrari.

The Mary Payne Hogan Endowed Professorship
Established in honor of Mary Payne Hogan, the endowment was created in 1997 by an anonymous donor. The professorship supports the College of Sciences, specifically in botany.

The Louis I. Jaffe Professorship
In 1968, an anonymous donor created a professorship in the College of Arts and Letters in memory of the Pulitzer Prize-winning editor of The Virginian-Pilot, Mr. Jaffe.

The George M. and Linda H. Kaufman Professorship
The Kaufmans endowed this professorship in 1985. A lectureship in public affairs also bears their name. Mrs. Kaufman is a former member of the Board of Visitors. Mr. Kaufmann led the effort to landscape the University’s mall, which was named in honor of his parents.

The William E. Lobeck, Jr. Endowed Chair
Established in 2002 by the Lobeck-Taylor Foundation, this funding created an endowed chair in advanced engineering environments in the Frank Batten College of Engineering and Technology. Mr. Lobeck is an alumnus and former president of the Auto Nation Rental Group of Republic Industries.

The Mitsubishi Kasei Professorship in Manufacturing Engineering
The Mitsubishi Kasei Corporation in 1990 established this professorship in manufacturing engineering in the Frank Batten College of Engineering and Technology.

The A.D. and Annye Lewis Morgan Professorship
The Morgan Trust established this professorship in 1986 consistent with the wishes of the Morgans. He was a successful Norfolk physician who also created a scholarship fund to benefit Old Dominion students. The professorship is for a faculty member in either the Frank Batten College of Engineering and Technology or the College of Sciences.

The Ruth M. & Perry E. Morgan Endowed Professorship
Mr. Perry Morgan, former Editor-in-Chief of The Virginian Pilot, established a professorship in the College of Arts & Letters in 1996 in honor of his wife, Ruth. The incumbent must have a doctorate in American literature with an emphasis in Southern literature.

Rosanne Keeley Norris Professorship
Frederick J. Norris ’78, through a bequest in his will, established a professorship in 2007 in memory of his mother, Mrs. Rosanne Keeley Norris, who devoted her career to primary education in the California and Massachusetts public schools. Mr. Norris desired to assist the University in attracting and retaining outstanding faculty in the Darden College of Education.

Oceanography Professorships
A challenge gift from the Norfolk Foundation in 1975 and gifts in response from corporations, friends, and alumni made possible an endowment to support several professorships in oceanography.

The Samuel L. and Fay M. Slover Chairs
A 1967 bequest from Mrs. Slover established an endowment that supports three chairs in oceanography. Col. Slover was the owner of The Virginian-Pilot and The Ledger Star.

The Oscar F. Smith Chair
The Oscar F. Smith Foundation made a grant in 1968 to establish an endowed chair in oceanography. The late Mr. Smith was president of Norfolk Shipbuilding and Drydock, Co., now Norshipco.

The William B. Spong, Jr., Professorship
In 1988, The Landmark Charitable Foundation endowed a professorship on behalf of The Virginian-Pilot and The Ledger Star to honor the former U. S.
The Robert M. Stanton Chair in Real Estate and Economic Development

Mr. Robert M. Stanton, a 1961 alumnus of Old Dominion University and former rector of the Board of Visitors, established a chair in real estate and economic development in the College of Business and Public Administration in 2003. The purpose of the chair is to help develop and enhance the Center for Real Estate and Economic Development into a nationally recognized institution. Mr. Stanton was the first chair of the Real Estate Foundation.

The Robert Stiffler Distinguished Professorship in Botany

The Robert Stiffler Distinguished Professorship in Botany was created in 2003 by an anonymous donor. The professorship in the College of Sciences honors 28 years of Robert Stiffler’s service to The Virginian-Pilot and the community as a gardening columnist and expert. The chair will help Old Dominion University and the Norfolk Botanical Garden fulfill their research goals in the field of botany.

The Jesse and Loleta White Lectureship

Created in 1992 by the Aphasia Foundation of Virginia, this endowment supports a faculty position in the Child Study Center within the Darden College of Education.

E.V. Williams Faculty Fellowship Endowment

Established in 2005 through a bequest of Mr. E. Virginius Williams for the College of Business and Public Administration.

E.V. Williams Endowed Chair in Strategic Leadership

Established in 2005 through a bequest of Mr. E. Virginius Williams for the College of Business and Public Administration.

Educational Foundation

The Old Dominion University Educational Foundation is a nonprofit 501(c) (3) corporation chartered in 1955 to receive and manage gifts that support the educational mission of the University. As of December 31, 2011, the Foundation was responsible for managing approximately $161 million of endowment assets, including $10.3 million of University endowments. The Foundation is supported by the University’s Office of Development and is governed by a Board of Trustees consisting of alumni and friends of the University.

Old Dominion Athletic Foundation

The Old Dominion Athletic Foundation is a nonprofit 501(c)3 corporation chartered in 1964 to provide funds for the University to compete successfully in intercollegiate athletic programs. The Foundation is governed by a Board of Trustees comprising alumni and friends of the University. Its activities are coordinated through the Department of Athletics and the Office of Development.

The Office of International Programs (OIP) coordinates activities that focus on Old Dominion University’s strategic commitment to campus-wide internationalization. These activities fall into three general categories, all of which are designed to expand student understanding of our interdependent world: encouraging the incorporation of international issues and perspectives into undergraduate and graduate education; facilitating international exchange of students and faculty; and sharing international interests and expertise with the broader Hampton Roads community that Old Dominion University seeks to serve. For more detailed information, visit the OIP website at www.odu.edu/oip.

OIP facilitates the development of the University’s cooperative agreements and exchange programs with other institutions of higher learning around the world in order to encourage exchange of students and faculty as well as collaborative research. OIP staff provide advising support for international fellowships, such as the Fulbright, National Security Education Program, and the Gilman International Scholarship Program.

OIP sponsors and coordinates international programs that serve and involve the citizens of the region and the state. These may include appearances by foreign diplomats, scholars and artists, workshops for teachers and other professionals, and support for internationally-focused community organizations.

OIP includes the Office of Study Abroad, the English Language Center, and International Student and Scholar Services.

Office of Study Abroad (OSA)

Increasing global awareness happens in both the classroom and elsewhere on Old Dominion’s multicultural campus, but there is no substitute for traveling abroad to acquire a personal perspective on our increasingly interdependent world. Old Dominion students participate in a wide array of study abroad experiences as an integral part of their college education. Faculty-led programs of study in the summer and over spring break are available in different subject areas (from Service Learning in South Africa to Theatre in London to Business Studies in Korea and China). Semester and academic year study abroad programs and reciprocal student exchange programs offer long-term opportunities in virtually all areas of the world. Old Dominion is a member of study abroad consortia that sponsor high quality programs around the globe, providing opportunities for exchange with over 100 universities overseas. Regardless of one’s field of study, almost all Old Dominion students can study abroad. Practically all forms of student financial aid may be applied to an academic program abroad, and travel grants are available for many programs. Dean’s Education Abroad Awards provide special support for selected majors, and internships, and volunteer and short-term work opportunities overseas are additional options.

The Office of Study Abroad administers overseas academic programs and authorizes transfer credit from approved programs of study. OSA maintains a library of study abroad directories (print and electronic), catalogs, and other reference materials from Old Dominion partner universities abroad; study abroad program brochures organized by country and region; atlases and travel guides; and reference materials on scholarships, internships and work abroad opportunities. A Study Abroad Fair is held every semester, and pre-departure orientation programs and “re-entry” sessions when students return from abroad are also organized by the staff. Please visit the OSA’s web site at www.odu.edu/studyabroad.

English Language Center

The English Language Center (ELC) offers intensive English language classes (six-seven week sessions per year) for international students and members of the local international community in grammar, composition, reading/vocabulary, and speaking/listening at beginning to advanced levels. This academic program primarily prepares students for study at American colleges and universities or for using English in workplaces around the world.

The ELC also provides semester-long Undergraduate and Graduate Bridge courses for students who have been conditionally admitted to the University and who need to improve their English language skills. The ELC administers the institutional TOEFL several times a year. Admission to ELC programs
Distance Learning

Old Dominion University’s Office of Distance Learning delivers graduate and upper-division undergraduate courses to students using a variety of technologies. Distance Learning provides access to higher education to students at community college sites and higher education centers across the Commonwealth of Virginia. The participating community college provides course work required for the first two years of study. Old Dominion University provides the final two years of course work, and students are able to complete their entire baccalaureate degree at their local community college campus. Graduate degree programs are also available at these locations.

Old Dominion University’s statewide network of site locations extends well beyond the community colleges with course offerings at various military bases and corporations. Out-of-state site locations are operating in Arizona and Washington state. At these sites students may register for classes, meet with advisors, and attend classes both on-site and using telecommunication technologies.

In addition, the University offers a variety of degree programs using Internet technologies, such as web-based and video-streamed courses. These options provide students the flexibility to take courses from any location.

Military Outreach

Old Dominion University is proud of its affiliation with military personnel and their families who represent all branches of the armed services. Students will find a variety of programs to match their personal and professional goals through the University’s six colleges. Courses are available on campus and a distance in live, synchronous, and anytime, asynchronous formats using media such as video-streaming, CD-Rom, and web-based technologies. Old Dominion operates sites on or near military installations in and outside Virginia where, depending on the location, students can take classes on the base. Distance learning counselors at all locations are trained to facilitate registration, admissions, and advising. Old Dominion accepts tuition assistance and serves the special needs of veterans, on campus or at distance, with a dedicated staff.

Old Dominion University is affiliated with the Servicemembers Opportunity Colleges (SOC), DANTES, and Troops to Teachers. The University is a member of the GoArmyED network, the USAF’s Associate’s to Bachelor’s Cooperative (AUABC), and the Navy’s NCPACE and partnership programs, all of which provide substantial credit for military training as well as flexibility, convenience, and affordability.

Regional Higher Education Centers

Old Dominion University operates three full-service higher education centers within the metropolitan region, located in Hampton, Portsmouth, and Virginia Beach. These centers offer a wide range of academic programming, including degrees and certificates at the undergraduate and graduate levels. Courses are conducted through multiple modalities, including traditional face-to-face, 2-way video-conferencing, satellite-delivery, web-based, and hybrid programming. Student support services available include on-site advising, registration, computer labs, testing, career management coaching, athletics tickets, bookstore, and access to the University’s library and mainframe computer. Each facility also offers non-credit courses and provides meeting and training space for government agencies, corporations, industry, and nonprofit organizations; capabilities include seminar/meeting rooms, teleconferencing, and administrative support. In addition, the regional higher education centers support a diverse array of community engagement efforts, ranging from partnerships with local public school districts to service-learning partnerships with an array of institutions and agencies.

ODU-Peninsula Higher Education Center
600 Butler Farm Road, Suite 2200
Hampton, Virginia 23666
757-766-5200 (switchboard); 757-766-5201 (fax)

phec@odu.edu
http://www.odu.edu/peninsula/

ODU-Tri-Cities Higher Education Center
1070 University Boulevard
Portsmouth, VA 23703
757-686-6220 (switchboard); 757-686-6219 (fax)
tntcc@odu.edu
http://www.odu.edu/tricities

ODU-Virginia Beach Higher Education Center
1881 University Drive
Virginia Beach, VA 23453
757-368-4100 (switchboard); 757-368-4109 (fax)
vhhec@odu.edu
http://www.odu.edu/vhhec

Athletics

Old Dominion University’s athletic program is among the most successful in the United States, boasting 28 team and four individual national championships, including three in women’s basketball, nine in field hockey, 15 in sailing, a women’s tennis clay court national crown, a men’s basketball Division II title, and three individual wrestling Division II titles.

The Department of Intercollegiate Athletics is the home for Old Dominion University’s 18 varsity programs for men and women. Old Dominion University offers competitive programs for student-athletes in the following sports:

- football
- men’s and women’s soccer
- field hockey
- men’s and women’s sailing
- men’s and women’s basketball
- wrestling
- men’s and women’s swimming and diving
- women’s lacrosse
- men’s and women’s golf
- men’s and women’s tennis
- baseball
- women’s rowing

The University is reviewing additional intercollegiate program opportunities for women. Old Dominion University is a Division I member of the National Collegiate Athletic Association (NCAA) and the Colonial Athletic Association (CAA). The 12 teams in the Colonial Athletic Association include:

- University of Delaware in Newark, DE
- Drexel University in Philadelphia, PA
- George Mason University in Fairfax, VA
- Georgia State University in Atlanta, GA
- Hofstra University in Hempstead, NY
- James Madison University in Harrisonburg, VA
- University of North Carolina at Wilmington in Wilmington, NC
- Northeastern University in Boston, MA
- Towson University in Towson, MD
- Virginia Commonwealth University in Richmond, VA
- College of William and Mary in Williamsburg, VA

All full-time enrolled students are invited to attend intercollegiate athletic events free of charge. Beginning one week in advance of a regular season men’s or women’s basketball game and 10 days in advance of a football game, an Old Dominion ID card may be used to pick up student general admission tickets at the Constant Convocation Center Box Office or Webb Center Information Desk. At each men’s and women’s home basketball game and home football game, an Old Dominion ID and a ticket must be presented at the student gate entrance of the Constant Convocation Center or S.B. Ballard Stadium. For soccer, baseball and other special athletic events, students are admitted at the gate by showing their current student ID card. For more information, call the Constant Convocation Center Box Office at
In addition, Old Dominion University provides students with a variety of recreational and intramural activities through its Recreation and Wellness Department. For more information on these activities contact the Recreation and Wellness Department at (757) 683-3384.
General Policies and Procedures

Accommodations for Students with Disabilities
http://www.odu.edu/ao/polnproc/pdfs/4500.pdf

Electronic Messaging Policy for Official University Communication
http://www.odu.edu/ao/polnproc/pdfs/3506.pdf

Firearms, Weapons, and Certain Related Devices

General Harassment Policy
http://www.odu.edu/ao/polnproc/pdfs/6330.pdf

Gun & Weapon Regulation

Inclement Weather and Emergencies
http://www.odu.edu/ao/polnproc/pdfs/1020.pdf

Interim Suspension

Old Dominion University Discrimination Complaint Procedure
http://www.odu.edu/ao/polnproc/pdfs/6310.pdf

Sexual Misconduct Policy
http://www.odu.edu/ao/polnproc/pdfs/4600.pdf

Sexual Harassment Policy
http://www.odu.edu/ao/polnproc/pdfs/6320.pdf

Smoking Policy
http://www.odu.edu/ao/polnproc/pdfs/3220.pdf

Stalking Policy
http://www.odu.edu/ao/polnproc/pdfs/4601.pdf

Student Complaint Procedure

Student Disciplinary Policies and Procedures

Student Record Policy
http://www.odu.edu/ao/polnproc/pdfs/4100.pdf
**Academic Resources**

**University Libraries**
The University Libraries include the Patricia W. and J. Douglas Perry Library, the Elise N. Hofheimer Art Library, and the F. Ludwig Diehn Composers Room. The libraries offer books, online journals, e-books, microforms, maps, musical scores, recordings, and other media in all fields of research and instruction as well as study space, internet stations, and other technology to support student learning. Available online at www.lib.odu.edu are the library’s catalog and the scholarly journals and research databases provided via the University and the statewide Virtual Library of Virginia (VIVA) subscriptions. The University Libraries also serves as a repository for US and Virginia government publications. The Libraries house family and other manuscript collections, Tidewater history, university archives, and contemporary composers’ manuscripts and scores. Students and faculty may also borrow materials from academic libraries in the region.

**The Elise N. Hofheimer Art Library**
Diehn Fine and Performing Arts Center, Room 109, 683-4059. The Hofheimer Art Library collections contain specialized books, journals, online resources, audio-visual titles and other materials for students and faculty in the visual arts. Reserve materials for Art Department classes are available at the service desk. Individual and group study space, computer workstations, DVD/VHS viewing monitors, a scanner and a network printer/copier are available. Visit the Art Library at www.lib.odu.edu/hofheimer/index.htm.

**The Diehn Composers Room**
Diehn Fine and Performing Arts Center, Room 189; 683-4173. The F. Ludwig Diehn Composers Room’s Listening Library houses music special collections, scores, music videos, and sound recording collections and a full complement of audio equipment for many formats. Additionally, MIDI, multi-media, DVD, VCR, laser disc player stations, internet stations, a scanner, and a network printer/copier are available. Reserve materials for Music Department classes are available at the service desk. The Reading Room offers space for the study of manuscripts and other materials from special collections. The seminar room is available for course level instruction and is equipped with whiteboards for instructional activities. A Steinway grand piano affords scholars and researchers the opportunity to play selections from the special collections as desired. Information on services and collections is located at www.lib.odu.edu/diehn/index.htm.

**Perry Library**
Offers many services and resources:

**Learning Commons**
1st Floor, 683-4178. The Learning Commons@Perry Library provides work and learning space for students. The facility includes workstations, café facilities, comfortable seating, presentation and multi-media facilities, collaborative rooms for group work, GIS stations, equipment loan, Writing Center, Math and Science Resource Center, and other services to support student learning. Staff in the Commons provide instruction and assistance with online scholarly resources, technology use, library collections, equipment use, writing, tutoring, advising, and other student services. The Commons is open for year-round services, including overnight hours during fall and spring semesters. Learning Commons information, reservation booking, and links are available at http://odu.edu/ao/learningcommons/.

**Circulation and Reserve Services**
2nd Floor, 683-4154. Students with a valid University ID may borrow and renew books and other materials, as well as check out reserve materials. Group study rooms and graduate student study carrels are also available. Information on borrowing privileges, loan periods, and policies is available at www.lib.odu.edu/libraryservices/borrowing.htm.

**Interlibrary Loan and Document Delivery Services**
Room 1208, 683-4170, 4171. Interlibrary loan services facilitate research by obtaining materials from other research libraries worldwide. The state’s VIVA interlibrary loan agreement ensures that students and faculty may obtain items located in other Virginia libraries. Document delivery services provide copies of materials held in the University Libraries’ collection to distance learners and other eligible students, faculty and staff. Interlibrary loan and document delivery requests can be submitted online through ILLiad. Online ILLiad registration and request forms are available at www.lib.odu.edu/libraryservices/interlibraryloan.htm.

**Library Accessibility Services**
The University Libraries offer a variety of services for students with disabilities. Students with extended research needs are encouraged to request an in-depth research consultation with a reference librarian. A wheelchair-accessible room (Room 1306) in the Learning Commons @ Perry Library is equipped with computers for individual use. The computers have JAWS, ZoomText, and specialized equipment for users with visual and learning disabilities. A CCTV is also available in this room. Users must be registered with the University’s Office of Educational Accessibility (http://studentaffairs.odu.edu/educationalaccessibility/) and must receive training prior to using the room. Students may make reservations for the room at the Learning Commons Help Desk. Additional services are offered at the 2nd floor Circulation Services Desk, including an on-demand service for patrons who need special assistance retrieving library materials. Students registered with the Office of Educational Accessibility who require quiet study space may reserve study rooms on upper floors. For further information, consult the “Accessibility Services” link (http://www.lib.odu.edu/libraryservices/accessibilityservices.htm) on the library’s Web site.

**Photocopy Services**
Self-service copiers and a bill changer are available on the second floor of Perry Library where assistance is also available. Photocopy costs may be charged to department or grant funds with appropriate authorization. Fee-based network printing is available from workstations located in the Learning Commons.

**Reference and Research Services**
1st Floor, 683-4178. At the Learning Commons service desk, Reference and Research Services staff assist students and faculty in locating information, library research and technology use. Specialized staff provide research through direct individual assistance, consultation by appointment, telephone, e-mail and live online chat. While most scholarly journals and databases are available through online subscriptions, the University Libraries holds collections of print reference and circulating materials, including government publications. Distance learning students may obtain assistance by calling the department or linking to Ask A Librarian at www.lib.odu.edu/contact/index.htm.

**Special Collections & University Archives**
Room 3023, 683-4483. Special Collections & University Archives houses manuscripts, books and printed material relating to University, Virginia and Tidewater history. The University Archives includes theses and dissertations, oral histories, yearbooks, course catalogs, University publications, and photographs of yesterday and today. Special Collections contains diaries, letters, legal and campaign files, photographs, and maps from the Civil War, Virginia politics, military history, African-American history, Norfolk urban redevelopment, women’s history, and local history. Visit Special Collections at www.lib.odu.edu/specialcollections/.

**User Instruction**
Reference and Research Services offers information literacy instruction for academic classes and special workshops and tours to assist graduate and undergraduate students with library research. Tutorials, online research guides, schedules of library workshops, and additional information on
Computing and Communications Services

As technology continues to change the way faculty teach and students learn, the Office of Computing and Communications Services (OCCS) maintains a leadership role in Old Dominion University’s dedication to providing technology-intensive disciplines and innovative educational delivery processes. With responsibility for research, consultation, support, and maintenance for computing and communications technology for the University, OCCS is committed to delivering high-quality computer, information processing, and telecommunications services.

In addition to maintaining the University’s administrative system, OCCS provides/manaages all computing accounts for faculty, staff, and students. The department also maintains Academic Computer labs, instructional labs, University-wide data and telecommunications networks, and the University telephone system, and provides media technology equipment in support of academic and University-related activities. OCCS provides high-speed wired and wireless Internet connectivity throughout the University campus in partnership with Network Virginia. Technology support services for faculty, staff and students include a Technical Support Center that is open over 75 hours per week, with 24-hour telephone and e-mail problem reporting. A Student Team provides peer-to-peer and walk-up technical support for students and on-site support for students in university housing.

Detailed information about these services is provided in the following paragraphs. Additional information about all computer services at Old Dominion University can be found on the OCCS web site at www.occs.odu.edu.

Computer Accounts

In support of the University’s mission of teaching, research, and other educational pursuits, OCCS provides students with a MIDAS account. A MIDAS account integrates the University student e-mail account as well as additional services to access to university resources.

MIDAS (Monarch Identification and Authorization System) is gradually moving the University to a “same sign on” for all technology resources. The account is created from the MIDAS web site at http://midas.odu.edu and provides access to integrated services using a single ID and password that is used to access student e-mail, Blackboard, the myODU Portal, online courses, faculty web pages and lecture notes, video streaming courses, Faculty/Student Communication System (FSCS) and many other important resources. The account activation is immediate for mail purposes, but may require 24-48 hours for access to resources on other services. During the creation process a security profile is established that allows the account holder to create a new password without knowing the current password.

University Student E-Mail Account provides a vital communication link between students and University administrators, departments and faculty members. It is the official electronic mail system for University related communications, policies, announcements, tuition bills and other information. This account will be activated on line as part of the MIDAS account creation process.

Technical Support

The Technical Support Center (TSC), located in Webb Center, is the central point of contact to the Office of Computing and Communications Services. The TSC may be reached by telephone at (757) 683-3192 or by e-mail to occshelp@odu.edu 24 hours per day/seven days per week. OCCS personnel coordinate responses to computing problems and questions and, when necessary, forward inquiries to the appropriate support group. Students may also request technology information and report technology/telecommunications problems to the TSC online at ftp.odu.edu.

OCCS is focused on Student Support and is committed to assisting students with their technology needs in order for them to be successful in all their academic endeavors. We support students with issues related to account access, personal computers and any software needs.

The Residential Network (ResNet) is managed by OCCS and its goal is to provide high quality data (wired and wireless), voice, and video services to students living in the University residence halls. This program is supported by professional and student staff who provide technological services and support for high speed internet access, cable television (MONARCHVision), and personally owned computers. Sufficient wired Internet connections are provided in the residence halls to allow each resident an individual connection that can be activated at the student’s request. Students may also request local phone service if desired.

myODU Portal

The Old Dominion University myODU Portal, located at https://my.odu.edu, provides University faculty, staff, and students a single point of access to their University services. Individuals may customize their portal page with links to the resources they access most frequently, including Blackboard, Leo Online, University-wide announcements, and Internet-based University email, address book and calendar.

Computer Labs

OCCS maintains University public computer labs equipped with Windows and Macintosh-based systems and various computer applications in support of class requirements. Laser printing is available in all labs as well as remote printing in academic buildings and residence halls. Students must have a University MIDAS account (see section on Accounts) to use the computers in the labs. Labs are located in: Learning Commons, Webb Center, Virginia Beach Higher Education Center, Peninsula Higher Education Center, and Tri-Cities Higher Education Center. Additional computing resources are also available in some academic buildings and residence halls. Lab schedules are posted on the OCCS web site at www.occs.odu.edu. IT consultants are available in all labs to provide assistance with application and computer-related questions and problems.

ODU Virtual Computer Lab is a software system that can provide 24 X 365 computer access to applications and systems for anyone that has access to a basic computer. It allows students to reserve a “virtual computer” with the desired operating system and applications via the Internet. The system has all the widely used applications at the University such as SAS, Matlab, SPSS, GIS and others. More information can be found at the OCCS website www.occs.odu.edu. A University MIDAS account (see section on Accounts) is required to access the ODU virtual computer lab.

Mobile Monarch

The University strongly recommends that all incoming freshmen have a notebook that at least meets the University’s minimum requirements. While students are strongly encouraged to purchase one of the recommended program notebooks, students may bring a non-program notebook to campus. Students who purchase from the Mobile Monarch program receive priority service at the Technical Support Center. Current models can be found at the OCCS website www.occs.odu.edu and then click on Mobile Monarch.

MONARCHtechstore

Located in the University’s Webb Center, the MONARCHtechstore offers a lowest-price guarantee on computers, peripherals, hardware, software, and supplies. Store profits go to ODU’s unrestricted Student Scholarship Fund. Updated information is available at www.odu.edu/techstore.

Software Download

Through the University’s software licensing program, some software is made available for students to download to their personal computers. This software includes Xwin 32 and the most current versions and upgrades of the McAfee VirusScan software. Downloadable software is available on the OCCS web site at www.occs.odu.edu – Click on Hardware and Software, click on Downloads and then click on the link for all Students, Faculty, Staff. When prompted for authentication, enter MIDAS ID and password.

Preparing Future Faculty (PFF)

Preparing Future Faculty (PFF) is a national initiative sponsored by the Council of Graduate Schools and the American Association of Colleges and
Universities and supported by many disciplinary organizations. The PFF program at ODU is open to all graduate students but is designed especially for those interested in an academic career. PFF offers two events a semester on topics such as teaching methods, portfolio development, grant writing, and the job application process.

Students can earn a PFF Certificate by participating in a mentored teaching experience and attending PFF and other professional development events. The PFF website also offers valuable resources for graduate students who are seeking their first academic job. For further information, go to the PFF website at www.odu.edu/ao/gradstudies/development/pff/.
Research Resources

Office of Research

Old Dominion University is classified as a Research Institution having high research activity, according to the Carnegie Foundation. In FY 2011, its total research and development (R&D) including institutionally-financed expenditures amounted to $102.2 million. In an effort to sustain, enhance and grow its research enterprise, Old Dominion’s Office of Research serves the faculty, staff, and students by providing basic research administrative services. The office also provides interface with public and private members of the external community as well as federal and state agencies that have a vested interest in research. The office is led by the Vice President for Research and includes staff members who are able to leverage a breadth of experience and convey quality services related to development of research programs, regional economic development, compliance in the conduct of research, grant writing and development, intellectual property, technology transfer, and governance issues related to sponsored programs. Sponsored research administration services, encompassing the range of pre- and post-award grant and contract administration, in particular, are provided by the ODU Research Foundation.

While most of Old Dominion’s research enterprise centers and entities are housed within specific colleges, the ones that are the most diverse in terms of their research focus and/or scope are configured within the Office of Research. The Virginia Modeling, Analysis, and Simulation Center (VMASC), the Frank Reidy Research Center for Bioelectrics, the Virginia Coastal Energy Research Consortium (VCERC), the Animal Facility and the Orchid Conservatory are five such entities.

VMASC is a multi-disciplinary modeling, simulation and visualization collaborative research center of Old Dominion University. With more than 100 industry, government, and academic partners, VMASC furthers the development and application of modeling, simulation, and visualization as an enterprise decision-making tool and promotes economic development through the transition of intellectual property to the commercial sector. Its core capabilities are: military modeling and simulation (primarily combat simulations), homeland security and homeland defense, medical simulations, social system modeling, transportation, serious gaming, virtual environments, and business and supply chain modeling. VMASC creates computer simulations and conducts program analyses to meet stakeholders’ needs. Computer simulations provide the capability to: quickly and economically test theories and ideas; help visualize and understand complex situations; prioritize labor and capital investment opportunities; and reduce the risk inherent in business decisions. The research interests and capabilities of VMASC include: simulation methodologies, mathematical modeling, simulation inter-operability, verification and validation, distributed simulation, computer visualization, immersive virtual environments, human factors, social behavior, performance analysis, intelligent systems, decision support and collaboration methodologies, and modeling and simulation systems integration.

The Frank Reidy Research Center for Bioelectrics (FRRCB) is internationally recognized as a leader in the understanding of the interaction of electromagnetic fields and ionized gases with biological cells and the application of this knowledge to the development of medical diagnostics, therapeutics, and environmental decontamination. The center is part of an International Consortium for Bioelectrics that includes universities and research institutes from Japan, Germany, France and the United States. 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. Research conducted at the FRRCB has already attracted substantial federal agency support including multiple grants from the National Institutes of Health, Department of Defense and the National Science Foundation. The FRRCB has expertise in pulsed power technology for biological and medical applications in the subnanosecond to the millisecond range and includes the design and modeling of pulse delivery systems. A wide range of research is conducted at the center including new cancer therapies, wound healing, decontamination, imaging and cardiovascular applications. As one of the first institutions to apply this technology in medicine and biology, Old Dominion University anticipates the potential for proprietary use of the technology with both marketing and licensing opportunities.

The Virginia Coastal Energy Research Consortium (VCERC) is a multidisciplinary research unit charged by the Commonwealth to study and identify alternative solutions to problems arising from over-dependence on fossil fuels that is unsustainable and has become the single biggest threat to our environment, economy, and national security. Virginia, with its vast coastline, natural waterways and abundant sunshine, is ideally suited for a number of alternative energy applications. VCERC seeks out and develops new alternative energy research directions and evaluates viable renewable energy sources for Virginia with an initial focus on offshore winds and the conversion of coastal algal biomass to biofuels. At Old Dominion University, VCERC involves faculty researchers from the Batten College of Engineering and Technology and the College of Sciences, and is structured to operate in partnership with a number of Virginia institutions: Virginia Tech – Alexandria Research Institute, Virginia Institute of Marine Science, Norfolk State University, James Madison University, Virginia Commonwealth University, University of Virginia, and Hampton University. This statewide, inter-university network seeks to become a leader in the research and development of numerous alternative energy projects that are of direct benefit to local employment, manufacturing groups, state institutions, the students and staff of Virginia universities, and the public.

Research and Enterprise Centers

The University has established a number of research and enterprise centers. Please check the web pages of the Office of Research www.odu.edu/ao/ research and those of the individual colleges for information regarding centers in specific areas.

Research Policies

Students who receive compensation through sponsored research, tuition/fee waivers, scholarships, assistantships, or other financial arrangements are covered by Old Dominion University’s Policy on Intellectual Property. This policy covers the ownership and use of copyrighted works, inventions, and any other form of intellectual property. In those cases where the University has a vested interest in intellectual property, the policy specifies how any revenues derived will be distributed between the inventor/author and the University. The policy can be found in its entirety at http://www.odu.edu/ao/bov/manual/pdfs/1424_Revised_4-8-10.pdf.

Students engaged in scientific research or other scholarly activity at Old Dominion University should also be aware of the University’s Policy, Procedures and Timeline for Responding to Allegations of Misconduct in Scientific Research and Scholarly Activity. The policy can be found in its entirety in the Board of Visitors manual section on Research Policies at http://www.odu.edu/ao/bov/manual/.

Research Foundation

The Old Dominion University Research Foundation is a separate, private, not-for-profit corporation chartered under the laws of the Commonwealth of Virginia in 1965. The foundation serves as the fiscal and administrative agent to manage research and sponsored programs and aid in technology commercialization for Old Dominion University. The foundation’s purpose is to promote the education, research and public service objectives of Old Dominion University by encouraging, advancing, fostering, and conducting research and sponsored programs in engineering, the physical and life sciences, the humanities, education, and all other branches of learning.

The foundation is the contracting agent for University research grants and contracts with external funding agencies. In fiscal year 2011, the Research Foundation received $83.5 million in awards for research and sponsored programs. Research and sponsored program activity for fiscal year 2011, measured by amount of expenditures, totaled $95.8 million for projects sponsored by federal, state, and local government agencies and a variety of corporations and private foundations.
Technical direction of a sponsored program remains the responsibility of the principal investigator. The foundation supports the University and assists investigators by providing a broad range of administrative and technical support services. Among these services are: financial administration, budget preparation and monitoring, financial compliance guidance, proposal preparation and submission assistance, project payroll and human resources, financial reporting, technical reporting support, intellectual property administration, procurement and equipment inventory control.
Graduate Admission

Office of Admissions

The mission of the Office of Admissions is to recruit, admit and enroll students from throughout the United States and abroad who will contribute to the overall collegiate experience. Old Dominion University is open to all qualified students regardless of race, color, religion, gender (including pregnancy), age, national origin, veteran status, disability, political affiliation, sexual orientation or genetic information.

General Requirements for Admission

For regular admission, applicants must have earned a bachelor’s degree from an institution accredited by a regional accrediting body or an equivalent degree from a foreign institution. An applicant must have earned at least a 2.80 cumulative grade point average (4.00 scale) for admission to a master’s program and at least a 3.00 cumulative grade point average for admission to a doctoral program. Additional requirements are imposed by individual graduate programs. For specific program requirements, prospective students should consult the appropriate section of this catalog and contact the appropriate graduate program directors.

Students who apply before completion of undergraduate work may be admitted on the condition that the bachelor’s degree is received before the beginning of actual graduate studies.

Students whose backgrounds are judged to be deficient in any specific area of study or whose undergraduate grades or test scores are below the required average may be admitted provisionally and asked to make up the deficiency by taking one or more courses at the undergraduate level. Graduate credit will not be awarded for these courses.

Standardized Tests

The Graduate Record Exam (GRE) or the Graduate Management Admission Test (GMAT) are normally required for admission. Test scores are considered valid for five years. Students with test scores older than five years should contact the program director for guidance.

Required by some programs, the Miller Analogies Test (MAT) is administered by appointment through the University Testing Center. Applicants should contact that office to make arrangements for taking the MAT.

Some programs require that students take the Exit Examination of Writing Proficiency, administered by the University’s Writing Center, prior to completion of nine graduate hours of study. Graduate students in additional programs must take the Graduate Writing Proficiency Examination administered and evaluated by the College of Education.

Academic Testing

The University Testing Center is part of University College and is located in the Gornto TELETECHNET Building. Personnel from the Testing Center administer University placement tests, College-Level Examination Program (CLEP) exams, DANTES, the Miller Analogies Test (MAT), and correspondence tests, and coordinate entrance and certification test administrations. For information on testing, please see the web site at www.odu.edu/testing.

Application Procedures

Individuals interested in graduate work at Old Dominion University should apply online at admissions.odu.edu or contact the Office of Admissions to obtain the forms and information. The applicant must first complete the Application for Admission to Graduate Study (and include the application fee), then arrange for the submission of official transcripts from each college or university previously attended. The completed application and supporting documents should be sent to the Office of Admissions by the deadlines established by the programs to ensure complete processing of an application. Transcripts are not required of the non-degree applicant for initial registration, but before embarking on further graduate study beyond the initial 6 credit hours, an official copy of previous college transcripts must be submitted.

Several programs of a highly competitive nature have early deadlines. Failure to submit a “complete” application by the program’s established deadline date will result in removal of the application from consideration for admission. Applications that remain incomplete for 6 months after the initial deadline will be purged unless the student requests deferment to a subsequent semester.

Applicants should refer to http://admissions.odu.edu/graduate.php?page=programs for program application deadlines.

The Admission Decision

A written notice from the Office of Admissions or International Admissions, not letters from departments or faculty members, is certification of admission. Admission to graduate study may be limited by the number of places available in the various programs, colleges, schools, and departments of the University. Applicants are encouraged to apply early. The application process may span six to eight weeks depending on timely receipt of documents. After supporting credentials have been received and reviewed, applicants for admission are usually notified within 30 days of the action taken on their application.

International Student Admission

All international applicants (Undergraduate, Graduate or Non-degree) seeking or holding a non-immigrant visa should apply through the Office of International Admissions. Applicants can apply online or via the paper application, which is available as either a pdf or hard copy by request. Along with the application and fee, official academic records and evidence of English language proficiency (if the applicant’s native language is not English) must be submitted.

Academic decisions regarding University admission are determined without bias to personal or family finances; however, a student will be unable to maintain or obtain a student visa without adequate financial support. Sufficient funding must be demonstrated to both Old Dominion University and the U.S. consulate. Funding includes tuition and living expenses for the first year of study in addition to a reasonable expectation of funding for the remaining years. Old Dominion University issues forms I-20 (F-1) or DS-2019 (J-1) for the nine-month academic year.

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 will not be accepted.

Additional information required by graduate departments is specified in the International Graduate Application. All applicants, undergraduate and graduate, should read the application prior to applying to insure they understand the admissions process. Following the application instructions will ensure a prompt admission decision.

Applicants outside the United States are recommended to apply to Old Dominion University six to eight months prior to their desired date of enrollment to allow time for the exchange of correspondence, evaluation of all necessary documents, and the settling of financial, immigration, and housing matters. Application and credential deadlines are as follows:

Term of Entry Application/Credentials Deadline (http://www.admissions.odu.edu/graduate.php?page)

All new international students are required to attend International Orientation, which precedes each fall and spring registration. The Orientation program gives students information critical to maintaining their non-immigrant status, in addition to an overview of campus life and services, employment/internship opportunities and general cultural adjustment.

All admissions correspondence such as applications, academic records, financial documents, examination results, translations, and course descriptions are to be addressed to:

The Office of International Admissions
English Proficiency Requirements for Non-Native Speakers of English

Admission to the University 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. Please note that Bridge Program students, undergraduate and graduate, must satisfy English proficiency requirements within twelve months from their enrollment in the program. Also, an application to the English Language Center and subsequent enrollment in English language courses at the Center does not imply admission to the University. English language courses are noncredit. 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).

Graduate applicants who are non-native speakers of English must provide evidence of English language proficiency through fulfillment of one of the following:

1. Submission of a TOEFL paper-based score of 550, a TOEFL iBT score of 79, a GRE Verbal score of 480, a GRE Verbal Reasoning score of 152, a GCSE or GCE score of "O" level pass in English, an IELTS overall band of 6.5, or a CPE grade of A, B, C.
2. Possession of a bachelor’s or master’s degree from an accredited institution located in a country where English is the native language.
3. Successful completion of the Graduate Bridge Program.

Graduate students who choose to satisfy English language proficiency requirements through the Graduate Bridge Program will be placed according to the following criteria:

1. Students with TOEFL paper-based scores below 500 or TOEFL iBT scores below 61 will be placed in a full-time English language program.
2. Students with TOEFL paper-based scores below 550 but above 500 or TOEFL iBT scores below 79 but above 61 will be placed in a comprehensive Graduate Bridge Program including academic course work (one graduate course) and semi-intensive English language courses (seven hours). Students will be considered as having satisfied English language requirements when they have successfully completed two semesters in this program. Attendance in the seven-week Summer Bridge Program can count as one semester. Successful completion is defined as a minimum grade of B in each graduate academic course and in English language courses. No student will receive a grade of A or B in English language courses without demonstrating 85% attendance.

Also, non-native speakers of English who anticipate holding a teaching assistantship position must provide evidence of oral English proficiency. They may take the Test of Spoken English (TSE), given by the Educational Testing Service (ETS) at sites around the world, or the ETS SPEAK Test, administered by the English Language Center at Old Dominion University. Graduate teaching assistants who fail to pass either of these tests will not be eligible to assume an instructional position.

Deferments

International students are eligible to defer their admission or application for up to one academic year beyond the original term of entry via the online international deferment request. Requests beyond this allotted time will require the student to re-apply with transcripts and application fee. Students in F/J status must submit updated financial documents and return all unused I-20 or DS-2019 forms to International Admissions.

Distance Learning The mission of the Office of Admissions is to recruit, admit and enroll students from throughout the United States and abroad who will contribute to the overall collegiate experience. Old Dominion University is open to all qualified students regardless of race, color, religion, sex (including pregnancy), age, national origin, veteran status, disability, political affiliation, sexual orientation or genetic information.

Admission

Students who are applying for a distance learning program are encouraged to apply on-line and include their essay and resume. Students may request letters of recommendation within the on-line application and the recommendation letters can either be mailed or sent electronically to the Office of Admissions. Paper applications are available and may be submitted to the local Distance Learning location or mailed to the Office of Admissions. All graduate applications are processed according to the University policies and procedures contained in this catalog.

Types of Admission Status

Degree Seeking Applicants

Regular

Students who have fully met the requirements for admission to a program.

Provisional

An applicant who does not fully meet the requirements for admission as a regular graduate student may, at the discretion of the graduate program director, be allowed to enroll in a graduate program as a provisional graduate student. This is normally a temporary status, which will be changed by the graduate program director to that of regular status when the student has fulfilled all the terms and conditions detailed in the offer of provisional admission. The change in status ordinarily will take place after the completion of at least 12 hours of graduate course work in which the student has earned the average grade of B (3.00) or better and upon completion of any prerequisite work. Previous non-degree credits earned may not be included for purposes of satisfying the provisional 12-hour requirement. No student with less than a 3.00 average will be granted regular status. Should a provisionally admitted graduate student not qualify for regular status at this time, the student may request non-degree status. Provisional students placed in non-degree status must reapply for admission to a degree-seeking program. The Regulations for Continuance section of this Catalog applies to both provisional and non-degree students. Credits earned as a provisional student may be applied toward the fulfillment of degree requirements. Credit earned while in non-degree status is subject to the limitations described below for non-degree admission.

Deferred Enrollment

With approval of the graduate program director, enrollment into a graduate program can be deferred for no more than one calendar year beyond the start of the original semester for which admission was offered. For example, students offered admission for fall may request to defer their enrollment to the next fall semester. The records of students who have not enrolled after 1 calendar year will be purged and students will have to reapply for admission.

Nondegree Entry

Nondegree entry is available to students who do not choose to apply for admission to a degree program at the time but wish to enroll in course work at the institution. Some reasons to enter as a nondegree student are:

Visiting student – A student who taking course work at Old Dominion University and then transfers the course credit to the home (degree-granting) institution.

Applying for a certificate program.

Expanding academic background or teacher certification.

Taking courses for personal and/or academic growth.
Missed the application deadline, but intends to apply as a degree-seeking student for a successive term.

Taking prerequisites (undergraduate, second degree or graduate) for a degree-seeking program.

Senior scholars – High school students taking college-level courses (permission is needed from an admissions counselor).

**Nondegree Entry Procedures**

Applicants for nondegree status are required to complete the application form found on the Registrar’s Office website at www.odu.edu/registrar or on the Admissions Office web page. For the student’s convenience, official credentials may not be required at the time of registration; however, unofficial records or a personal interview may be requested for admission purposes. 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. Students should be familiar with policies and procedures for nondegree enrollment listed on the application form.

**Directions for Certificate Program Registration**

Please contact the department offering the certificate program for specific registration information and procedures.

**Additional Information**

All students should seek the approval of the academic department before registering for course work as a nondegree student.

Financial aid is not available for nondegree students, except those in approved teacher certification programs.

Students under suspension from another college or university are not eligible to attend as nondegree.

Academic advising is not available to nondegree students, but students are strongly encouraged to contact their academic department before registering for courses.

All students, degree and nondegree alike, must meet the continuance requirements as stated in the current Graduate Catalog. Failure to meet these requirements will subject students to probation or suspension.

**Continuing Student Admission**

Continuing applicants are students who have previously attended Old Dominion University on a degree-seeking basis and left the University, but would like to return. A student who has left the University in good academic standing is required to complete a reactivation/readmission form. If the separation from the University was longer than five years, the applicant will be required to reapply and resubmit all official transcripts and necessary credentials.
Graduate 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 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.

Finally, the Office of the University Registrar provides service to military veterans who are attending the University by processing Veterans Affairs paperwork. Complete information is available to veterans on the Registrar’s Office website as well as on the Veterans Administration website www.gibill.va.gov (http://www.gibill.va.gov).

Self-service is available for most processes online at my.odu.edu. On the Norfolk campus, walk-up services are available at the office in 116 Alfred B. Rollins, Jr. Hall. Additionally, many services are available at the higher education centers and the distance learning sites located throughout the Commonwealth of Virginia. The office is open Monday-Friday from 8 a.m.-5 p.m. and can be reached at 757-683-4425.

Registration

There are several registration options available to students: registration via the web at my.odu.edu, click LEO online, in person, on-campus registration, and off-campus registration.

Eligible students are encouraged to preregister in order to improve the likelihood of obtaining satisfactory schedules of classes. Preregistration is reserved for currently enrolled degree-seeking students. Eligible students will be assigned a “time ticket” four to six weeks prior to preregistration.

Open registration begins immediately following the preregistration period.

Complete registration information, important deadlines and the final examination schedule can be found at www.odu.edu/registrar. The course schedule is available at my.odu.edu or www.leonline.odu.edu by March 7 for summer and fall semester classes and by October 7 for spring semester classes.

Academic Calendar and Course Scheduling

The academic calendar consists of fall semester, which begins one week 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 Labor Day. 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.

Spring semester begins one week prior to the Martin Luther King holiday weekend. Classes are canceled for MLK weekend (Saturday-Monday) and resume on Tuesday following the holiday. Spring Break is scheduled eight weeks after the start of classes, from Monday through Saturday. Classes resume on the following Sunday and continue until Tuesday of week 15 into the semester, with the exception of Easter Sunday. A reading day is held the Wednesday after classes end, with exams beginning on Thursday and continuing to the following Thursday.

Fall and spring commencement ceremonies currently are scheduled for the Friday evening and Saturday after exams have been administered. Complete information is available on the Commencement website. There is one graduation date each fall and spring semester, the Saturday after exams have been administered. This date will be printed on diplomas and transcripts. The graduation date for students completing studies in the summer will be the Friday before fall classes resume. There is no summer commencement ceremony.

Summer term is 13 weeks, with varying sessions allowing for course durations of one week, two weeks, and so on, up to 13-week timeframes. The term ends no later than mid-August.

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, based on the concept of anytime/anyplace learning.

Authorization to Enroll in Graduate Courses

Degree Seeking Students

All students who have been admitted in regular or provisional status to graduate degree programs must have the advisor block updated prior to registration each semester. Registration for graduate courses in engineering and business requires departmental approval. Students should consult with their advisors to discuss their program of study and to schedule appropriate courses in advance of registration whenever possible.

Nondegree Seeking Students

Nondegree graduate students should seek advice from the department/school offering the course, or, if registering for engineering or business courses, obtain permission of the department/school.

All nondegree graduate students who have completed six credit hours of graduate courses will receive an “advisory” notice upon attempting to register for additional graduate courses. This notice will advise the student to contact the Office of Graduate Studies to obtain counseling and recommendations. This “advisory” notice will not prevent registration.

All nondegree graduate students attempting to register for additional graduate courses and who have completed or will exceed 12 credit hours (13 credit hours for certain military programs) will be blocked from registering. To remove this registration block, a student must contact the Office of Graduate Studies for advice on gaining admission into a graduate program or to receive written permission to take additional hours as a nondegree student.

Students taking graduate courses for licensure, certification or professional development (e.g., Virginia Department of Education endorsements) will not receive the advisory notice and will be exempt from the registration block. Contact the department offering the affiliate program for specific registration information and procedures.

Students should consult the Registrar’s Office website at www.odu.edu/registrar each semester for the most current advising and registration policies.

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. Any course elected for audit cannot be changed to that of credit status after the end of the “add” registration period. Registration for the audit option must be selected by the end of the drop/add period in the given semester. 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.
Graduate Numbering (Graduate Level)

Courses at the 500, 600, 700, and 800 levels are generally for graduate credit. Courses at the 500 level correspond to undergraduate 400-level courses; however, a different grading scale is used for 500-level registrants. Additional and higher quality work is required in 500-level courses. A limited number of 500-level courses may be used to satisfy the requirements for a master’s degree. Courses at the 600 level are the mainstay of master’s programs and are not linked to 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, linked. 700-level courses are generally for advanced master’s students, and 800-level courses are generally for doctoral students. Higher level outcomes are required for 800-level courses. At least three-fifths of the coursework for a doctoral degree must be completed at the 800 level. However, some programs have instituted more stringent requirements.

Topics course numbers include 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 also be listed. If a particular topic is offered more than three times, it should be approved as a regular course offering and given its own course number.

Individual and Tutorial course numbers include 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 generally 667, and 867.

Internship course numbers are generally 668, and 868.

Practicum course numbers are generally 669, and 869.

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. This may be a discipline-specific 999 course or GRAD 999.

System of Grading

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Points</th>
<th>Undergraduate</th>
<th>Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
<td>Superior</td>
<td>Excellent</td>
</tr>
<tr>
<td>A-</td>
<td>3.70</td>
<td>Superior</td>
<td>Excellent</td>
</tr>
<tr>
<td>B+</td>
<td>3.30</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>B-</td>
<td>2.70</td>
<td>Good</td>
<td>Fair</td>
</tr>
<tr>
<td>C+</td>
<td>2.30</td>
<td>Satisfactory</td>
<td>Poor</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
<td>Satisfactory</td>
<td>Poor</td>
</tr>
<tr>
<td>C-</td>
<td>1.70</td>
<td>Passing</td>
<td>Poor</td>
</tr>
<tr>
<td>D+</td>
<td>1.30</td>
<td>Passing</td>
<td>Not Used</td>
</tr>
<tr>
<td>D</td>
<td>1.00</td>
<td>Passing</td>
<td>Not Used</td>
</tr>
<tr>
<td>D-</td>
<td>0.70</td>
<td>Passing</td>
<td>Not Used</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
<td>Failing</td>
<td>Un satisfactory</td>
</tr>
<tr>
<td>WF</td>
<td>0.00</td>
<td>Unofficial</td>
<td>Unofficial</td>
</tr>
<tr>
<td>P</td>
<td>None</td>
<td>Pass</td>
<td>See Below</td>
</tr>
<tr>
<td>F(F/F)</td>
<td>None</td>
<td>Fail</td>
<td>See Below</td>
</tr>
<tr>
<td>O</td>
<td>None</td>
<td>Audit</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>None</td>
<td>Incomplete</td>
<td></td>
</tr>
</tbody>
</table>

II None Incomplete not Subject to Time Limit
W None Official Withdrawal
Q None Progress but not Proficiency
Z None 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, nondegree credit courses, and pass/ fail degree courses are not included.

A 3.00 average will be required for the awarding of a graduate degree or certificate. A student whose average falls below 3.00 following six or more graduate hours attempted shall be placed on probation or suspended in accordance with the continuance regulations for graduate students.

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 at my.odu.edu. 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 through the last day of classes of the following term (excluding the exam period) according to the following schedule: I grades from the fall semester become F’s if not removed by the last day of classes of the spring semester; I 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. 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.

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.

Dropping, Adding and Withdrawing From Classes
See the academic calendar in this Catalog or the Registrar’s Office website at www.odu.edu/registrar for deadlines for adding or dropping classes. For information regarding the refund schedule, see the chapter on Financial Information or go to the Office of Finance’s web page.

Class Schedule Changes and Drop/Add Procedures
During the fall and spring semesters, students may drop classes within the first 11 calendar days after the first day of classes for the semester and may add classes up to 11 calendar days after the first day of classes for the semester (for full semester classes). Once registered, a student must drop or add classes via the secure website at my.odu.edu, click LEO online or submit a completed drop/add form to the Office of the University Registrar or to the distance site office (for distance students). The date the form is received in the Office of the University Registrar, the distance site office or processed via LEO determines tuition adjustments, if applicable. If needed, drop/add forms can be downloaded from the Registrar’s Office website: www.odu.edu/registrar.

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 www.odu.edu/registrar 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 (www.odu.edu/af/finance).

Summer Sessions
Old Dominion University offers a 13-week summer program, including two six-and-one-half week sessions, two five-week sessions, and one 13-week session, starting in the middle of May and ending in the middle of August. The exact dates are listed on the Registrar’s Office website at www.odu.edu/

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 eleven calendar days of the semester, a student may drop a course; this means no grade will be assigned and no reference entered on the student’s permanent academic record. Please refer to www.odu.edu/registrar and click on the link to “calendars” for the dates to drop classes in nonsemester courses.

Withdrawal from Classes
After the first eleven calendar days of the semester, a student may withdraw from any course through the end of the tenth week of a regular semester. Please refer to www.odu.edu/registrar and click on the link to “calendars” for the dates to withdraw from classes in nonsemester courses. A grade of W will be assigned during this period. Students who withdraw through the end of the tenth week are encouraged to contact their instructor, advisor, site director, or distance learning representative, and financial aid counselor to discuss the implications of withdrawing. Students receiving financial aid may not meet Satisfactory Academic Progress (SAP) requirements if withdrawing from a course or courses during the semester.

Withdrawal from a course after the tenth week of a regular session (or its equivalent in a nonsemester 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 and the chair of the department offering the course. If permission is granted by both, a grade of W will be recorded. If permission is not granted by both, the student will not be allowed to withdraw from the course. Any appeal of decisions should be brought to the dean of the college offering the course.

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.

Drop and Withdrawal Deadlines
Specific deadline dates for dropping and withdrawing from classes are found at the Registrar’s Office website, www.odu.edu/registrar, by clicking on the link to “calendars”

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 Engagement and Enrollment Management or designee. If the student initiates the withdrawal, the Vice President for Student Engagement and Enrollment Management or designee 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 to withdraw from classes without penalty, 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 student will receive an “F” in the class.

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 Student Ombudsperson in Student Engagement and Enrollment Management. These requests must include clear and convincing evidence explaining the student’s inability to submit 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.

**Sudden Withdrawal and Prolonged Absence Due to Military Mobilization**

The following guidelines are provided for students whose service in the uniformed services has required their sudden withdrawal or prolonged absence from enrollment at Old Dominion University.

The following definitions are provided in connection with these guidelines:

- “Service in the uniformed services” means service (whether voluntary or involuntary) on active duty in the Armed Forces, including such service by a member of the National Guard or Reserve, for a period of more than 30 days under call or order to active duty of more than 30 days.
- “Tuition” means the actual price of education charged to a student for the term in which service in the uniformed services caused his or her sudden withdrawal or prolonged absence from enrollment at a Virginia institution of higher education.
- “Reinstatement” means the readmittance and reenrollment of a student whose service in the uniformed services has caused his or her sudden withdrawal or prolonged absence from enrollment.
- “Sudden withdrawal” means leaving an institution after a semester has begun or after the tuition and required fees for a term have already been billed to or paid by the student.

**Policies and Procedures**

All active duty military students who are unable to complete course requirements due to change in employment duties, work schedule or deployment to a duty assignment may be administratively withdrawn from current semester courses. Students are required to furnish a copy of their military orders to the Office of the University Registrar. Upon receipt of the copy of military orders, the student will be withdrawn from all courses and refund of tuition will be processed following an audit of the student’s account and returned to the appropriate party. In addition, the University Registrar will notify the following offices so that additional refunds can be processed as appropriate: Housing and Residence Life; University Card Center, Parking Services, and Old Dominion University Bookstore. Students who are deployed while actively attending the University should make an effort to notify the University Registrar as soon as possible so that records can be updated, providing a copy of military orders or verification of a new duty assignment.

**University Housing and Dining Services**

Upon notification by the University Registrar, the Executive Director of Office of Housing and Residence Life will authorize a refund based on prorated charges for the semester calculated on the days in residence. If the student is deployed prior to the start of the semester, but has made a formal commitment for University housing, the student will be released from the housing agreement without penalty and the deposit will be fully refunded.

**Dining/Monarch Plus Card/Parking Services**

Upon notification by the University Registrar, prorated refunds will be made for partially used meal plans. Funds remaining on the Monarch Plus card will be refunded to the student. Refund of payment for a parking decal will be prorated based on percentage of use.

**Textbooks**

Upon notification by the University Registrar, the Old Dominion University Bookstore will allow for full refunds/and or exchanges of textbooks for any student called to official active military duty as long as the book is in resaleable condition.

**Preview Fee**

Students who have paid but have not attended Preview will receive full refund of the fee.

**Academic Credit**

If the student has begun attending classes and sufficient time has passed in the semester, the incomplete grade policy may apply.

A grade of Incomplete (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 through the last day of classes of the following term (excluding the exam period) according to the following schedule: I grades from the fall semester become F’s if not removed by the last day of classes of the spring semester; I 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. 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.

If the student is unable to complete the incomplete grade because of prolonged deployment the student should provide justification and documentation directly to the course instructor. At the instructor’s discretion, the course instructor can authorize the University Registrar to administratively withdraw the student using this policy. The student will be withdrawn from the course, a grade W will be posted to the academic record and refund of tuition to the appropriate party will be processed. If the instructor is no longer employed at the University, the student should consult the department chair. In the event of a disagreement about a grade,
the normal grade appeal process described in the University Catalogs will apply.

Students who are administratively withdrawn from the University under this policy are strongly encouraged to maintain contact with the University through the Office of Student Engagement and Enrollment Services.

Students who are called to active duty during an academic semester who have completed 75 percent of the course requirements at the time of activation and who meet other specified requirements also have the option to accept the grade earned to date. It is the responsibility of the student to provide a copy of the military orders to the Office of the University Registrar. The Registrar will provide documentation to the instructor in support of the student’s request to receive the grade earned to date.

Reinstatement

As soon as plans are made, returning students should contact the Office of Admissions to verify their student status and to reactivate their record, if necessary, prior to re-enrolling in classes. Students who leave the University in good standing remain eligible to re-enroll. A student who has left the University for more than a year must complete a reactivation/readmission form available on the Office of Admissions web site. If the separation from the University was longer than five years, the applicant will need to resubmit all official transcripts and necessary credentials. There are no additional fees if the student has previously paid the admission fee.

Students who return following a prolonged absence due to military deployment should be aware of the time limits for Catalog election.

Graduate Return to Program

It is presumed the graduate student will remain eligible to return to the same program of study. The student should contact the Graduate Program Director if returning to the same program of study. The content of some programs may require that the student repeat previously passed courses to maintain currency in the field.

If the program of study is no longer available for any reason, the student should seek the assistance from the Graduate Program Director of the appropriate alternative major.

Graduate Time Limits

Graduate 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 (master’s) or eight years (doctoral) from the date of the first enrollment. Students who have had a prolonged deployment may be required to elect a more recent Catalog or the Catalog in effect at the term of re-enrollment at the University.

Returning students should consult their Graduate Program Director to verify the correct Catalog for graduation purposes. Students should refer to their "general student record" in Leo Online to verify the Catalog selected at the date of first enrollment. The Catalog "year" begins with the fall semester each year.

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.

The Office of the University Registrar will maintain records of administrative withdrawals completed under this policy.

Guidelines and Procedures for Grade Adjustments for Nonacademic Reasons

1. Errors in the assignment of grades (e.g., a C received instead of an A) must be brought to the attention of the faculty member immediately upon receipt of the grade. If confirmed, the instructor will submit a grade change through the chair to the University Registrar. An online process for grade changes is available if the grade to be changed is not older than two semesters. In these cases, the instructor of record makes the change online. The chair is notified by email of the change and may at that time deny the change of grade. If the grade to be changed is older than two semesters, then the instructor submits an Academic Record Change Form (H-1002) to the chair, who forwards it to the University Registrar if it is approved, and notifies the instructor of reasons for denial if it is not approved.

2. Administrative errors (e.g., drop/add submitted but not processed) should be brought to the attention of the University Registrar immediately upon receipt of the grade.

Grade Appeal Procedure

1. 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). 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.

2. Students must initiate the appeal within the same time limitations that exist for removing a grade of I from a record (see the policy on System of Grading).

3. The student will consult with the instructor first for an explanation of the method of evaluation and to determine whether an error has been made.

4. If the student is not satisfied with the results of the conference with the instructor and the student wishes to pursue the appeal, the case must be presented in writing for a first-level appeal. The student’s grade appeal letter 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 supporting documentation.

   A. The student will submit the grade appeal letter to the chair of the department.

   B. If the instructor is the chair, the student will submit the grade appeal letter to the dean.

   C. If the instructor is the dean, the student will submit the grade appeal letter to the chair of the department in which the dean is teaching the course.

5. If it is concluded at the first-level appeal that there is no cause for complaint, the person to whom the appeal was submitted will notify the student in writing that the appeal is denied. The student may submit a second-level appeal as detailed below.

   A. If the chair initially concludes in the first-level appeal that there is no cause for complaint, the student has the right to appeal to the dean. The student should request in writing that the chair forward the grade appeal package to the dean to initiate the second-level appeal.

   B. If the instructor is the chair and the student has appealed directly to the dean and the dean concludes in the first-level appeal that there is no cause for complaint, the student has the right to appeal to the provost and vice president for academic affairs. The student should request in writing that the dean forward the grade appeal package to the provost and vice president for academic affairs to initiate the second-level appeal.

   C. If the instructor is the dean and the student has appealed to the chair of the department in which the dean is teaching the course and the chair has concluded in the first-level appeal that there is no cause for complaint, the student has the right to appeal to the provost and vice president for academic affairs. The student...
should request in writing that the chair forward the grade appeal package to the provost and vice president for academic affairs to initiate the second-level appeal.

6. If the person to whom the second-level appeal is submitted concludes that there is no cause for complaint, the student will be notified in writing that the grade appeal process is complete and no further appeal is allowed.

7. If during the first- or second-level appeal process it is concluded that there may be valid cause for the complaint, the person to whom the appeal has been submitted should consult with the instructor and student and attempt to mediate the dispute. 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 mediation fails, the person to whom the appeal has been submitted will offer to form a committee to carry out an independent investigation and a hearing will be held.

A. The person to whom the appeal has been submitted will appoint a committee from the department or college. The committee will consist of two faculty and one student. 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. The committee will hear the instructor, the student, and other pertinent witnesses. The hearing will be taped, but the tapes will be erased after one year following disposition of the case. The committee, after careful deliberation, will make its recommendation to the person to whom the appeal was submitted, who will relay the information to the instructor and the student.

B. If the committee finds that there is no cause for complaint, the grade appeal process is complete and no further appeal on the merits of the case is allowed. Only one hearing on the merits of the case is allowed.

C. If the committee finds on behalf of the student and recommends a change of grade and the instructor refuses to change the grade, then the person to whom the appeal was submitted will consult with the student about the advisability of accepting a P grade. Should the student consent to acceptance of a P grade, the person to whom the appeal was submitted is authorized to change the contested grade and will so inform the registrar. A P grade established under this policy 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.

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 a rehearing may be to the person identified as the second level of appeal. The only basis for appeal will be the failure to have been provided due process as prescribed by the policy.

Transcripts

Transcripts are provided by the Office of the University Registrar and are issued only upon the written request of the student or upon submission through the secure website at www.leoonline.odu.edu (click on link to student records and then transcripts). They 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.

No transcripts will be issued if the student has an outstanding debt at the University. All grades, academic standing, degrees received, and degree honors are included on the 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.

There is a charge of $5.00 for each transcript issued. Additional fees are charged for expedited delivery services. Students may access and print unofficial transcripts for personal use through my.odu.edu, click LEO online or www.leoonline.odu.edu at no charge.

Graduation Information

All students must apply for graduation during the semester prior to the expected completion of degree requirements. The deadline to file the intent to graduate is generally the last day of November, February and June for the following semester. Specific deadlines are published on the Registrar’s Office website, www.odu.edu/registrar.

Students can view their application and degree status in LEO Online, www.leoonline.odu.edu. Once the application has been processed, the student’s graduation status appears as “pending.” The status changes to “awarded” once the degree is conferred. At peak times, coding can take up to four weeks following submission of the application.

Applications, complete instructions and deadlines regarding graduation are available on the Registrar’s Office website. A separate application for each degree is required if the student is pursuing more than one degree.

Students who do not complete degree requirements as expected must reapply for the next graduation date.

Application for Graduation for Graduate Students

Graduate students should apply online at www.leoonline.odu.edu or download the application for graduation from the Registrar’s Office website and submit the completed paperwork directly to the Registrar’s Office.

Graduation staff members will coordinate the evaluation process with the appropriate graduate program advisor.

All outstanding work, incomplete and unreported grades must be completed or resolved before the degree will be conferred. Master’s level and doctoral students must have submitted the thesis (if required) or dissertation to the Registrar’s Office no later than the Friday one week before commencement as well as evidence of successful completion of oral, written or other degree requirements. Graduate students should confer with the graduate program director and review materials available on the Office of Graduate Studies website for complete information (www.odu.edu/graduatestudies).

Commencement

Commencement exercises are intended for students who are eligible and reasonably expect to complete degree requirements, graduating from the University within the current or next graduation period.

Commencement ceremonies are managed through the Office of University Events. Information about requirements for participation in commencement ceremonies, the on-line application process for tickets, academic regalia, schedule of events, etc., will be posted to www.odu.edu/commencement.

To be eligible to participate in ceremonies, candidates must register for commencement ceremonies according to deadlines posted by the Office of University Events.

Participation in May commencement ceremonies is limited to candidates for May graduation and students who expect to complete studies in the upcoming August. Participation in December commencement ceremonies is limited to candidates for December graduation and graduates from the preceding August.

Students who expect to attend commencement ceremonies must have applied for graduation in order to be coded by the Registrar’s Office as “pending” for graduation; otherwise, tickets will not be provided by the Commencement Office. With the exception of doctoral candidates, all students participating in commencement ceremonies remain pending for
Diplomas

Diplomas are mailed to the student’s permanent address after the degree has been posted. Diplomas will be mailed beginning in June for May graduates, in September for August graduates and in January for December graduates. Diplomas will be mailed as students are cleared for graduation; Registrar’s Office staff will continue until all diplomas are distributed. Students can verify posting of degrees and other information at www.leononline.odu.edu.

All holds, debts or other obligations to the University must be satisfied before the diploma will be released. Information about holds can be viewed at www.leononline.odu.edu.

The student’s legal name (as maintained in the student system) and the degree title (Master of Arts, Master of Sciences, etc..) appear on the diploma. For a complete listing of degrees, please refer to the “Synopsis of Degree Programs” in this catalog. The student’s major does not appear on the diploma, but is published on the transcript.

Interinstitutional Agreements and Opportunities to Fulfill the Degree

Attendance at Other Institutions

Graduate students who are enrolled at Old Dominion University may attend another institution and transfer credit earned to a degree program at Old Dominion University. While formal Old Dominion University permission is not required, students should consult the graduate program 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. An official transcript from the other institution must be submitted to the graduate program advisor along with any supporting materials that may be requested such as a syllabus, course description, etc. The graduate program advisor will complete an evaluation of external credits and submit the result to the Office of the University Registrar for posting to the student’s academic record.

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.

Academic Common Market

Old Dominion University, through a number of its undergraduate and graduate programs, participates in the Southern Regional Education Board’s Academic Common Market. Eligible residents of participating states may enroll (following admission to degree status) as Academic Common Market students at in-state tuition rates. Evidence of legal domicile must be presented to the Office of the Registrar, Rollins Hall. Information on available programs can be viewed at www.schev.edu/students/acmva/n/in/sta te/tuition rates.asp (http://www.schev.edu/students/acmva/n/in/sta te/tuition rates.asp).

Interinstitutional Study Program with Norfolk State University

Old Dominion University students have the opportunity to elect courses at Norfolk State University through a student exchange program agreed to by the two institutions.

The registrar of each institution will register a student for courses at the other institution if the student presents a properly signed form listing the course or courses to be taken at the other institution. The student exchange will be honored both in the regular session and in the summer session and applies to both undergraduate and graduate students. All credits earned by students will be considered as resident credit at the home institution for degree purposes. (Courses taken at NSU under this policy will be considered the same as Old Dominion University courses; all other courses are subject to transfer credit policy limitations.)

Regular bus service is provided between campuses but is not available for evening classes.

Student Exchange Policy Between the College of William and Mary and Old Dominion University

The registrars at Old Dominion University and the College of William and Mary will each register students in all departments in the College of Sciences (Old Dominion) and the School of Marine Science (William and Mary) for courses at the other institution. If the student presents a properly signed form listing the course(s) to be taken at the other institution, the exchange will be honored in both regular sessions and in summer sessions, and will apply to graduate students at the master’s, certificate of advanced study, and doctoral levels at both institutions.

The student must have completed prerequisites for the course(s) for which he/she registers. Core curriculum requirements must be met at the home institution. Elective courses and departmental requirements may be satisfied through exchange courses, but approval is required from the student’s department. If a particular course is offered at the home institution, it may not be taken for credit at the other institution. All credits earned will be considered as resident credit at the home institution for degree purposes.

The tuition and fees are determined and retained by the student’s home institution.

Student Exchange Policy Between Eastern Virginia Medical School and Old Dominion University

The registrars of Old Dominion University and Eastern Virginia Medical School (EVMS) will each register a student for courses at the other institution if the student presents a properly signed form listing the course(s) to be taken at the other institution. The exchange will be honored in both regular sessions and in summer sessions and will apply to graduate students at the master’s and doctoral levels at both institutions. The students must have completed all prerequisites of the courses for which they register. All credit so earned will be considered as resident credit at the home institution for degree purposes. (Courses taken at EVMS under this policy will be considered the same as Old Dominion University courses; all other courses are subject to transfer credit policy limitations.)

Tuition and fees applicable to the courses taken will be handled according to current interinstitutional policies regulating these.

Navy Education Consortium and Educational Agreements

A consortium of higher education institutions, located near major naval facilities, has developed a means to enhance the opportunities for active duty naval officers to participate in graduate education at the master’s level. The institutions are Old Dominion University, George Washington University, Memphis State University, The University of Rhode Island, San Diego State University and the University of West Florida. The program areas which may be offered under the auspices of the consortium include international and political studies, computer information sciences, and computer science. These higher education institutions also provide a common curriculum that satisfies competency areas as set forth by the Navy for the ETMS program. Officers participating in the program are enrolled in the Master of Science in Education degree program with a major in educational administration. For current information, contact the Office of Academic Affairs.

Virginia Tidewater Consortium Exchange Program

Old Dominion University students may also take courses at any of the following Consortium institutions: Christopher Newport University (Newport News), College of William and Mary (Williamsburg), Eastern Shore Community College (Melfa), Eastern Virginia Medical School (Norfolk), Hampton University (Hampton), Joint Forces Staff College
(Norfolk), Norfolk State University, Paul D. Camp Community College (Franklin), Regent University (Virginia Beach), Thomas Nelson 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 cumulative grade point averages of 3.00 or better.

2. Graduate students who opt to cross-register under the Virginia Tidewater Exchange Program may accumulate a maximum of 12 external credit hours to include any combination of transfer or consortium credit hours. Exceptions are granted to students enrolled in approved joint programs within the Virginia Consortium.

3. Graduate students must get pre-approval from their Graduate Program Director (GPD) before registering for consortium classes.

For further information, contact the Office of the University Registrar, Alfred B. Rollins Jr. Hall.
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 at http://www.odu.edu/af/finance/students/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.

Housing Charges—2012-13 Academic Year*

<table>
<thead>
<tr>
<th>Housing Charges</th>
<th>2012-13 Academic Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average room and board per year</td>
<td>$8,547.00</td>
</tr>
</tbody>
</table>

Applied Music Fees—2012-13 Academic Year*

<table>
<thead>
<tr>
<th>Applied Music Fees</th>
<th>2012-13 Academic Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Instruction (2 or 3 credits, one hour of instruction)</td>
<td>$250.00</td>
</tr>
<tr>
<td>Individual Instruction (1 credit, one-half hour of instruction)</td>
<td>$175.00</td>
</tr>
<tr>
<td>Group Instruction (class piano or voice)</td>
<td>$75.00</td>
</tr>
</tbody>
</table>

Laboratory Fees—2012-13 Academic Year*

<table>
<thead>
<tr>
<th>Laboratory Fees</th>
<th>2012-13 Academic Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTS 202, 203, 211, 231, 279, 304</td>
<td>$30</td>
</tr>
<tr>
<td>ARTS 241, 251, 252, 253, 254, 256, 263, 281, 291</td>
<td>$50</td>
</tr>
<tr>
<td>BIOL 404, 420, 473, 504, 520, 573</td>
<td>$25</td>
</tr>
<tr>
<td>BIOL 103</td>
<td>$30</td>
</tr>
<tr>
<td>BIOL 250, 251</td>
<td>$35</td>
</tr>
<tr>
<td>BIOL 314</td>
<td>$40</td>
</tr>
<tr>
<td>BIOL 315</td>
<td>$45</td>
</tr>
<tr>
<td>BIOL 405W</td>
<td>$10</td>
</tr>
<tr>
<td>CEE 335</td>
<td>$20</td>
</tr>
<tr>
<td>CET 345W</td>
<td>$30</td>
</tr>
<tr>
<td>CHEM 212, 214, 332W, 334W</td>
<td>$75</td>
</tr>
<tr>
<td>CHEM 442W/542</td>
<td>$100</td>
</tr>
<tr>
<td>CS 101, 120G, 121G</td>
<td>$30</td>
</tr>
<tr>
<td>CS 150</td>
<td>$40</td>
</tr>
<tr>
<td>CYTO 428</td>
<td>$45</td>
</tr>
<tr>
<td>DNTH 303</td>
<td>$40</td>
</tr>
<tr>
<td>DNTH 301, 317</td>
<td>$50</td>
</tr>
<tr>
<td>ECE 287, 387</td>
<td>$25</td>
</tr>
<tr>
<td>ECE 407, 507</td>
<td>$30</td>
</tr>
<tr>
<td>EET 125, 315, 325, 335</td>
<td>$30</td>
</tr>
<tr>
<td>ENGN 110, 111</td>
<td>$45</td>
</tr>
<tr>
<td>GEOG 402, 404, 502, 504</td>
<td>$25</td>
</tr>
<tr>
<td>MATH 211, 212, 312</td>
<td>$10</td>
</tr>
<tr>
<td>MAE 203, 225, 305</td>
<td>$25</td>
</tr>
<tr>
<td>MAE 441</td>
<td>$30</td>
</tr>
<tr>
<td>MEDT 310, 312, 319, 320, 325, 326, 327, 331</td>
<td>$45</td>
</tr>
<tr>
<td>MEDT 307</td>
<td>$50</td>
</tr>
<tr>
<td>MET 387</td>
<td>$20</td>
</tr>
<tr>
<td>MET 200, 400, 415</td>
<td>$30</td>
</tr>
<tr>
<td>MLRS 501, 601</td>
<td>$45</td>
</tr>
<tr>
<td>NURS 302, 351</td>
<td>$50</td>
</tr>
<tr>
<td>NURS 619, 658, 659, 660, 665, 672, 674, 675, 764, 767</td>
<td>$250</td>
</tr>
<tr>
<td>OEAS 106N, 107N, 126N, 127N</td>
<td>$20</td>
</tr>
<tr>
<td>OEAS 110N, 111N, 112N</td>
<td>$30</td>
</tr>
<tr>
<td>OEAS 440, 441, 442W</td>
<td>$35</td>
</tr>
<tr>
<td>PT 627, 628, 826, 827</td>
<td>$150</td>
</tr>
<tr>
<td>STEM 110T, 221, 231, 241, 350, 360</td>
<td>$20</td>
</tr>
<tr>
<td>THEA/COMM 341, 370, 380, 385, 446, 483, 486</td>
<td>$25</td>
</tr>
</tbody>
</table>

Nonrecurring Charges and Fees—2012-13 Academic Year*

<table>
<thead>
<tr>
<th>Nonrecurring Charges and Fees</th>
<th>2012-13 Academic Year*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Fee**</td>
<td>$50</td>
</tr>
<tr>
<td>Late Penalty Fee</td>
<td>10% of past due amount</td>
</tr>
<tr>
<td>Payment Plan Processing Fee (non-refundable)</td>
<td>$40</td>
</tr>
<tr>
<td>Returned Check Processing Charge</td>
<td>$50</td>
</tr>
<tr>
<td>Collection Fees</td>
<td>25%</td>
</tr>
<tr>
<td>Transcript Processing Charge (per copy)</td>
<td>$5</td>
</tr>
<tr>
<td>Thesis, Dissertation Binding Service Charge</td>
<td>$50</td>
</tr>
<tr>
<td>Additional Copies</td>
<td>$16.50</td>
</tr>
<tr>
<td>Ph.D. Dissertation - Microfilming</td>
<td>$65</td>
</tr>
<tr>
<td>Ph.D. Dissertation - Copyrighting</td>
<td>$65</td>
</tr>
</tbody>
</table>

* All fees are tentative and subject to final approval by the Board of Visitors and/or the President. Those listed are in effect as of 2012-13 and are subject to change.

** Does not apply to Old Dominion University full-time faculty and staff and their full-time dependents and former Old Dominion University students seeking readmission who have not attended another institution since leaving Old Dominion.

Residency

To be considered a Virginia resident for tuition purposes for any given semester, it is necessary that the applicant be domiciled in the Commonwealth of Virginia for at least one year immediately preceding the beginning of that term. Domicile is a technical legal concept and is defined as the place (state) where a person resides with the unqualified intention of remaining indefinitely, with no present intention of leaving. Domicile is generally evidenced by such things as payment of income, real estate, and personal property taxes, voter and automobile registration, and driver’s license. Residence in Virginia for the purpose of securing an education does not qualify a person for classification as a Virginia student for tuition purposes.
The General Assembly of Virginia has enacted several special provisions for active duty military, spouses and dependents. Please refer to www.odu.edu/registrar for current guidelines.

A student who meets the criteria for resident tuition during his or her course of study at Old Dominion University is not automatically reclassified to such status. He or she must request such classification, using an appeal form available from the Office of the University Registrar. By law, appeals of classifications must be submitted before the start of classes for the term in which a change is sought. Copies of the Virginia statute and guidelines issued by the State Council of Higher Education for Virginia are on reserve in the University Library and are available at www.schev.edu (http://www.schev.edu) (search for “domicile”). Because of the length of those requirements, they are not printed in this catalog. Additional information may be obtained from the Office of the University Registrar.

Students who fail to complete the Tuition Rate Determination Form are classified at the out-of-state tuition rate.

Student residency records may be audited for compliance with the Code of Virginia residency. Students may be required to submit proof of domicile following audit. Documentation may include driver’s license, motor vehicle registration, etc.

Billing Cycle

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 may opt for participation in the University payment plan (fall and spring only). If charges remain unpaid 30 days after the due date, a 10% late payment penalty is assessed. Once the account is 90 days past due, it is forwarded to a collection agency and assessed an additional 25%.

Billing Statements

The University sends debt notification by e-mail. It is the student’s responsibility to activate the ODU.EDU e-mail address issued to all admitted students. Please refer to Leo Online for specific types of notification covered. Approximately 30 days before the payment due date, advance billing statements for tuition and fees are sent to students who have preregistered. Students are expected to access account information through the secured access site on the web at www.leoonline.odu.edu. Any student who registers or adds classes after any advance billing may be issued a statement by electronic mail during the next billing cycle, and charges will be subject to late payment fees. Failure to receive a reminder bill confirming charges does not waive the requirement to make payment when due, and financial penalties may accrue.

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/Cashiers Office

Students may pay for classes with personal checks, money orders, cash, or charge cards (VISA or MasterCard only). Cash payments should be made at the Cashiers Office ONLY. Payments may be mailed to Accounts Receivable/Cashiering, 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. 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 Office does not cash checks or make cash refunds. Checks must be provided in US dollars. Checks written in excess of assessed fees or other amounts paid the University will be accepted and processed, but the excess will be refunded to the student by mail or electronically at a later date.

Third-Party Payment Authorizations

The financial guarantee for payment of tuition and fees must be addressed specifically to Old Dominion University, Accounts Receivable, and printed on agency letterhead, purchase order, or voucher. Payments must be unconditionally guaranteed and made by the due date specified on the University’s invoice. Amendments to the financial guarantee are required in writing. Prior to the University processing authorizations, students may receive an individual billing statement. Students must provide the third-party billing authorization or government training voucher to the Office of Finance before the student’s individual payment due date. Failure to submit the authorization by the established deadline may result in a student billing assessment of late fees and a financial hold on the student’s account. An agency with a past due balance may have billing privileges terminated. Sponsoring agencies and students being sponsored by these agencies should be aware that the student is ultimately responsible for any defaults in payments by the sponsoring agency. A student whose employer or sponsor reimburses him or her for tuition after receipt of grades is not considered a third party. A student must pay in full upon registration or by the stated due date to avoid financial penalties. Contact the third-party billing coordinator for billing requirements or check the University web site.

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. 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, transcript of grades, grade report, or permit a 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 90 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

The University pursues debt in accordance with the guidelines set forth by the Commonwealth of Virginia in the Virginia Debt Collection Act. Under the provisions of this act, an individual’s Virginia income tax refund, lottery winnings or other refunds due from the state will be subject to the University’s claim for any unpaid balance of tuition and fees. Any communication disputing an amount owed must be submitted in writing to the accounts receivable manager, Alfred B. Rollins Jr. Hall.
Dishonored Checks and Charge Cards
A $50.00 fee will be charged for each returned check or charge. If collection action is necessary, students will be liable for all collection agency costs. Stopping payment on a tuition draft does not constitute a cancellation of the student’s registration.

University Payment Plan (not available on past due balances)
The University offers a payment plan during fall and spring semesters ONLY. Payment plan agreements are administered by the Office of Finance and are established for a specified four-month period each semester (refer to the Office of Finance website). Payment plans are established on the student’s total charges for tuition and/or housing. There is a $40.00 non-refundable processing fee to establish the plan each semester. Students must be in good standing with their student account to be eligible to participate. Payment plan forms are available on the University’s web site. Failure to pay on time may prevent students from using the payment plan process to defer payments in future terms. If any payment is 30 days past due, the entire payment plan balance will be due and payable. A 10% late penalty will be assessed on the entire balance if a payment is 30 days past due.

Tuition Refund Policy
The total tuition is considered fully earned by the University once scheduled classes have begun in any semester or summer session. Failure to attend the course after registering is not justification for elimination of charges.
For refund purposes, the beginning date of class is defined as the first official class date for the term. Students desiring to drop or withdraw from the University must formally notify the University using the official procedures set by the Office of the University Registrar. Refunds will be computed based on the actual withdrawal date certified by the Office of the University Registrar. Refunds will not be made to students who do not attend classes and have not completed the required withdrawal procedure. Refunds are issued by check or electronically (for those who sign up for e-Refunds) for all payments, including credit cards. Please refer to the Office of Finance website at www.odu.edu/af/finance/ for refund dates.

Tuition Differentials
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.

Drop and Add
No refund or additional tuition charges are assessed for students who drop and add an equal number of credit hours on the same day within the same semester/session if the per credit tuition rates are the same.

Special Situations
Administrative drops, 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.

Refund Policy on Financial Aid Funds
Federal regulations mandate the treatment of refunds for financial aid recipients. Financial aid funds are returned to the government when charges were paid by financial aid and a refund is given a student who fully withdraws from the University. Financial aid recipients may request more detailed information from the Financial Aid Office as federal refund guidelines are subject to change.

Tuition Appeal Policy
Students who must withdraw (with a grade of W or WF only) after the end of the refund period may appeal for a refund under the Tuition Appeal Policy. The purpose of the tuition appeal policy is to provide an opportunity for students to explain mitigating circumstances that prohibited them from course completion. All appeals are written and are reviewed by the Tuition Appeal Committee. The Tuition Appeal Committee may approve a refund or a release of financial charges under pre-approved conditions or recommend an exception. Committee decisions are final.

Students have the responsibility to submit an appeal within one year of the tuition due date for which charges are being appealed and to demonstrate compliance with the policy. Documentation is required, especially in cases of illness, death, and changes in employment shifts or military orders. Depending on the complexity of the appeal and the receipt of all supporting documentation, processing time on appeals can vary from two to four weeks. Late fees and collection fees are not appealable charges.

Tuition appeals will generally be approved for the following reasons as long as the appropriate supporting documentation on official letterhead with original signature is provided: extended periods of physical illness, extended periods of physical or mental illness of the student’s immediate family member, death of a student’s immediate family member, mandatory job transfers outside of Hampton Roads or extended campus site, involuntary changes in employment schedule or military deployment, or a statement from the Office of Student Affairs authorizing an administrative withdrawal for medical reasons.

Students are strongly discouraged from submitting appeals that are based on lack of awareness of University policies and procedures, changes in personal circumstances or decisions, dissatisfaction with academic progress, or personal errors in judgment, including not attending class or the acceptance of new employment, as they will not be considered for approval. Issues related to the dissatisfaction with course content, delivery of instruction, or dissatisfaction with an advisor or instructor should be addressed with the chair of the academic department rather than through this appeal process.

Tuition appeal forms are available from the Office of Finance web site. Please refer to the Office of Finance website for full details. www.odu.edu/af/finance/

Employee Fee Waiver
Full-time faculty and staff registered for on-campus courses may have the transportation fee waived provided a faculty/staff parking decal has been purchased. Accounts are adjusted after the end of the drop/add period.

Senior Citizen Tuition Waiver
An educational benefit under the Code of VA 23-38.54-60, Senior Citizen’s Higher Education Act of 1974, a senior citizen shall be permitted under regulations as may be prescribed by the State Council of Higher Education:

• To register for and enroll in courses as a full-time or part-time student for academic credit if such senior citizen had a taxable individual income not exceeding $15,000 for Virginia income tax purposes for the year preceding the year in which enrollment is sought;
• To register for and audit courses offered for academic credit; and
• To register for and enroll in courses not offered for academic credit in any state institution of higher education in the Commonwealth of Virginia.

Such senior citizen shall pay no tuition or fees except those established for the purpose of paying for course materials, such as laboratory fees, but shall be subject to the admission requirements of the institution and a determination by the institution of its ability to offer the course or courses for which the senior citizen registers.

Senior citizen eligibility terms require that individuals must:
• Be at least age 60 before the beginning of the semester.
• Have had legal domicile in the Commonwealth of Virginia for at least one year before the first day of classes.
• Enroll in no more than three courses in a given semester with a tuition waiver.
• Register only on or after the first official day of classes. (Eligible students may submit the form found at www.odu.edu/registrar, but staff will not process the form prior to the first day of classes for the semester.)

• Have a taxable individual income not exceeding $15,000 for Virginia income tax purposes for the preceding year in order to be exempt from tuition for credit-bearing classes.

Senior citizens may be admitted to a course only on a space-available basis after all tuition-paying students have been accommodated.

Audited classes (no credit) are tuition-free for all senior citizens domiciled in VA.

Perkins Loan Exit Interviews
The Perkins Loan Program requires that all recipients attend an exit interview before graduating, leaving the University, or attending less than half-time for the semester enrolled. During the interview session, the student is informed of his or her rights and responsibilities, including grace period, deferments and how they work, and cancellation privileges. Students are notified of exit interviews by mail. If a student fails to attend the exit interview or return the required materials, a hold is placed on the student’s account, transcript and/or diploma until the University has received all the proper paperwork required to meet federal regulations. The Federal Direct Student Loan program is a distinctly separate loan program and has another exit process. For information on the Federal Direct Student Loan exit interviews, please contact the Office of Financial Aid.

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. Generally, the deferment period extends the date of payment until the specified date shown below or until funds become available, whichever comes first. Deferments are a separate program and should not be confused with other University payment arrangements.

Students participating in educational programs through the Department of Veterans Affairs may qualify for a deferment of tuition only. Interested students should contact the Office of the University Registrar for more information. Deferments are only granted prior to the tuition deadline for each semester, provided all past due debts are satisfied. Veterans’ deferments expire on November 1 for fall and April 1 for spring. No VA tuition deferments are offered for summer sessions.

Balance of Aid Refunds
Grants, scholarships and loans are credited to the student’s account in the order received. After all charges are fully paid, refunds will be issued as excess payments are credited to the account. Expected installment payments are deducted from the account prior to the release of the refund. All refund checks (except Plus Loan refunds) are made payable to the student and are mailed to the student’s permanent home address or electronically deposited. The refund check will be mailed five to seven business days after the refund entry is made on the account. Due to security reasons, checks are not available for pick up.

Replacement Checks
Checks that are lost, mutilated or destroyed can be replaced. Mutilated or expired checks should be submitted for replacement. For checks that are lost, 10 business days from the date the original check was issued must expire before a written request for a replacement check will be accepted. The ten-day period allows for the original check to be forwarded by the postal service or returned to the University. A “stop payment” of the original check requires two-four business days to process at the bank. Once the stop payment has been confirmed by the bank, a replacement check can be issued. Expect a minimum of an additional two-four business days to process a replacement check. Please note that international checks will take longer.

Education Tax Credits
The Taxpayer Relief Act (TRA) of 1997, enacted by Congress, created two tax benefits for families who are paying for higher education. On January 31 of each year, all eligible students are issued a 1098T form for the prior calendar year. Students are directed to consult a tax professional or the Internal Revenue Service for matters related to 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, option 2
Toll-free (800) 224-1450
e-mail tuition@odu.edu

Payment address:
Office of Finance
Old Dominion University
Alfred B. Rollins, Jr. Hall
Norfolk, VA 23529.

Fees for Noncredit Programs
The fees for noncredit programs vary according to the activity. Noncredit courses are free to all senior citizens on a space-available basis.
Graduate Financial Aid

Office of Financial Aid

The Office of Student Financial Aid supports the mission of the University by assisting students and their families in reducing or eliminating financial barriers that might prohibit their participation in the degree programs offered by Old Dominion University. The office administers need-based financial aid programs funded by Federal, State, University and private sources in the form of grants, Federal Direct Subsidized loans, Federal work-study programs, and both merit-based and need-based scholarships. In addition, the office administers the William D. Ford Federal Direct Unsubsidized Loan program and the Federal Direct PLUS and Grad PLUS loan programs, all of which are non-need-based federally supported sources of funding. Alternative loan options are also available.

Financial resources are available to assist Old Dominion University graduate students with their educational costs. Most stipends awarded to graduate students are insufficient for meeting all living expenses; therefore, other sources of income are necessary. Financial sources for graduate students typically include teaching, administrative and research assistantships, fellowships, tuition grants (all administered through the academic colleges) as well as Federal Direct Stafford Loan Programs, and part-time student employment (administered through the Office of Financial Aid). Additional information about need-based financial assistance is available from the Office of Financial Aid.

Prospective graduate students should also consider applying for national fellowships, such as those awarded by the National Science Foundation, the Woodrow Wilson National Fellowship Foundation, the Ford Foundation (minority fellowship program), and the Danforth Foundation. Applicants should check program deadlines, some of which are as early as December 1. Information on fellowships in specific fields is available from the chair or program director of each department/school.

Regulations governing the administration of student financial aid are subject to unanticipated change. Information provided herein is as accurate as possible on the date of printing. For additional and updated information, students and interested parties are invited to visit the office’s web site at http://www.odu.edu/af/finaid/index.shtml or Old Dominion University’s home page 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 accepted for admission into degree programs. Some of these awards are available only to Virginia residents, while others are awarded without regard to state residency. Student assistance is offered on the basis of scholastic achievement and/or established financial need. Financial need is defined as the difference between the cost of education/attendance at Old Dominion University and the amount of money an applicant and his or her family are expected to make available from their income and assets to meet the expenses of that education. The eligibility for non-need Federal Direct Unsubsidized loans and Federal Direct PLUS loans is determined by a combination of factors, including cost of attendance, and aggregate amount borrowed to date, to name a few.

To be eligible for assistance from the major student aid programs, a student must:

• be a citizen or an eligible non-citizen

• A student must be admitted and enrolled as degree seeking in an eligible 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) to be eligible for financial assistance. Certain aid programs require a student to maintain a full-time status.

There is one exception to the requirement that students be admitted on a degree-seeking basis: students who are admitted only for purposes of teacher certification may qualify for a William D. Ford Federal Direct Loan by submitting memo verifying their admission into approved licensure program by Director of Teacher Education Services in the Darden College of Education.

Financial aid eligibility is determined on an annual basis for one academic year (fall, spring, summer) only, and is determined for succeeding years upon re-application and continued eligibility. Applications for Old Dominion University-administered financial aid should be submitted as early as possible in January for consideration in the following academic year.

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 February 15 preceding the academic year of interest. All admitted students will automatically be considered.

An entering student must be accepted for admission into a degree-seeking program before receiving a financial aid eligibility notification letter; 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 in writing 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 e-mail to their Old Dominion University e-mail accounts throughout the year.

Alerts, reminders, and student-specific information are mailed through the University’s secure e-mail 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 Guide to Federal Student Aid, which describes the federal student 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 the Access America for Students gateway web site (http://www.students.gov). The site is known as FAFSA on the Web. Get U.S Department of Education personal identification number called a PIN at www.pin.ed.gov and submit them as soon as possible after January 1 preceding the academic year for which application is made. (For example, a student planning to attend during the Fall Semester, 2009 would submit a financial aid application in January, 2009.)

The documents and deadlines are described below. Note: The Free Application for Federal Student Aid (FAFSA) is required of all applicants for financial aid.

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

something out on paper before going online to enter their application information). When completing the FAFSA, use Old Dominion University’s Title IV Institution Code (003728). Fill out the FAFSA at www.fafsa.ed.gov (http://www.fafsa.ed.gov). Keep an eye on your e-mail for a response and further instructions. FAFSA are also mailed to student by the U.S. Department of Education upon the student’s request (call 1-800- 433- 3243). The paper FAFSA should be mailed to the Department of Education’s federal processor, not to Old Dominion University. A pre-addressed envelope is provided with each application. Because the FAFSA must reflect income for the calendar year preceding the academic year aid is being applied for, it cannot be signed or mailed until after January 1.

Document 2: Student Aid Report (SAR)
Once the FAFSA is received and processed, you will receive your results by e-mail within a few days. This e-mail will contain a secure link so you can access your SAR online. If you have a “blocked” folder in your e-mail files, check it. Otherwise you’ll receive a paper SAR in the mail in about two weeks. Students are strongly encouraged to keep their SARs and all other financial-aid-related documents for future reference. The SAR contains valuable information as well as a unique data release code.

Document 3: Employment Eligibility Verification
All U.S. employers are responsible for completion and retention of Form I-9 for each individual they hire for employment in the United States. This includes citizens and non-citizens. On the form, the employer must verify the employment eligibility and identity documents presented by the employee and record the document information on the Form I-9. Additional information can be obtained from the Office of Finance.

Document 4: Consortium Agreement and Dual Enrollment Forms
Students attending classes at a distant site may be required to submit these forms. These students should consult with their site director and their financial aid counselor to determine if these forms are required.

Standards of Satisfactory Academic Progress to Maintain Financial Aid Eligibility
Old Dominion University Requirements
Fulfillment of Federal Satisfactory Academic Progress is reviewed and evaluated by the Financial Aid Office in compliance with federal regulations. In order to qualify for assistance through the Office of Student Financial Aid, students must be accepted by the University as degree-seeking students. Students must be enrolled at least half-time (50%) to qualify for most financial aid programs.

Graduate students must be enrolled for a minimum of nine hours during either the fall or spring semester to be considered full-time or 6 or more hours during the summer. Three-quarter time enrollment is 6-8 during the fall or spring semesters or 4-5 hours in the summer semester. Half-time enrollment for graduate students is four hours during either the fall or spring semesters or three hours during the summer semester.

Eligibility and award amounts are based on the number of semester hours in which the student is enrolled. For purpose of financial aid, courses taken as Audit course do not count toward enrolled hours.

The following quantitative and qualitative requirements apply to financial aid programs administered by Old Dominion University for satisfactory academic progress.

Policy
Maintaining Satisfactory Academic Progress is one of many federally mandated criteria viewed in determining a student’s eligibility for continued receipt of financial aid. Progress is measured by PACE (the number of credits earned in relation to those attempted), Qualitative (GPA) standard and Allowable time (the maximum time frame allowed to complete the academic program). Students must also demonstrate a progression toward completion of their degree program within an established timeframe. Failure to maintain Satisfactory Academic Progress will result in loss of financial aid eligibility. Progress is reviewed annually, at the end of the academic year.

A. PACE
Graduate
In order to maintain Satisfactory Academic Progress, a graduate student is required to complete 80% of the total credit hours attempted.

How to calculate PACE
Cumulative number of credit hours student successfully completed
Cumulative number of credit hours student attempted

B. QUALITATIVE
Qualitative Satisfactory Academic Progress for students is evaluated in accordance with the following table.

<table>
<thead>
<tr>
<th>Hours Earned</th>
<th>Minimum G.P.A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1+</td>
<td>3.0</td>
</tr>
</tbody>
</table>

C. ALLOWABLE TIME
The maximum allowable time to be eligible for financial aid for a full-time Master’s degree is three (3) years and for a full-time Doctoral degree four (4) years.

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. *Note: Transfer credit hours are included.

Satisfactory Academic Progress Review
The Office of Student Financial Aid will conduct a review of Satisfactory Academic Progress at the end of each academic year. Email notifications of SAP standard(s) not met will be sent to the student’s ODU email account.

Please note that students who have not received financial aid in previous years, but are applying for financial assistance for the first time will also be held to the requirement of maintaining Satisfactory Academic Progress. Satisfactory Academic Progress is reviewed for all semesters of a student’s enrollment regardless of whether the student was eligible for financial assistance during a term. If students exceed the maximum allowable time, they are not meeting satisfactory academic progress, thus, all aid will be suspended.

Financial Aid suspension does not prohibit you from continuing your education at Old Dominion University. It does prohibit you from receiving financial aid until you again meet the standards for Satisfactory Academic Progress.

Financial Aid Suspension
Students who fail to meet satisfactory academic progress are placed on financial aid suspension. You have the option to appeal this suspension. An appeal must be based on significant mitigating circumstances that seriously affected academic performance. The decision of the appeal will be sent via email to the students ODU email account. *Note: Please make sure your email account is activated.

Financial Aid Probation
For students who are successful in their appeal, aid will be reinstated; however, placed on probation for one payment period/term. Emails will be sent to students on financial aid probation advising them of the conditions needed. At the conclusion of the probation term, the student must be meeting the school’s SAP standard in order to qualify for further Title IV Funding.

The Appeal Process
The appeal form may be downloaded from our website at http://www.odu.edu/af/finaid.
The basis for an appeal includes:

1. Death of a relative
2. Student/parent injury or illness
3. Serious illness or injury of a parent/guardian, spouse, or child that required you be the primary caregiver and prevented you from passing the course(s)
4. Other special circumstance (ex, divorce/separation, natural disaster, extreme change in financial or legal circumstances, etc.)

Appeals will NOT be accepted for the following conditions:
Encountering a situation that could have been anticipated, such as the need to have transportation, the need to pay for ordinary living expenses, the need for child care, etc.
Change of major
Dissatisfaction with course material, instructor, instructional method, or class intensity
Lack of motivation change in academic interest

If you would like to file an appeal for reinstatement of your eligibility for financial aid, please follow these directions:

1. **Use the SATISFACTORY ACADEMIC PROGRESS APPEAL FORM to write your appeal.**
   - State clearly why you failed to meet the condition(s) cited.
   - Attach documentation if necessary.
   - State what has changed that will allow you to demonstrate SAP progress at the end of the next evaluation period.
   - To confirm your extenuating circumstance(s), you must attach documentation from an objective third party (e.g. physician, counselor, lawyer, social worker, teacher, religious leader, academic advisor).
   - We realize that sharing personal information can be difficult. Be assured that your statement will remain confidential. Only financial aid personnel will review your appeal.

2. **Meet with your academic advisor or the dean of your college to complete the REQUEST FOR WRITTEN EVALUATION OF ACADEMIC PERFORMANCE form.**
   - **NOTE:** If you submit your appeal without the advisor or dean’s evaluation, your appeal will not be considered

3. **Submit your complete appeal packet and all supporting documents within 14 days of receipt** of this notification. Failure to submit the complete packet will result in cancellation of aid.

   **ALLOW TWO WEEKS** for the review of this appeal and receipt of the decision notification. If your appeal is approved, the decision notification will outline the conditions of your contract for reinstatement of aid eligibility. The contract is binding and your academic progress will be reviewed at the end of the enrollment period specified. If your appeal is denied, the decision notification will specify the conditions for future consideration for financial aid eligibility.

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

If the appeal is unsuccessful, an email notification will be sent notifying you of the decision and also information on how to re-establish eligibility if applicable.

**Re-establishing eligibility**

Students may re-establish their eligibility for financial assistance by achieving the satisfactory progress standards. Keep in mind this will be at the student’s own expense as they are ineligible for financial aid. Sitting out a semester at Old Dominion University will not assist in re-establishing eligibility. Once the student has earned the required grade point average or completed the required credit hours, they must contact financial aid to request the reinstatement of their financial aid eligibility.

Students not making SAP at the end of the second year, but at the end of the subsequent grading period come into compliance with the school’s graduation requirements; will be considered making SAP beginning with the next grading period.

**Withdrawing from courses**

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

**Withdrawing from the University**

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

Withdrawing from all courses for two consecutive semesters may result in loss of financial aid eligibility.

Students who withdraw from all courses are subject to regulations regarding the Return to Title IV Funds requirement. If the date of complete withdrawal precedes the date on which 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. The University policy regarding tuition refunds following withdrawals is stated in the catalog and is independent of the Return to Title IV funds regulations. Students who withdraw from the University before 60% of the semester has elapsed should anticipate repaying a significant portion of the Title IV financial assistance. Additionally, students who failed to earn a passing grade during the term are subject to the same federal guidelines.

**Transfer and Repeat Coursework**

Accepted transfer credits must count as both attempted and completed hours.

Repeated coursework will count toward enrollment status where no more than one repetition of a previously passed course or any repetition of a previously passed course due to the student failing other coursework in a prior term.

**Example:**

- Student enrolls in 4 fall courses – pass 3 and fails 1
- School required student to retake all 4 courses
- May count the failed course in the next enrollment status
- May not count the passed courses

Remedial courses are counted, however, enrichment and ESL courses ARE NOT taken into consideration.

**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 Work Study (FWS) Program**

This program provides jobs for undergraduate and graduate students with financial need, allowing them the opportunity to earn money for educational expenses. The FWS program encourages community services work such as tutoring and work related to the course of study. A student who qualifies for FWS is not automatically guaranteed employment and must compete with other FWS recipients for available positions. The Career Management Center, located in Webb University Center, maintains a listing of available positions on its web site at http://www.odu.edu/a0/cmcc/.

**Federal Perkins Loan Program**

This low-interest (5 percent) loan is targeted for students with exceptional financial need. A Federal Perkins Loan borrower is not charged an origination fee or an insurance premium. A Federal Perkins Loan must be repaid.
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 two kinds of loans:

**William D. Ford Federal Direct Unsubsidized Loans**
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.

**PLUS Loans for Graduate or Professional Students**
Graduate or professional students are eligible to borrow under the PLUS Loan Program up to their cost of attendance minus other estimated financial assistance in both the FFEL and Direct Loan programs. These requirements include a determination that the applicant does not have an adverse credit history, repayment beginning on the date of the last disbursement of the loan. Applicants for these loans are required to complete the Free Application for Federal Student Aid (FAFSA) and must have applied for their annual loan maximum eligibility under the Federal Subsidized and Unsubsidized Stafford Loan Program before applying for a Graduate/Professional PLUS loan.

**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/af/finaid. 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:

Initial financial aid notices are based on the assumption that the student will enroll full time.

Students are required to communicate immediately with their counselors any changes in the enrollment level or student type during the period leading up to the beginning of each semester as they may impact the student’s aid eligibility. Financial aid is based upon full-time (9 credits or more), three-quarter (6-8 credits), or half-time enrollment (4-5 credits). If a student’s aid has been calculated based on an enrollment level different from the actual enrollment for that semester, the aid will not be released until the student has notified the counselor and the counselor has reviewed and recalculated aid eligibility. Financial aid eligibility changes when enrollment level changes. Students who drop courses are responsible for notifying the financial aid counselor immediately. It is the student’s responsibility to notify the financial aid office if the student type changes (example: degree seeking to non-degree/certificate program). Aid will be reduced accordingly and financial aid already received will be due back to the University. This also applies to “balance-of-aid” payments made to students prior to dropping. The student is responsible for repayment of any and all financial aid received if adjustments resulting from unreported or misreported information discovered through verification, third-party notices, account reviews, and/or Quality Assurance findings that lead to reductions in aid. Documents such as Federal Income Tax transcript, W-2 forms, Leave and Earning Statements, notices of SSI benefits, and Verification Worksheets may be required. Other documents may be requested to confirm marital status or other information provide on the FAFSA during the verification process.

1. The student is responsible for reporting additional educational assistance received through sources other than the Financial Aid Office. Financial aid may be adjusted according to federal regulations as a result of additional educational assistance received and not reflected initially. The student bears responsibility for reporting any additional aid in the form of scholarships from outside sources, Vocational Rehabilitation Benefits, Graduate Tuition Scholarships, Veterans Benefits, Senior Citizen Tuition Waivers, Employer Assisted Tuition Payments, Third Party Payment Agreements involving any outside group or company, and all other forms of assistance. The student must report these external sources of financial assistance immediately to his/her financial aid counseling team.

2. Federal Direct Student Loans and Federal Perkins Loans require Promissory Notes. Federal Direct Student Loan promissory notes may be signed online. Federal Perkins Loan Promissory Notes are produced by the Office of Student Financial Aid after all eligibility conditions have been met. Students must complete and sign the promissory notes and return them to the Financial Aid Office before the loan process can be completed. Entrance loan counseling is required of all first-time borrowers prior to release of loan proceeds.

3. A tentative or conditional financial aid package assumes a level of government appropriations which are frequently underdetermined 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.

4. The Office of Student Financial Aid reserves the right to review, modify or cancel financial aid at any time on the basis of new information affecting student eligibility, including but not limited to changes in financial resources, residence, academic status, or changes in the availability of funds.

5. Students who withdraw from ALL courses are subject to regulations regarding RETURN OF ALL TITLE IV FUNDS. If the date of complete withdrawal precedes the date on which 60% of the academic semester has been complete, a prorated portion of all Title IV student financial assistance will be due back to the federal programs. 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 60% of the semester has elapsed should anticipate repaying a significant portion of Title IV financial assistance.

**Awards Based on Admission to the University**

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.

The Scholarship Form for Continuing and Graduate Students is available for students who are:

- 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:

Office of Student Financial Aid
21 Rollins Hall
Norfolk, VA 23529-0052

The form must be received by February 15 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) PRIOR to February 15 of the appropriate academic year.
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 and May of each year. All scholarships must be formally accepted in writing.

**College Scholarships**

**The College of Arts and Letters**

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

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

*The Harriet W. ’69 and Burl Fisher Endowed Scholarship in History* is funded by an endowment that was established by Harriet and Burl Fisher given in memory of her aunt, Mabel Gresham Cones, and his grandmother, Renie Wright Fisher. Preference will be given to one or more full-time graduate students in history who maintain GPA of 3.5 and demonstrate financial need. (FAFSA)

*The Friends of Women’s Studies Scholarship* is funded by an endowment in honor of Carolyn Rhodes for 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. Graduate students must have a minimum grade point average of 3.50. Recipients can be full- or part-time students. (FAFSA)

*The Linda Hyatt Wilson Graduate Scholarship in China Studies* was established by Linda Hyatt Wilson to assist a full-time graduate student who maintains a grade point average of 3.5, demonstrates financial need and is involved in the study of China’s culture, history economy, politics, or foreign relations. (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 Perry Morgan Fellowship in Creative Writing was 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 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 David Scott Sutelan Memorial Scholarship is made possible by an endowment established by David, Charles and May Scott Sutelan. The recipient will be seeking a master in fine arts in the creative writing program.

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 College of Business and Public Administration**

*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 College of Business and Public Administration. 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 Theordore F. and Constance C. Constant Fellowships* are funded by an endowment that assists two full-time graduate students in the College of Business and Public Administration.

*The Larry J. and Elizabeth J. Creef Endowed Scholarship* was established as an endowment by Larry J. and Elizabeth J. Creef 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, must demonstrate financial need, be a full-time student enrolled in the College of Business and Public Administration and must have declared a major in accounting. (FAFSA)

*The James A. Hixon Endowed Scholarship* was established by James A. Hixon to assist a full-time or part-time MBA student in the College of Business and Public Administration. The student must have a cumulative GPA of 3.5 or better and demonstrate financial need. (FAFSA)

The Jesse and Sue Hughes International Accounting Scholarship was established by Dr. Jesse and Mrs. Sue Hughes to assist a full-time international student in the College of Business and Public Administration 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, however, if there is not an eligible student at the graduate level, then an undergraduate student can be considered for the scholarship award.

*The Max B. Jones Endowed Memorial Scholarship* was established by Katherine Jones Long and Susan K. Jones, in memory of their father, to assist a full-time or part-time graduate student enrolled in the College of Business and Public Administration. The student must be a Virginia resident, have a minimum cumulative GPA of 3.0, and demonstrate financial need. (FAFSA)

The Wolfgang Pindur Endowed Scholarship in Applied Research is funded by an endowment given by the Department of Urban Studies and Public Administration to assist a full-time or part-time master’s student (MPA or MUS) and/or a doctoral student (PhD in Public Administration and Urban Policy). An essay concerning the student’s commitment to public service will need to be provided. (Essay) (683-6856)

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

*The Joseph and Donna Vestal Endowed Scholarship* was established by Joseph Vestal to assist a full-time student in the College of Business and Public Administration, 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 Susan (Merendino) Rowell Graduate Scholarship in Humanities was established in 2004 by Mrs. Susan S. Rowell to assist a graduate student majoring in humanities. The recipient must have a GPA of 3.4 or higher. This scholarship is renewable and preference will be given to students with full-time enrollment status.
The Marvin and Marilyn Simon Family Endowed Fellows Program in Business was established in 1994 to assist a master’s or doctoral degree-seeking candidate attending the College of Business and Public Administration. The recipient will be a talented student studying in business who has outstanding academic ability.

*The John R. Tabb Scholarship* was established by an endowment by the Tabb family in 2004. It is the desire of the family to assist a graduate student studying economic development with an international focus. The recipient must be a U.S. citizen with residency in North Carolina, Virginia or Iowa. A minimum grade point average of 3.5 and demonstrated financial need is required. (FAFSA)

The Tidewater Association of Service Contractors (TASC) Scholarship was established to assist a full-time undergraduate or graduate student from the College of Engineering and Technology or College of Business and Public Administration degree program. A full-time/part-time Masters Certification in Government Contracting program or any other certificate program supporting government contracting within the Continuing Education Departments may also be considered. The scholarship recipient must have a minimum grade point average of 3.0

*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 College of Business and Public Administration. 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 has at least a minimum of 3.0 cumulative GPA. (FAFSA)

The Darden College of Education

*The Coca-Cola Scholars Endowed Scholarship Fund* was established by the Coca-Cola Foundation. The scholarship recipient must be enrolled in a financial aid-eligible program leading to teacher certification, licensure, and/ or enhancement. Consideration will be given to all students studying at rural Virginia TELETECHNET sites 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 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 College of Education and must have an overall cumulative 3.2 grade point average.

The Linda Zydron Bamforth Scholarship in Early Childhood Education was established by Linda Z. Bamforth to assist a graduate student majoring in the Early Childhood Program (Pre-K -3) of the Darden College of Education. The recipient must be a full-time or Part-time graduate student, has a minimum GPA of at least 3.5, and demonstrates love of children and dedication to early childhood education-evidenced by a copy of the applicant’s last performance appraisal or student teaching evaluation.

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 a 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.

*The John Albert Gay Scholarship* is made possible by an endowment given by Dr. and Mrs. R. A. Gay (Florence Vaughan). This scholarship assists a graduate student majoring in special education. Preference is given to those specializing in the area of the emotionally disturbed child. Student must demonstrate financial need. (FAFSA)

*The Peggy Woofler Hull Scholarship* is made possible by an endowment given by Marie D. Woofler in memory of her daughter. It is awarded to a full-time doctoral student in education. Students are nominated by their graduate program director and are selected by the Office of the Dean of the Darden College of Education. Recipients must demonstrate financial need. (FAFSA)

*The Frank Hill Knecht Memorial Scholarship* is made possible by an endowment given by Lena Rosa K. Conley, an alumnus and retired staff member of Old Dominion University, in memory of her brother. This scholarship assists a full-time graduate student in education. Preference is given to study in the area of special education. (FAFSA)

The Frank Batten College of Education and Technology

The Civil and Environmental Engineering Visiting Council Graduate Scholarship in Engineering was established by The Civil and Environmental Engineering Visiting Council (CEEVC) in 2003. The recipient must be either full- or part-time civil or engineering graduate student who has a minimum undergraduate grade point average of 3.25. Transfer students from other colleges or universities are also eligible for consideration.

The BBG Incorporated Endowed Scholarship in Engineering was established by BBG Incorporated for a rising junior or senior majoring in Electrical Engineering, Mechanical Engineering, 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 Electric or 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 Rollie Dubbe’ Engineering Scholarship* is funded by an endowment to assist a full time graduate engineering student who holds a minimum cumulative GPA of 3.0. The scholarship recipient must be enrolled in the civil engineering program with a preference in geo-technical engineering. Must demonstrate 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 Frank 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 Tiwari Endowed Graduate Scholarship in Mechanical Engineering was established by Surendra N. Tiwari. The recipient must be a graduate level Mechanical Engineering student and be enrolled full-time or equivalent if registered as a Graduate Assistant. Must have a minimum Undergraduate or Graduate GPA of 3.0 and preference is given to an international student interested in scholarly activities and research.

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

*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 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 Chesapeake Regional Medical Center Nursing Endowed Scholarship* was established by the Chesapeake Regional Medical Center
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 DPS, Inc. Graduate Dental Hygiene Endowed Scholarship was established by DPS, Inc. to assist a full-time first or second-year graduate dental hygiene student that has been admitted to the Old Dominion University Dental Hygiene Program. The scholarship recipient must demonstrate financial need and hold a minimum GPA of 3.0 (FAFSA).

*The Friends of Dental Hygiene Endowed Scholarship 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 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 Kate and George Mailhafer Scholarship in Physical Therapy was established by George Mailhafer to assist full-time graduate students majoring in Physical Therapy who have a minimum GPA of 3.25. Students eligible for the scholarship may apply for the scholarship starting in the spring semester of their first year of study. Students interested in the scholarship must submit an essay no longer than 500 words to the Physical Therapy Curriculum Committee describing their career goals within the physical therapy profession after graduation. The scholarship is to be awarded in the fall semester.

The College of Sciences

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 and must have an overall cumulative 3.2 grade point average.

The Virginia S. Bagley Endowed Scholarship is made possible by Mrs. Bagley’s estate and is awarded to a graduate or undergraduate student in the Department of Biological Sciences.

*The Hampton Roads Maritime Scholarship is funded by an endowment from the Hampton Roads Maritime Association and is given to a graduate student in the Department of Ocean, Earth and Atmospheric Sciences with financial need. (FAFSA)

The Neil and Susan Kelley Endowed Scholarship Fund, established by Neil Kelley in 2001, provides financial support to a graduate student pursuing a Master of Science in Oceanography. The scholarship is awarded strictly on merit and may be renewed annually.

The Harold G. Marshall and Vivian J. Marshall Scholarship in Biology is funded by an endowment given by Harold G. Marshall and Vivian J. Marshall. This scholarship is provided to assist a full-time graduate student in the Department of Biological Sciences with a specific concentration in ecology.

*The Jacques S. Zaneveld Endowed Scholarship was established by Dr. Jacques S. Zaneveld to assist a graduate student in the Department of Ocean, Earth and Atmospheric Sciences of the College of Sciences. The recipient must demonstrate a need for funding in the preparation of his/her dissertation in the field of biological oceanography. (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. (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

Other Awards (General)

The Alumni Association Outstanding Scholar Fellowships were established in 1984. The fellowships are awarded to two graduate students in good academic standing who are attending Old Dominion University on a full-time or part-time basis. One fellowship must be awarded to an Old Dominion University alumnus/alumna who has been admitted as a full-time student to a graduate program at the University.

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

*The Friends of Women’s Studies Scholarship is funded by an endowment in honor of Carolyn Rhodes for 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. Graduate students must have minimum grade point average of 3.50. Recipients can be full or part-time students. Students are selected by the Director of Women’s Studies and candidate selection is forwarded to the Office of Financial Aid, scholarship coordinator. Student must demonstrate financial need. (FAFSA)

The Nancy Topping Bazin Scholarship was established by the Friends of Women’s Studies to assist a graduate student in women’s studies.

*The John R. Burton Jr. Scholarship is made possible by an endowment given by John R. Burton Jr. This scholarship assists 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 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 Delta Sigma Lambda-Dr. Ruth Harrell Scholarship is supported by an endowment to assist women who have received a bachelor’s degree and are full- or part-time graduate students enrolled at Old Dominion University. Selection is also based upon scholastic ability, financial need and good personal character. Preference is given to those students who have lived in the Commonwealth of Virginia for at least one year. Students must also complete a separate application, which is available in the Old Dominion University Women’s Center. Delta Sigma Lambda members are eligible for the award. (FAFSA) (757) 683-4109

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 Lillian Vernon Endowed Scholarship is funded by an endowment from the Lillian Vernon Foundation. It is awarded to a spouse, child, or grandchild of an active Lillian Vernon employee. Recipient must have a minimum grade point average of 2.80 and demonstrate 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 Meredith Construction Company Scholarship is made possible by an endowment given by the Meredith Construction Co. Inc., Meredith Realty, et al. and members of the Meredith family. The award is given to a graduate student demonstrating academic merit in his/her chosen curriculum.

The Steve Russell Morrison Memorial Endowed Scholarship has been established by the family of Steve Russell Morrison and the Epsilon Beta Chapter of Kappa Delta Rho. This scholarship is awarded to a rising sophomore demonstrating leadership and involvement in campus and community affairs. Preference is given to active members of the Epsilon Beta Chapter of Kappa Delta Rho. (ESSAY)

*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 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 Hugh L. Vaughan Scholarship** has been established by an endowment made by Mr. Hugh L. Vaughan to assist handicapped students. Preference is given to blind students. Recipients must be native-born Virginians.

*The E. C. Wareheim Foundation “Returning Women’s” Scholarship* has been established by an endowment to assist one or more returning women from Norfolk, Virginia Beach, Portsmouth, Chesapeake or Suffolk who have demonstrated financial need. Preference is given to students who enroll part-time. (FAFSA)

*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 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 Linda Hyatt Wilson Graduate Scholarship in China Studies was established by Linda Hyatt Wilson to award one scholarship to a full-time graduate student who has a 3.5 grade point average, demonstrates financial need, and is involved in the study of China’s culture, history, economy, politics, or foreign relations.

**Other Financial Aid Resources**

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 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 Music Department. Contact Mr. Dennis Zeisler, chair of the department. (AUDITION) (757) 683-4061

The Student Activities Scholarships in music are awarded to students who participate in one or more Music Department activities including concert choir, band, orchestra, Madrigal Singers and brass choir. Information concerning audition requirements is available from the Music Department. Contact Mr. Dennis Zeisler, chair of the department. (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) (757) 683-3608.

The Institute for Learning in Retirement Scholarship is a two-year scholarship established by the Institute for Learning in Retirement for a student of any discipline who demonstrates financial need, has a baccalaureate degree, is a resident of Hampton Roads, and has a 3.00 grade point average. (757) 368-4160.

**The ODU Credit Union Scholarship** has been established for members of the ODU Credit Union or their dependents. The applicant must be an admitted Old Dominion University student in good standing or a candidate with worthy credentials. An application, transcripts, and a short (250 word) essay are required. (757) 533-9308.

**Veterans and Dependents Benefits**

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 University Registrar’s web page: http://www.odu.edu/webroot/orgs/AF/REG/registrar.nsf/pages/MSS+Home.

Contact Military Student Services staff in the Office of the University Registrar for further assistance by phone: 757 683-4425; by FAX: 757 683-5865; or by email to register@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’s classification advances to an admitted graduate student status.
Financial Awards for Graduate Students

Financial awards are determined by the graduate program and college dean following the policies and guidelines described below. For specific qualifications, conditions, amounts, length and types of awards, contact the appropriate graduate program director.

Graduate Assistantships

A. Nature of the Graduate Assistantship

The graduate assistant is expected to participate directly in either instructional, research, or administrative duties in support of the ongoing activities of the University’s academic, research, and service units. It is the University’s intention to make the assistantship an integral and valuable part of the student’s graduate education. It should be viewed as an apprenticeship in teaching, research, or administrative service.

B. Categories of Graduate Assistants

1. Graduate Teaching Assistant (GTA) - participates directly in teaching activities, such as the teaching of a course or holds responsibility for a laboratory section, or is assigned to specific instructional support or related activities. The University recognizes two levels of graduate teaching assistant responsibilities and activities, i.e., the Instructor Level GTA and the Assistant Level GTA.
   - GTA Instructors directly communicate and interact with students in ways that lead to the conveyance of knowledge or skills required to successfully complete the course. Included in this category are graduate students who serve as instructors, laboratory supervisors, recitation leaders and tutors.
   - GTA Assistants do not directly instruct students in the knowledge or skills imparted by the laboratory experience, instead, TA Assistants serve as graders, help the instructor research articles and materials to be used by the instructor in preparing lectures or handouts, or as laboratory assistants who prepare equipment solutions, etc.

2. Graduate Research Assistant (GRA) - participates directly in research or support activities conducted by faculty members or administrators. There are three sources of funding for GRAs: those funded through Commonwealth sources, those funded by local funds, and those whose stipends are paid by the Old Dominion University Research Foundation (ODURF) from grants and contracts.

3. Graduate Administrative Assistant (GAA) - participates directly in the support of the activities of a University administrative unit (e.g. student services or athletics).

C. Graduate Teaching Assistant Instructor Institute (GTAI Institute) Requirement

1. All GTA-Instructors will be required to successfully pass the GTAI Institute in order to receive a GTA stipend. GTA Assistants are not required to pass the GTAI Institute but must be approved and supervised by the appropriate faculty instructor.

2. The Institute is offered twice a year during the week before fall and spring classes begin. All graduate assistants, including those who have research and/or other non-instructional assignments, are encouraged to participate in the Institute in anticipation of future teaching assignments. The institute is comprised of the University portion and the college portion. Students are required to attend both portions to pass the Institute. Departments are encouraged to develop their own programs for training graduate teaching assistants. Such programs should be tailored to the specific needs of the discipline and department policies.

D. Application

Application forms for graduate assistantship stipends paid by the University (GTAs, GRAs, and GAAs) are available from the Office of Admissions or from the University’s web page. The completed form, together with a brief essay by the applicant discussing academic interests and career objectives, must be submitted to the appropriate graduate program director or office making the appointment, as soon as possible for fullest consideration. Applications for GRA positions funded through ODURF are made through the faculty member who is principal investigator, the department chair, or graduate program director.

E. Eligibility

1. Only students admitted to graduate degree programs in regular or provisional status on the basis of complete and fully evaluated credentials and in good academic standing are eligible for appointment to a graduate assistantship. Additional criteria apply for appointment as a graduate teaching assistant (GTA) (see section on appointments).

2. All students appointed to a graduate assistantship are required to verify their identity and employment eligibility and complete an I-9 Form, according to University procedures, prior to commencing their duties. This requirement is established in order to comply with the Immigration Reform and Control Act of 1986. Students are also required to complete the Child Support Disclosure and Authorization Form, the Commonwealth of Virginia’s Policy on Alcohol and Other Drugs Form, ODU Use of Electronic Communications and Social Media Form, the Commonwealth of Virginia Selective Service Form, and the Employee Payroll Direct Deposit Authorization Form.

3. Students who are not in good academic standing are ineligible to hold an assistantship. Assistantship appointments will be terminated for any student whose GPA is less than 3.0.

F. Enrollment Requirements

There are two categories of enrollment requirements:

1. Assistantship recipients who are supported by University/ Commonwealth funds are required to be enrolled each fall and spring semesters of their appointment and must register for and complete a minimum of nine hours of graduate course work per semester and six hours in the summer.

2. Assistantship recipients who are supported by other funding sources are required to be enrolled each fall and spring semesters of their appointment and must register for and complete a minimum of six hours of graduate course work per semester and three hours in the summer.

All doctoral students (regardless of their funding source) who have successfully advanced to candidacy and only need to complete the dissertation must register for at least one hour of graduate credit every semester until graduation (see Continuous Enrollment Policy in this Catalog.) Students who have advanced to candidacy and are enrolled for one credit are eligible for full tuition exemption. The graduate form, Doctoral Candidates 1-Hour Full-Time Notification, must be completed and forwarded to Student Employment in the Office of Finance. Students are required to complete all of the credit hours as listed in the individual department sections necessary for the degree. Undergraduate prerequisite courses and courses taken for audit are not normally counted toward the enrollment requirement, except upon the recommendation of the program director, department/school chair, and the dean of the appropriate academic college.

   • Graduate assistants normally may not enroll for more than nine credit hours per semester. Enrollment for 10 to 12 credit hours requires the approval of the appropriate program director. No graduate assistant will be permitted to enroll for more than 12 credit hours in any semester an appointment is held.
• The Board of Visitors has authorized the president or his or her designee, to consider waivers related to the minimum enrollment requirements specified above.

G. Appointment Process

1. Assistantships in Departments/Schools
   The dean or other appropriate administrators notifies the individual departments/schools or units of their allocation of assistantships for the coming year.
   
   A. The department/school recommends candidates for the assistantships to the appropriate academic dean. Candidates should be interviewed before final recommendations are made for appointment. Particular care should be taken in the consideration of applicants to determine the adequacy of academic preparation and language skills. A completed E-1S form or ODURF Form 108 for all graduate assistant appointments will accompany the candidate’s nomination to the dean or administrator. All completed E-1S forms with award letters, acceptance forms and job descriptions are to be sent to the Office of E1S Processing for processing. ODURF 108 forms are to be sent to the Old Dominion University Research Foundation. Prior to submission of a nomination, the department/school should determine whether the student has been nominated for or accepted another graduate assistantship.
   
   B. Nominations are reviewed and approved by the dean of the academic college or his/her designee to insure that applicants meet the eligibility criteria for appointment, such as admission to a degree program, English language proficiency requirements, good academic standing, and enrollment, and that the appointment is in compliance with applicable University and college policy.
   
   C. Applicants for GTA appointments must demonstrate written and oral fluency in the English language. For international students, a good command of written English will be evidenced by acceptable TOEFL scores and required entrance essays. Oral proficiency in English will be determined through the SPEAK test administered by Old Dominion University’s English Language Center personnel. A passing score on the SPEAK test is 50. Students who marginally fail the SPEAK test with a score of 45 will be offered the opportunity to participate in a re-test as a part of the GTAI Institute to determine if face-to-face communication is sufficient for holding a teaching assistantship.

2. Assistantships in Non-Departmental Units
   
   A. Each non-departmental unit, e.g., Career Management Center, Athletics, Registrar, submits to the Office of Graduate Studies a position description for each Graduate Administrative Assistant (GAA) position available within their unit. Along with the position description the unit will provide a list of those graduate programs in which students have or are proposed to have the interest and skills required. The position must require and provide an academically and programatically appropriate level of intellectual and professional activity. If the position description is approved, the department chair and graduate program director will coordinate with the non-departmental unit the selection of academically qualified and highly ranked students from their current or to-be recruited graduate students. The appointment of the GAA is made jointly by the academic and non-departmental administrative departments.
   
   B. Determination of the number and the availability of funds must be done as early as possible in order to facilitate offering these GAA positions to the top ranked applicants/students in the appropriate graduate programs. As part of the Dec-Jan budget submission process, non-departmental units must submit a justification for continued and increased support of GAAss, i.e., stipends and tuition waiver.

C. Each semester, the GAA’s immediate, non-departmental supervisor will evaluate the performance of the student and make recommendations for continuance or termination. This written evaluation will be reviewed by the graduate student and his/her GPD or academic advisor and a final set of recommendations made regarding continued awarding of the assistantship.

H. Appointment Workload

Graduate assistantships require 20 hours per week of service and are generally made for a period of one academic year with a nine-month performance period. For a GTA (instructors and administrative assistants), the work load should include no more than six hours of classroom teaching or nine contact hours of laboratory supervision per semester, plus normal preparation time.

Nominations should be submitted at least 30 days before the semester of employment in order to assure adequate time for processing. A graduate assistant funded through a grant or contract may be appointed for shorter periods if required by the conditions of the grant or contract.

An assistantship workload (20 hours per week) may be divided between teaching and research duties with the approval of the dean of the appropriate academic college. A graduate assistant appointment may be renewed upon nomination, review of qualifications, and satisfactory previous performance.

I. Additional Employment

Full-time (20 hours per week) graduate assistants are not permitted to accept additional on-campus employment during the period of their assistantship. In particular, graduate assistants (graduate teaching assistants, graduate research assistants, and graduate administrative assistants) may not be paid for part-time teaching or other campus employment for the University in addition to their normal responsibilities. Exceptions to this policy may only be made under unusual circumstances and only with the approval of the dean of the appropriate college or equivalent administrator upon the written recommendation of the graduate program director and the department/school chair. Any outside employment (i.e. off-campus) should be undertaken with caution and in consultation with the GPD. It should in no way adversely affect academic performance or assistantship duties and responsibilities.

Information on employment guidelines that are specific to international students may be obtained in the Office of International Student and Scholar Services.

J. Evaluation and Monitoring

All graduate assistants shall be provided with a written job description of their responsibilities, and be evaluated at least once by their supervisor(s) during the period of the award, preferably before the end of the first semester of service is completed. The evaluation shall be discussed with the assistant and a copy forwarded to the appropriate graduate program director, or chair.

K. Termination

A graduate assistantship normally ends when the period of appointment is concluded and the terms of the assistantship agreement are fulfilled. Otherwise, a graduate assistant may be terminated for the following reasons:

1. Resignation by the student. Resignation shall be in writing to the supervisor with a copy to the appropriate department chair, program director, and academic dean or equivalent administrator.

2. Failure of the student to perform his or her assigned duties adequately. Termination must be recommended by the student’s supervisor and approved by the department chair, graduate program director, and the appropriate academic dean or equivalent administrator.

3. Failure of the student to remain in good academic standing in accordance with the graduate continuance regulations.

4. Failure of the student to maintain enrollment in the requisite number of graduate credits.

5. Expiration of a grant or contract that funds the student’s stipend.
A. Any overpayment must be reimbursed to the University by the student as soon as possible after termination. Failure to repay the amount owed may result in legal action against the student for recovery.

B. If a student resigns from an assistantship or is terminated for reasons other than the completion of the appointment or expiration of the funding contract, the department chair or graduate program director should notify the appropriate academic dean or administrator as soon as possible and nominate a replacement if necessary.

C. A student who believes that he or she may have been unjustly terminated may appeal the decision. First, the student should meet with the supervisor, graduate program director, and department chair in an effort to resolve the situation. If this effort fails, the student may make an appeal in writing to the dean or administrator of the appropriate academic college. If the matter is not resolved, it will be referred to the Office of Graduate Studies and then be automatically referred the matter to the Graduate Appeals Committee for review. The decision of the Appeals Committee is final.

L. Grievance Procedure
Should a graduate assistant believe that his/her assigned duties and/or the workload required to fulfill these duties do not conform to university graduate catalog policies, he/she should first attempt to reconcile the grievance with his/her academic/nonacademic immediate supervisor. If the grievance is not resolved, the graduate assistant will ask his/her graduate program director (GPD) to mediate the grievance between him/her and the immediate supervisor. If the GPD is the student’s immediate supervisor, the GPD chair/dean’s designee will attempt to mediate. If the chair is the student’s supervisor, the GPD shall refer the case directly to the dean or the dean’s designee. If this course of action does not resolve the grievance, the GPD/chair/dean’s designee will seek mediation with the supervisor of the student’s immediate supervisor. If a resolution cannot be achieved, the chair/dean’s designee will appoint an ad hoc committee comprised of two senior faculty members from the student’s department and one senior faculty member from another department. If the student’s assistantship is a non-academic unit, the third member will be a senior level administrator from the nonacademic unit. Should the committee not resolve the grievance, it will be referred to the dean of the student’s college for a final decision. For matters involving sexual harassment and/or discrimination, please see the “Sexual Harassment Policy and Procedures” or the “Discrimination Complaint Procedure” in this catalog.

M. Recognition of Graduate Teaching Assistant Performance
Each academic year, two graduate teaching assistants will be recognized for their outstanding performance as a classroom or laboratory instructor. Recipients of the Outstanding Teaching Assistant Awards will receive a $1,000 financial award to be used to support their educational expenses. A request for nominations and criteria is distributed by the Office of Graduate Studies.

Graduate Fellowships
Fellowships are awards granted for scholastic achievement and promise. Their objective is to enable full-time students to pursue graduate studies and research leading to advanced degrees without requiring them to render any service. Part-time and/or nondegree students are not eligible. Fellows are responsible for payment of their tuition, in- or out-of-state, as applicable.

University fellows are chosen by their graduate programs and are supervised by their colleges. Applicants should indicate their intent to apply for a fellowship when applying for admission. Letters of recommendation, current transcripts, and any additional evidence of scholastic achievement that would assist in an evaluation of the student should be on file in the Admissions Office.

Tuition Grants
Tuition grants may be offered to full-time regular or provisional degree-seeking graduate students. Part-time tuition grants may also be available for Virginia residents. Applicants should indicate their desire to apply for tuition grants when applying for admission. Students holding tuition grants who withdraw from courses will be held personally liable for repayment of funds utilized. Students receiving tuition grants must be registered for nine graduate credits each semester and six in the summer.

Tuition Waivers
Graduate students who are awarded a fellowship or who are employed as graduate assistants may receive partial to full tuition assistance. The decision as to whether a student receives partial or full tuition is made by the students’ academic program.

Minimum Stipend Levels
In compliance with federal guidelines a graduate student must receive a minimum of $3,200 in assistantship or fellowship support for the fall and spring semesters and a minimum of $2,500 during the summer. Supplements to the minimum stipend amount can be made based upon the availability of funds and upon approval of the appropriate dean and the funding agency. The stipend is considered to be taxable income since it is payment for services.

Return of Tuition Assistance
A student who completes less than half of the assistantship or fellowship appointment will be required to return his/her full tuition assistance award to the university.
Graduate Policies and Procedures

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 Affairs when the student is going to be absent from classes for more than one week because of an illness. Student Affairs will notify the student’s course instructors of the absence on his or her behalf.

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 and included in the syllabus for the course. These guidelines will apply to each site at which the class is offered.

Continuous Enrollment Policy
Master’s, Education Specialist, and Pre-candidacy Doctoral Students.
Students who have completed all course work but are working during a given semester to complete other outstanding degree requirements (e.g., comprehensive examination, thesis, removal of an I or II grade) or wish to use University facilities and/or consult with faculty must be registered for at least one credit during that semester. In addition, graduate students must be registered for at least one credit hour in the semester in which they graduate. The program designated 999 course may be used to fulfill this requirement.

Registration for the required program designated 999 course is subject to the normal fees and regulations of the University.

Doctoral Students After Advancement to Candidacy. After successful advancement to candidacy, all doctoral students are required to be registered for at least one graduate credit hour each term (fall, spring, and summer) until the degree is completed, including the semester in which they graduate. Failure to comply with this requirement will result in charges to the student’s account for one graduate credit hour plus required fees for each semester after passing the candidacy examination. Students are not eligible for graduation until all charges are paid.

Additional Graduate Degrees Policy
Graduate students may pursue an additional graduate degree in any discipline at Old Dominion University. Students may request that graduate level course work used to fulfill requirements for one ODU graduate degree be applied to another graduate program. Such a degree may be sought subsequent to or concurrently with another degree. Approval of the graduate program directors and appropriate college deans is required.

Policy on Nondegree Credits to Complete a Degree
No more than 12 credit hours of graduate-level course work taken at Old Dominion University as a nondegree student may be applied toward a graduate degree or certificate. These 12 credit hours may include only coursework for which grades of B or higher are earned. These credit hours are in addition to the 12 credit hours that can be transferred from other institutions and through experiential learning.

Graduate Writing Proficiency
Each graduate department or program will develop specific policies and procedures for evaluating and, if necessary, upgrading student writing.

Graduate Pass/Fail
Master’s-level students may include pass/fail-graded experiences to fulfill a portion of their program requirements provided that they meet a University requirement of 24 credit hours of course work, of which at least 18 hours must be letter-graded course work, and any additional departmental or school requirements. The college, school and/or department administering the program shall determine which student course work shall be considered for pass/fail credit.

Doctoral students must take dissertation credit as pass/fail and may select from among the designated pass/fail-graded experiences a portion of their program requirements, provided that they take a minimum of 24 credit hours of letter-graded course work, of which at least 18 hours must be letter-graded course work, beyond the master’s degree, or equivalent, and meet any additional departmental or school requirements.

Deans may, at their discretion, designate courses as pass/fail, letter graded or both.

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.

Graduate Policy on GPA and Course Credit Following Separation and Readmission to the Institution
Students newly admitted to a graduate program following six or more continuous years of separation from the University may apply to have all previous course grades and credits removed from the calculation of GPA in the new degree program.

Students who wish to apply must complete the Policy on GPA Following Separation Form and have it approved and signed by the graduate program director, the department chair, and the college dean before submitting it to the Office of the Registrar.

If approved, all previous graduate courses and grades will remain on the transcript but will not be used in calculating the GPA for the new graduate degree program.

Declaration or Change of Major or Program
A provisional or regular graduate student who wishes to change to a program other than the one of original admission must make the request in writing to the main campus Admissions Office or to his/her site director. The student’s graduate record will be examined to ascertain what, if any, other supporting credentials must be submitted (e.g., test scores, letters of recommendation) prior to consideration for admission to the new program. If it is determined that no other supporting credentials are necessary, the student’s record will be submitted to the graduate program director of the new program, with a request for consideration of admission. The student will be notified in
writing of the decision. If not admitted to the new program, the student will be retained as a provisional or regular student in the original program.

When the new program requires other and/or additional supporting credentials, the student must submit these before consideration can be given to the change.

Credits earned toward a degree or certificate for the original program may or may not be accepted by the director of the new graduate program. All grades earned in the original program remain on the student’s transcript but only grades of B or higher are used to compute the GPA in the new program.

Conversion from Doctoral to Master’s Program

A student in a doctoral program may be converted to an appropriate master’s program in special situations. The doctoral student making satisfactory progress but wishing to leave the University may apply in writing to the new master’s program director, with copies to the current program director and the applicant’s committee. The new program director, in consultation with the current program director, will review the request following program policy and procedures.

In the case where a doctoral student fails to pass or complete a particular degree requirement, the student’s committee may recommend the student to a master’s degree program. The student will follow the procedure outlined in the preceding paragraph, except that this approach requires supporting documentation from the current committee.

Once the student is accepted, the new program director will send a memorandum and a Notice of Change of Status Form, to the Office of the Registrar. The memo should clearly note which of the Old Dominion University credits and approved transfer credits may be applied to the master’s degree, and which, if any, should be reserved for future doctoral work.

Normal Course Load

Every graduate program of study requires prior approval of the graduate program director or the approved faculty advisor. The minimum load for a full-time graduate student is nine graduate credit hours per semester. No more than 12 credit hours may be carried, except in unusual circumstances and with the permission of the graduate program director. In summer sessions, six credit hours constitute a full load.

 Unsupported graduate students registered for fewer than nine credit hours during regular semesters or fewer than six credit hours in summer sessions are classified as part-time graduate students. During regular semesters, six credit hours is considered three-fourths time, four credit hours is half-time, and three credit hours is quarter-time. During the summer term, four credit hours is considered three-fourths time, three credit hours is half-time, and one hour is quarter-time.

Graduate students who are appointed as teaching, administrative or research assistants who are supported by other funding sources must register for and complete a minimum of nine hours of graduate course work per semester and six hours in the summer. Those graduate students who are appointed as teaching, administrative or research assistants who are supported by other funding sources must register for and complete a minimum of six hours of graduate course work per semester and three hours in the summer. Doctoral assistants who have successfully advanced to candidacy and need only to complete the dissertation, must register for at least one hour of dissertation (899) every semester through graduation.

Course-Load Distribution

Graduate students should take care that the major portion of their course work is selected from 600- and 700-level offerings in pursuit of the master’s degree and from 800-level offerings for an education specialist or doctoral degree. At least three-fifths of the course work must be completed at these levels, and some programs have instituted more stringent requirements. Reference should be made to the appropriate section herein, and individual questions concerning the course-load distribution should be directed to the advisor.

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).

Re-Validation of Out-of-Date Graduate Credit

Academic credit granted outside the time limit established for graduate degrees (six years for master’s and education specialist degrees and eight years for doctoral degrees) must be validated by an examination before the work can be applied toward the requirements of a degree program.

To be re-validated, the work must have been completed at Old Dominion University or be acceptable as transfer credit in lieu of an Old Dominion University course.

The following procedure shall be used to re-validate out-of-date work:

1. The student must receive the permission of his or her graduate program director and the chair of the department/school or dean of the college in which the course is offered to validate the course credit. The form for re-validation of out-of-date credit shall be used to record all transactions and must be submitted to the Registrar’s Office upon completion of validation of work.

2. The graduate program director, department/school chair or dean shall make appropriate referrals to faculty member(s) (an individual or a committee) teaching the course to request that an examination be prepared and evaluated. Before the examination, the faculty member(s) shall inform the student of the area of knowledge or course content on which he or she is to be examined.

3. After the examination has been completed, the validation form shall be filled out, signed by the examining faculty member(s), and forwarded to the dean of the academic college offering the graduate degree program for approval.

4. Copies of the completed form shall be sent to the student, the graduate program director, and the university registrar.

5. Validation for any given course can be sought only once.

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, if given, are to be given at the time and in the location given on the Registrar’s Office website at www.odu.edu/registrar. Upon request of the instructor, exceptions to this regulation may be made only by the dean.

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.

Students enrolled in asynchronous, video streaming, CD Rom, or like courses that may not follow the traditional semester timetable will be
required to adhere to the examination schedule set by the professor. In addition, students not associated with a distant learning site, higher education center, or with main campus will need to secure a proctor to administer all tests, quizzes, and final exams. A postal fee will be incurred by the student for this service. For more information on proctoring, contact the Office of Distance Learning at 1-800-968-2638.

Probation and Suspension (Continuance)
The requirements and regulations set forth are to be construed as the minimal requirements established by the University. Students also are obligated to meet all additional requirements established by the appropriate program graduate.

Students who believe the probation or suspension was due to an error in a grade assigned should contact the Office of the University Registrar.

Degree Seeking Students
At the end of each semester-fall, spring, and summer- the records of students who do not maintain a 3.00 cumulative grade point average (GPA) are reviewed. Students who do not have a cumulative GPA of at least 3.00 will be placed on probation.

Probation/Suspension Policy
Graduate students on probation will have 12 credit hours to raise their cumulative GPA to 3.00. If they fail to achieve a cumulative GPA of 3.00 after completing the next 12 credit hours, they will be placed on indefinite suspension and prevented from enrolling in graduate courses. This does not affect the student’s status with regard to undergraduate courses.

Reinstatement Policy
The following policy was approved for the 2011 academic year. All conditions must be satisfied before reinstatement is authorized:

1. The student is responsible for initiating each of the following aspects of the request for reinstatement to the university:
   
   A. Developing a plan of study in consultation with and approved by the appropriate Graduate Program Director (GPD) of the program that the student is seeking to either continue enrollment or to be newly admitted. The plan of study must specify the initial 12 credit hours to be taken and the steps necessary to complete the degree requirements within the six-year (Master’s) and the eight-year (doctoral) time period as required by University policy. This plan should recognize that all prior courses in which grades of B- or below were earned must be repeated or replaced with an approved substitution. If reinstated, the student’s GPA will revert to .00 and courses with a grade of B or above will be treated as internal transfer credit and therefore will have no bearing on the GPA. Upon reinstatement, the student must achieve a cumulative GPA of at least 3.00 in the next 12 credit hours of graduate credit attempted.

   B. Providing to the GPD a written explanation and documentation of the factors and circumstances that contributed to the failure to achieve the academic standards as well as evidence that these issues have been resolved. Students who wish to maintain confidentiality regarding special medical or other personal issues, must obtain a letter from the division of student engagement and enrollment services certifying their validity and contribution to the suspension and that these issues have been or will be satisfactorily resolved prior to the reinstatement.

2. The GPD is responsible for each of the following steps of the request for reinstatement:
   
   A. Reviewing the student’s letter and any written documentation the student provides, assisting in the development of the proposed plan of study, and assessing the student’s potential for successful completion of the program.

   B. Assessing the potential impact of reinstatement on departmental resources.

   C. Submitting a recommendation on the student’s request to the department chair. Note: (The GPD and the chair must agree for the student to be reinstated at the department level.)

3. If reinstatement is approved, the student will be informed in writing and the steps outlined in 1.a. and 1.b. of this policy shall be followed. A copy of the letter and the approved plan of study shall be forwarded to the Office of Graduate Studies. The Office of Graduate Studies will work with the Office of the Registrar to ensure the academic record is updated so the student may resume his or her study.

4. Upon reinstatement:
   
   A. All courses with grades of B- (2.70) or below will be dropped from consideration in the calculation of the grade point average for continuance or graduation. These grades will remain on the student’s transcript, but the courses will not be counted toward the degree.

   B. Courses with grades of B or above may be counted toward the degree but they will not be used in the calculation of the GPA.

   C. Reinstated students must achieve a cumulative GPA of at least 3.00 upon completion of the next 12 hours of credit attempted. Subsequent performance will be monitored by the GPD.

5. If the student’s request for reinstatement is denied the student must be informed in writing. A copy of the letter shall be forwarded to the Office of Graduate Studies along with original materials submitted by the student. The student has the right to appeal the decision to the Graduate Appeals Committee. The student must resubmit the written letter and documentation as outlined in 1.a and 1.b to the Graduate Appeals Committee.

6. The Graduate Appeals Committee will request a written evaluation from the GPD. The GPD’s evaluation must address the reasonableness of i) the proposed plan of study; ii) the potential for successful completion of the program, and, iii) the potential impact of reinstatement on departmental resources.

7. The Graduate Appeals Committee will render its decision and inform the Office of Graduate Studies. The Office of Graduate Students will send a letter to the student, with a copy to the GPD, informing him or her of the Graduate Appeals Committee’s decision. If the Graduate Appeals Committee supports the GPD’s original decision, the student shall remain separated from the program. If the Graduate Appeals Committee approves reinstatement, the steps outlined in 1.a. of this policy shall be followed. The decision of the Graduate Appeals Committee is final.

8. A student may be reinstated only once.

Non-degree Students
Certificate and Licensure Program Students
Probation/Suspension Policy
Students who have been permitted to pursue a certificate or licensure program must achieve a cumulative GPA of 3.00 after six or more credit hours of graduate coursework. If they fail to do so, they will be placed on probation and must raise their cumulative GPA to 3.00 within the next six credit hours. Students who fail to achieve a cumulative GPA of 3.00 after completing the additional six credit hours will be indefinitely suspended and prevented from enrolling in graduate courses. This does not affect the student’s status with regard to undergraduate courses.

Reinstatement Policy
A suspended certificate or licensure student seeking reinstatement should follow the procedures outlined earlier in this policy under Reinstatement Policy for Degree Seeking graduate students.
Life-long Learners

Probation/Suspension Policy
Students who have not been formally admitted into a degree granting program, a certificate or licensure program but desire to take graduate courses are defined as *life-long learners*. Life-long learners must achieve a GPA of at least 3.00 after six credit hours. Students who fail to achieve a 3.00 after completing an additional six credit hours will be indefinitely suspended and prevented from enrolling in graduate courses. This does not affect the student’s status with regard to undergraduate courses.

Reinstatement Policy
A life-long learner who has been suspended from graduate study must formally apply and be admitted into a degree program, a certificate or a licensure program before being allowed to take additional graduate courses.
University Requirements for Graduate Degrees

Completion of Requirements
Graduate students who complete their master’s or education specialist degree requirements within six years, and doctoral students who complete degree requirements within eight years, following admission to Old Dominion University will qualify for the degree by fulfilling the requirements in the catalog in effect at the time of their first enrollment. (See military service exception under Requirements for Graduate Degrees.) Students (including part-time) who do not complete their graduate degree requirements within these time periods must project their graduation and fulfill the requirements in the catalog in effect during any of the six or eight years, respectively, preceding graduation. If a catalog other than the catalog of the year of initial enrollment is to be used, written permission of the graduate program director and dean must be obtained. Graduate students should consult their advisors to determine if any out-of-date credits may be re-validated by examination.

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 create their own degree requirements by selecting partial requirements from more than one catalog.

Graduate Assessment Requirement
Old Dominion University has developed an institution-wide plan to assess the quality of its graduate academic degree programs. In addition, students are asked to assess their experiences with support services, University administration, and other aspects of their University experience. Students will complete the assessment at the end of their graduate degree program.

Prior to the completion of degree requirements, all graduate students must complete their assessment. Students will receive advanced notice of their eligibility to complete the measures, which may be accessed through the University’s site on the World Wide Web. Failure to complete the assessments normally precludes the student’s right to receive his or her graduate degree. Assessment results are used to improve student learning and the educational experience at Old Dominion University, and they do not become part of students’ records. Confidentiality is assured, as only aggregate data are reported and used in analyses.

Responsible Conduct of Research Policy
1. All graduate students must complete the Collaborative Institutional Training Initiative (CITI) seven core RCR training modules. These modules address the following: Misconduct (falsification, fabrication, and plagiarism); Data acquisition, management, sharing and ownership; mentor/ trainee relationships; Publication practice and responsible authorship; Peer review; Conflicts of interest; and, Collaborative research.
   Completion of the RCR modules will be tracked through the CITI website and must be completed within twelve months after first enrolling. As appropriate to their general field of study, students can complete the Biomedical Social and Behavior Research, Physical Science, or Humanities RDR track offered by CITI to fulfill this requirement.

2. All investigators conducting human subjects research protocols (both Exempt and Non-Exempt) as well as all graduate students enrolled in Thesis and Dissertation projects involving human subjects are required to complete the CITI (Collaborative Institutional Training Initiative) Program for Human Subjects Research.

3. All investigators conducting animal subjects research protocols as well as all graduate students enrolled in Thesis Dissertation projects involving animal subjects are required to complete the LATA (Laboratory Animal Training Association) training program.

Master’s Degree
This section specifies the minimum requirements for a master’s degree from Old Dominion University. Some colleges, schools and departments have requirements in addition to the requirements described below. In seeking a master’s degree, each master’s student accepts responsibility for the following University requirements as well as any imposed by the major department.

The master’s degree is awarded in recognition of the candidate’s command of a comprehensive body of knowledge and ability to perform productively in the field of study. All master’s degrees require a minimum of 30 semester hours of graduate credit. No more than 12 credit hours taken at other institutions may be counted toward a master’s degree at Old Dominion University. All requirements for a master’s degree must be completed within a six-year period. Exceptions to these time limits must be approved by the graduate program director, the college dean. Academic credits older than six years at the time of graduation must be re-validated by an examination before the work can be applied to a master’s degree. See the “Policy on Re-validation of Out-of-Date Graduate Credit.” Students whose graduate study is interrupted by military service will be granted an extension of time for the period of their military service, not to exceed five years.

Candidates for the master’s degree at Old Dominion may have the choice of two options: the thesis option or the nonthesis option. The choice will depend upon the availability of the two options within the selected discipline, the professional interests of the candidate, and the advice and approval of the appropriate graduate program director.

Thesis Option
A minimum of 30 semester credits is required, including 24 semester credits in approved course work and six semester credits in research. The candidate is required to prepare and present a thesis or equivalent creative work. A final oral examination covering the research is required. A comprehensive written and/or oral examination covering the program of study may be required.

Nonthesis Option
A minimum of 30 semester credits of approved course work is required, including one or more courses at the conclusion of study that deal directly with special topics and/or training related to current problems or research in the discipline. A comprehensive written and/or oral examination, or an approved equivalent, on the program of study is required.

Student Advising
The Master’s Degree
The graduate program director in consultation with the student, will assign a graduate advisor who must be certified for graduate instruction. An annual evaluation may include student’s performance in courses, assistantships (teaching, research), the development and re-evaluation of his/her plan of study, guidance in selecting projects and mentors, preparation and scheduling of qualifying/comprehensive or equivalent exams, time management, and obtaining employment or further education. The advisor’s annual evaluation and recommendation will be shared with the student and the graduate program director.

Program of Study
Prior to completion of 12 semester hours, the degree candidate is required to prepare a program of study with the guidance of the advisor. The purpose of the program of study is to ensure that the student organizes a coherent, individualized plan for the course work and research activities. The program of study is to be consistent with the requirements for the degree as described in the catalog and must be approved by the graduate program director. The
successful completion of the program of study, along with the collateral reading, research, practica, etc., will enable the student to demonstrate the high level of professional competence required of all graduate students in their respective fields.

**Master’s Examination**

A comprehensive written examination and/or oral examination, or its equivalent, is required under the nonthesis option and, depending on the program, may be required under the thesis option. The examination tests the candidate’s competence in the fields covered by the program of study. The nature of the master’s examination will depend on the degree sought and the requirements of the major department and examining committee. A program may propose, through the appropriate college graduate committee and academic dean, replacing the master’s examination with an equivalent requirement. Such equivalent requirements shall be approved by the associate vice president for graduate studies. For further information, the student should consult the section on requirements under each degree program.

The examining committee is appointed by the graduate program director with appropriate notification to the student. The examining committee is composed of a minimum of three members who may or may not be those who serve as advisors or members of the thesis advisory committee. Members are expected to be certified for graduate instruction in the major department/school and college. This examination may not be scheduled until all major requirements have been satisfied except the final semester completion of the course work and/or the thesis.

The results of the examination must be received in the Office of the Registrar at least two weeks prior to the end of the semester. In order to pass the final examination or approved equivalent, a master’s degree candidate must have a favorable vote from a majority of the examining committee. A student who has failed the examination may repeat it once. Students who fail the comprehensive examination twice cannot subsequently elect a thesis option. At the discretion of the graduate program director, a student who passes the examination but does not graduate within twelve months may be required to repeat the examination.

**Thesis Advisory Committee**

The graduate program director, in consultation with the student, appoints a thesis advisory committee of at least three graduate faculty members with the backgrounds and interests necessary to counsel, direct, and evaluate the proposed research and progress toward completion of the program of study.

Nonfaculty personnel may be recommended for inclusion on a graduate thesis advisory committee. Such personnel should meet the current standards of academic training and research experience expected of faculty members serving on such committees. If the nonfaculty personnel are to be voting members of the advisory committee, approval of the inclusion of such personnel should be sought by the graduate program director through petition to the appropriate academic college dean, citing the particular advantages of such a nomination. In all cases, the committee chair must be a resident graduate faculty member.

**Thesis**

The candidate for the master’s degree whose program of study includes a thesis is required to prepare and present a thesis (or equivalent in creative work) acceptable to the thesis director and committee, the graduate program director, and the appropriate academic dean. The thesis must represent in content and methods the skills, disciplines and knowledge required for graduate study, including competence in written language. The character of the final work must testify to the distinction of the student and standards of the University. The thesis or equivalent creative work must be worthy as a culminating experience for graduate study. Candidates will be required to defend the thesis in an oral examination. The Thesis Acceptance Form must be submitted to the Office of the Registrar upon completion of Part A of this form. The Thesis Delivery Form must accompany this form.

The candidate should consult the Guide for Preparation of Theses and Dissertations available from the Office of Graduate Studies’ web site or from the Dean’s office of the appropriate college.

**Change From Thesis to Nonthesis Option**

A student who wishes to change from the thesis option to the nonthesis option for the master’s degree must obtain the permission of the thesis advisory committee and the graduate program director. The permission must be forwarded to the Office of the Registrar prior to the last semester for the intended graduation using the Change of Status Form. The candidate must meet all requirements of the nonthesis option. A maximum of three credits earned in thesis research can be counted toward the degree requirements for the nonthesis option. The thesis advisory committee must indicate that the thesis research work was productive in and of itself and warrants credit as a special problem or special topics course.

**Departmental Requirements**

Individual colleges and/or programs may establish requirements above and beyond those set by the University as minimum. Students are obligated to follow the requirements of the appropriate graduate program section of the catalog in effect at the time of their first enrollment for this degree.

**Education Specialist Degree**

The Education Specialist degree (Ed.S.) normally is granted at the end of the sixth collegiate year of study and as such falls between the master’s degree and the doctorate in time; however, it is not necessarily viewed as intermediate between the two degrees. The education specialist degrees provide advanced professional preparation for various positions in education.

For admission to an education specialist program, the University requires a master’s degree from an accredited institution and a minimum grade point average of 3.00. Some programs have additional requirements such as a minimum Graduate Record Examination (GRE) aptitude score, grade point average, and graduate courses in specific areas.

The education specialist degree requires a minimum of 30 semester hours of graduate credit beyond a master’s degree. A program may range from 30 to 39 hours, depending on the background and needs of the student. All requirements for the degree must be completed within a six-year period. Students must pass a written comprehensive examination and satisfy research requirements. Specific course requirements are found in the appropriate section of this catalog.

**Doctoral Degrees**

Old Dominion University offers five doctoral degrees:

1. Doctor of Engineering (DE)
2. Doctor of Nurse Practice (DNP)
3. Doctor of Physical Therapy (D.P.T.)
4. Doctor of Psychology (Psy.D.) through the Virginia Consortium Program in Clinical Psychology, and the
5. Doctor of Philosophy (Ph.D.)

**Doctor of Engineering**

The Batten College of Engineering and Technology offers a Doctor of Engineering program in addition to traditional Doctor of Philosophy programs. The purpose of the Doctor of Engineering program is to provide the Commonwealth and the nation with exceptionally educated engineering practitioners. These individuals will have developed high-level capabilities to provide innovative solutions in specialized engineering endeavors. The graduates of the program will meet the highest standards for advanced level engineering and leadership positions in industry and government.

The curriculum consists of a minimum of 48 credit hours of graduate work beyond the Master’s degree including 18 credit hours of common courses (Methodologies for Advanced Engineering Projects, Project Management, Engineering Leadership, Engineering Ethics, Financial Engineering,
Doctor of Nurse Practice

Doctor of Nurse Practice (DNP) – Advanced Practice

This program is designed to develop the roles and practice skills of advanced practice nurses including nurse practitioners, nurse midwives, clinical nurse specialists and nurse anesthetists. Nurses enrolled in this program will be prepared to serve as leaders, researchers, business owners and expert clinicians capable of transforming lives and the healthcare of the communities they serve. Specific emphasis is on addressing the needs of underserved and vulnerable populations.

Doctor of Nurse Practice (DNP) – Nurse Executive

This program is designed to prepare the top level nurse executive for health system. The program outcomes are consistent with the American Organization of Nurse Executive guidelines for nurse executive practice. Content focuses on executive leadership skills, working with vulnerable populations, fiscal and human resource management, quality magnet achievement, emerging technology and organizational research in clinical issues. Students participate in executive internships throughout the program in their home area. Upon program completion, graduates are eligible to take the national certification examination.

Doctor of Physical Therapy

Old Dominion University offers a professional doctorate degree in physical therapy (D.PT.) that provides individuals with the knowledge, skills, and clinical internship experiences required to sit for licensure in any jurisdiction in the United States. This curriculum is comprised of a series of required didactic and clinical education courses prescribed in a specific sequence that offers students the knowledge, professional skills and competencies necessary for entry into the practice of physical therapy. In the place of a dissertation, each student is required to develop a selected case study based upon the observations of a patient examined and treated during one of the clinical internships, a research proposal, and a research project with platform and poster presentations. In addition to satisfactorily completing the didactic and clinical education curriculum, students must pass both written and oral comprehensive examinations prior to graduation.

The curriculum consists of 117 credit hours over a three-year, nine-semester period of time including summers. There are five full-time clinical internships in the three years of study totaling 40 weeks. For details on admission and program requirements see the School of Physical Therapy section of this catalog.

Doctor of Psychology

The Department of Psychology participates in a program that awards the Doctor of Psychology (Psy.D.) in clinical psychology. The emphasis of the program is on the training of highly skilled clinicians who will work in those areas of society where mental health care needs are not being met by the present system. The program is fully accredited by the American Psychological Association. The program consists of a minimum of four years of post-baccalaureate training. The curriculum involves a specific sequence of required courses to ensure mastery of the knowledge and skills necessary for professional competence. The first two years (six semesters) provide for an intense program of basic behavioral science and clinical courses and practica. In the third year, course work includes technology in mental health care administration, practica, and concentration courses. The other main activity is the doctoral dissertation. The one-year full-time clinical internship is completed during the fourth year. For details on admission and program requirements, contact:

Virginia Consortium Program in Clinical Psychology Office
Pembroke Two
Suite 301
287 Independence Blvd.
Virginia Beach, VA 23462

Telephone: (757) 518-2550

Doctor of Philosophy

Programs leading to the Ph.D. are designed to help superior students develop the capability to become creative leaders in their chosen fields. The degree is awarded upon mastery of the subject area, the development of appropriate research skills, and a concentration of knowledge in the field of specialization.

It is important to recognize that the attainment of this degree is not a matter of accumulating course credits and satisfying residency and language or research skill requirements, even though minimum requirements for these categories are set forth by the University. The final basis for granting the degree shall be the candidate’s knowledge of the field of study and his or her demonstrated ability to do independent, original, scholarly research.

Each graduate program is responsible for setting out the requirements and procedures appropriate to its area of study. The requirements and regulations set forth below are to be construed as the minimal requirements established by the University. Students also are obligated to meet all additional requirements established by the appropriate graduate program.

Prerequisites for Admission

The applicant must complete the appropriate application for admission, submit official transcripts of all college- or university-level work, and supply letters of recommendation and official results of test scores as specified by the individual program. Baccalaureate and post baccalaureate work must reflect superior performance.

Minimum Requirements

Minimum degree requirements for the Doctor of Philosophy which must be considered in preparing the preliminary plan of study are:

1. Satisfactory completion of at least 48 semester hours of post-master’s course work, including the dissertation or equivalent level of performance course work;
2. Demonstrated competency in research skills as required by the specific graduate program;
3. The passing of written and oral candidacy examinations at the end of the program of course work;
4. The completion of a dissertation representing independent, original research worthy of publication in a refereed scholarly journal; and
5. The successful oral defense of the dissertation before an appropriately selected committee of faculty knowledgeable in the field of the dissertation research.

Time Limits

All requirements for a doctoral degree must be completed within eight calendar years from the date of beginning the initial course following admission to the doctoral program. Exceptions to these time limits must be approved by the graduate program director and the college dean. Academic credits older than eight years at the time of graduation must be validated by an examination before the work can be applied to a doctoral degree. See the “Policy on Validation of Out-of-Date Graduate Credit.” Students whose graduate study is interrupted for military service will be granted an extension of time for the period of their military service, not to exceed five years.

Student Advising

The Doctoral Degree

Before completion of nine semester hours, the graduate program director, in consultation with the student, will assign a program advisor or advisory committee. The advisor of advisory committee members must be certified for graduate instruction and will meet with the student to evaluate student’s academic progress. Among the advisor’s/advisory committee’s responsibilities are a review of student’s performance in courses, assistantships (teaching research), the development and reevaluation of his/her plan of study, guidance in selecting projects and mentors,
preparation and scheduling of qualifying/comprehensive or equivalent exams, time management, and obtaining employment or further education. These annual evaluations are signed by the advisor/advisory committee and the student. The evaluation is filed in the student’s record and a copy given to the graduate program director.

Before completion of nine semester hours, the graduate program director, in consultation with the student, will assign a program advisor or advisory committee. The advisor or advisory committee members must be certified for graduate instruction and will meet with the student at the end of each semester to evaluate student’s academic progress. Among the advisor’s/ advisory committee’s responsibilities are a review of student’s performance in courses, assistantships (teaching, research), the development and re-evaluation of his/her plan of study, guidance in selecting projects and mentors, preparation and scheduling of qualifying/comprehensive or equivalent exams, time management, and obtaining employment or further education. These annual evaluations are signed by the advisor/advisory committee and the student. The evaluation is filed in the student’s record and a copy given to the graduate program director.

Plan of Study
Before completion of nine semester hours, the student shall prepare a plan of study with the aid and approval of the advisor or advisory committee. The plan of study also should be approved by the graduate program director to ensure that it meets established requirements. Failure to present the plan on time may prolong the period of study for the degree. Before drawing up and approving the plan the graduate program director should verify that there is on file a set of transcripts of all undergraduate and graduate work the student has taken. When appropriate, a diagnostic examination also may be used in developing a plan of study.

The successful completion of all work indicated on the approved plan of study is a fundamental prerequisite to the granting of the degree.

Institutional Credit Requirements for Graduate Degrees
A majority of the total credits for completion of the master’s and doctoral degree must be courses offered by ODU. Some colleges, schools and departments may have additional requirements that must be fulfilled. Students interested in the opportunity to apply transfer or experimental learning should refer to the policy on Experiential Learning Credit Options and the policy on the Evaluation of Transfer Credit in the University Graduate Catalog

- New policy defines institutional credit in terms of proportion of ODU courses required to complete graduate degrees. Eliminates current policy requirement of full-time enrollment for a minimum of two semesters.
- Follows SACS guidelines and language
- Allows graduate programs to establish additional requirements which may include physical presence on campus and full-time enrollment.
- New policy applies to all degree seeking to all graduate students.

Research Skills
Program skill requirements reflect the University’s expectations of one or more significant skills distinct from the dissertation but fundamental to doctoral and postdoctoral research. Specific skill requirements vary with programs. Traditionally, a reading knowledge of one or more foreign languages has been required; more recently a demonstrated proficiency in computer science or quantitative methodology has been introduced.

Under University policy, each academic program leading to the Doctor of Philosophy establishes its own requirements for research skills. Responsibility for the level of competency, the nature of validating the competencies, and the standards utilized in the evaluation rests with the department/school that offers the program. Descriptions of individual programs should be consulted for appropriate regulations and procedures. Information about schedules of examination, standards, and general procedures is available from all departments/schools and graduate program directors.

The research skills requirement must be met before taking the candidacy examination. For specific information, the student should consult the appropriate program, school or college.

Candidacy Examination
The written and oral examinations qualifying a student for candidacy for the degree of Doctor of Philosophy are comprehensive in nature. The graduate program director is responsible for coordinating the administration of the written and oral candidacy examinations and will appoint a committee to administer the exams. The examination committee will be made up of at least three faculty members, all of whom must be graduate certified. Before taking the qualifying examinations, the student must meet the appropriate departmental, school and college requirements and have the recommendation of the advisor or advisory committee. The examinations are taken near the end of the student’s coursework. The candidacy examinations are usually taken during the semester in which the last formal graduate courses listed in the study plan are taken.

When the student and the advisor or advisory committee have determined that the examinations should be taken, the student should obtain a Request for Permission to Take the Ph.D. Candidacy Examination no later than one month before the date of the first examination. The student should secure the signature of the advisor or advisory committee and submit the form to the graduate program director, who will verify that the student meets the prerequisites for the candidacy examinations. The graduate program director should be consulted on the schedule of the examinations. Once permission has been granted, postponement of the examinations must have the approval of the graduate program director.

After successful completion of the written examination, an oral examination, which must be taken prior to the end of the next semester, is given addressing topics discussed in the written examination and possible additional materials. The oral examination is a serious and integral part of the qualifying procedure.

A student must pass both the written and oral candidacy examinations. The written examination must be passed before the oral examination may be taken. For either the written or oral examination, more than one negative vote from the examining committee will result in a failure. A failed written examination must be retaken successfully within one year. A student who passes the written examination on the first attempt need not repeat the written exam in the event of failing the oral exam. A failed oral exam, which also may be attempted a second time, must be retaken prior to the end of the next semester.

Neither the written nor the oral examination can be passed conditionally. A pass cannot be made contingent upon doing extra courses, additional projects, etc.

The examination committee will report, in writing, to the graduate program director and the dean the results of the examinations. Students must be registered in any semester in which they are scheduled to appear for the examination.

Dissertation Committee
After the candidacy examinations have been passed, the dissertation committee is formed to supervise the dissertation research. Membership of the Dissertation Committee may overlap with the Advisory Committee if one has already been established (see section under Student Advising). Faculty who agree to serve on a dissertation committee understand that they are committed to serve until the dissertation is completed. The committee must have approval of the graduate program director and the college dean using the Doctoral Dissertation Committee form. Replacement of the dissertation committee chair or any other substantial change in the composition of the dissertation committee initiated by the student requires that the reconstituted dissertation committee re-evaluate and re-approve the dissertation prospectus. The committee should have at least three Old Dominion University faculty members; one faculty member must be
from outside the major department/school. The chair must be certified for graduate instruction and be an authority in the field of specialization of the proposed dissertation. Committee membership may be extended to a non-University person with special knowledge of the dissertation subject area. Voting privileges can be provided such specialists upon the recommendation of the chair and approval of the graduate program director and the college dean. No more than one-third of the committee’s membership can be individuals external to the University. Adjunct faculty members who are certified for graduate instruction may be appointed as voting members of the committee upon the recommendation of the director of the dissertation committee and approval of the graduate program director and the college dean. The dissertation and the final oral defense of the dissertation must have the majority approval of the dissertation committee.

**Change in Dissertation Committee**

Changes must be made in advance of the oral dissertation defense. Changes made in the dissertation committee are made only with the approval of the graduate program director and the college dean.

**Advancement to Candidacy**

Advancement to candidacy is a formal step that occurs after the student has:

1. passed the Ph.D. written and oral candidacy examinations,
2. filed an approved dissertation proposal, and
3. completed formal course work.

In some colleges advancement to candidacy may be equivalent to “all but dissertation” (ABD) status. Please check with the appropriate graduate program director for further information.

**Dissertation Preparation**

General regulations and procedures governing the submission of a doctoral dissertation are given in the Guide for Preparation of Theses and Dissertations. Full information, including detailed procedures and qualifications for undertaking a doctoral dissertation, is available in the student’s major/school and should be obtained by the student and the dissertation advisor at the beginning of the planning for research and writing of a dissertation.

After approval of the dissertation proposal, the chair of the dissertation committee shall recommend the student’s admission to candidacy to the graduate program director and the dean.

**Oral Dissertation Defense**

The format of a defense is determined by the dissertation committee with the approval of the graduate program director. The defense is chaired by the chair of the dissertation committee. The chair will act as moderator, ruling on questions of procedure and protocol that may arise during the defense. The chair of the defense represents the college dean, to whom he or she makes a complete and prompt report on the defense. The chair should also promptly notify the graduate program director of the results of the defense.

The oral dissertation defense is scheduled for the time and place approved in the request for the dissertation defense. A two-week lead time is required for scheduling. This information is published in the appropriate University news media. The oral dissertation defense is open to the University community; all interested members are encouraged to attend the examination.

The aim of the defense is to explore with the candidate the methodological and substantive contributions of the already approved dissertation. Majority approval by the examiners constitutes successful completion of the defense of the dissertation. In case of failure, the dissertation committee may recommend that the candidate be dropped or be allowed re-examination no earlier than three months after the first examination.

Satisfactory performance on this examination and adherence to the regulations outlined above complete the requirements for the degree. The Dissertation Acceptance and Processing Form must be submitted to the Office of the Registrar with the completed dissertation upon completion of requirements for the degree.

**Dissertation Load Registration and Leave of Absence**

All doctoral students who have advanced to candidacy are required to be continually registered for an appropriate number of dissertation units during each semester and summer session. (See “Graduate Student Registration Requirement.”)

A candidate who finds it necessary to be excused from registration for a semester must report formally, before the beginning of the semester, to the dissertation committee and the graduate program director and request by petition a leave of absence using the Permission to Take a Leave of Absence from Graduate Studies Form. A leave of absence may not exceed one year and may not be repeated. During a leave of absence, the candidate will not be entitled to assistance from the dissertation committee or to the use of University facilities. The granting of leave of absence does not change the candidate’s responsibility for meeting the time schedule for the completion of degree requirements.

**Thesis and Dissertation Procedures**

Graduate students who plan to write theses or dissertations should obtain copies of the Guide for Preparation of Theses and Dissertations from the Office of Graduate Services web site for use in conjunction with any style manual preferred or required by their respective departments/schools or colleges. Minimum University requirements for the preparation of theses and dissertations are contained in the guide; departments/schools and/or colleges may set additional requirements.

Information regarding compliance with policies regulating research involving human subjects, animals, radiation, potential biohazards (e.g., recombinant DNA), lasers, controlled substances, or hazardous materials and policies regarding intellectual property can be found on the Office of Research web site at www.odu.edu/ao/research/IP-Main.htm.

All research involving human subjects, animal care and use, radiation, potential biohazards, lasers, controlled substances, or hazardous materials requires the approval signature of the appropriate review committee chair or designee, or safety officer, prior to the initiation of any research activities.

Students should be aware that in most cases, the University owns intellectual property created with University resources and can claim an interest in the intellectual property. Intellectual property must be disclosed to the Office of Research using an invention disclosure form. In order to fulfill its contractual obligations, and to adhere to the Policy on Patents and Copyrights, it may be occasionally necessary for the University to temporarily delay publication of a thesis or dissertation that contains potentially patentable information in order to ensure the availability of worldwide patent protection. Such situations would arise when a faculty member directing the research, under his/her duty as a University employee, discloses potentially patentable subject matter to the Office of Research. A student’s degree requirements can still be fulfilled even though publication of the thesis or dissertation is delayed.

Presentation of a thesis or dissertation in partial fulfillment of degree requirements necessitates submission of the finished original work to the dean of the college for final approval, following oral defense and signature approval by the thesis/dissertation committee and graduate program director. Approval of the dean of the college should be obtained prior to reproduction of the original work, in the event corrections need to be made.

Upon final approval, the student must arrange for reproduction of four additional copies of the thesis or dissertation, for a total of five for submission to the Office of the Registrar for binding. Certain doctoral programs require more than five copies; students should consult appropriate graduate program directors.

A final, approved, error-free original and four copies (more are required by some programs) of the thesis or dissertation must be received by the Office of the Registrar no later than the day prior to the beginning of the final examination period; that is, the last day of classes of the semester in
which the degree will be taken. The completed document, approved by the dean, and copies should be accompanied by the following forms: Binding Fee Receipt, Thesis/Dissertation Acceptance, Results of the Comprehensive Examination, and Thesis/Dissertation Delivery. The date on the title page of the thesis/dissertation should be within the same semester that the student intends to graduate.

A microfilming fee is also required of dissertation writers; a copyrighting fee is optional.

The student may order additional copies of the thesis or dissertation by making payment to the Office of Finance at the same time the required copies are ordered.

**Experiential Learning Credit Options at the Graduate Level**

Old Dominion University offers a program for assessing college-level knowledge gained through work and life experience and self-study. Students should meet with their advisors, site directors, or distance learning representative to determine how experiential learning credit affects their degree planning. A student may earn a maximum of six semester hours at the graduate level through the following mechanisms:

1. **Knowledge-based examinations.** Upon approval of the student’s graduate program director and the appropriate chair and/or dean of the college involved, a student may take a knowledge-based examination, and with a satisfactory score, receive academic credit for the course(s).

2. **External examinations.** Upon approval of the student’s graduate program director and the appropriate chair and/or dean of the college involved, a student may submit satisfactory scores of professional examinations that are evaluated and recommended for graduate-level credit by the American Council on Education, and receive academic credit for the relevant course(s).

3. **Credit for training.** Upon approval of the student’s graduate program director and the appropriate chair and/or dean of the college involved, a student may submit documentation of completion of professional and/or military training that is evaluated and recommended for graduate-level credit by the American Council on Education, and receive academic credit for the relevant course(s).

4. **Portfolio development.** Upon approval of the student’s graduate program director and the appropriate chair and/or dean of the college involved, a student may develop a portfolio for a graduate-level course(s) offered by Old Dominion University to earn academic credit. Portfolios are submitted to the Office of Experiential Learning and Testing and assessed for credit by the appropriate department and/or college involved.

The following regulations for experiential learning credit apply:

1. Experiential learning credit be granted upon the written recommendation of the student’s graduate program director and the chair of the department/school (or designated faculty assessor) having jurisdiction over the courses involved.

2. Applicability of experiential learning credit toward a specific degree program is subject to departmental/school approval.

3. A student may not receive credit for the same course in which any grade has been previously awarded, including W (withdrawal), F (fail), or O (audit).

4. No letter grades be entered on the student’s transcript for experiential learning credit, but that this credit be treated in the same way as transfer credit with “Pass” (P) and not be counted in the student’s grade point average.

5. A student request experiential learning credit as early as possible upon admission to degree status. A student must meet with the degree program advisor and the director at the beginning of his or her academic career at Old Dominion University to determine how the experiential learning program may be applicable to the degree.

6. Satisfactory scores for knowledge-based examinations and professional examinations are determined by the appropriate department/school and/or dean of the college involved.

7. Necessary documentation for academic credit for professional training is determined by the appropriate department/school and/or dean of the college involved.

8. A maximum of six semester hours of graduate credit may be earned through experiential learning mechanisms. The six hours is included in the maximum number of graduate credits that may be transferred into a graduate program at Old Dominion University. Experiential learning credit does not count toward the University’s residency requirement.

9. A student in a certificate or endorsement area may earn a maximum of six credit hours through experiential learning credit to apply to a certificate, endorsement or teacher licensure program. Experiential learning hours gained in these programs would be applicable to approved degree programs at Old Dominion University. In an approved graduate degree program at Old Dominion University, a student may earn six credit hours in a certificate or endorsement program that is applicable to the degree program has met the maximum number of experiential learning credit hours. No additional experiential learning credit may be applied to that graduate degree program.

**Graduate Credits by Transfer**

A maximum of 12 semester hours of graduate credit may be applied into a graduate degree program from graduate credits earned as a nondegree graduate student at Old Dominion University. An additional combined maximum of 12 credits may be transferred into a graduate degree program from graduate credits earned through experiential learning credit options and graduate credits earned at another accredited institution. Exceptions are allowed in the case of an approved interinstitutional program.

Transfer credit will be given only for those courses that are certified as being applicable toward a comparable degree or certificate at the institution that offered the courses, and that were completed with a grade of B or better. Specifically, in-service courses that are established especially for groups of teachers and are not intended by the home institution to be part of a degree program will not be acceptable for transfer at Old Dominion University.

Exceptions to this regulation may be made only with the approval of the graduate program director and, the dean of the college. In case of doubt, it is the responsibility of the student to show that the course in question would be acceptable toward a comparable degree at the home institution.

No credit toward a graduate degree may be obtained by examination (except through the experiential learning options noted above) or correspondence study.

A student who wishes to transfer credit earned prior to admission to a degree program at Old Dominion University must submit a special request for evaluation of transfer credits through the graduate program director to the Registrar’s Office. Following admission to the degree program, the student should obtain written permission from the graduate program director before registering for a course at another institution with the intention of transferring the credit for that course toward a graduate degree at Old Dominion University.

In no case is a transfer of credit final without the signed approval of the graduate program director and the academic dean on the Evaluation of Transfer Credits Form.

**Evaluation of Transfer Credits**

In the case of a student who has changed programs of study at Old Dominion University, the graduate program director of the new program may or may not accept any previously transferred course work or work completed in the former programs.
Credits accepted for transfer from another institution will satisfy partial hour requirements, but grades earned in such courses are not calculated in the student’s overall grade point average.

No credits will be accepted toward the degree or certificate if more than six years old (eight years for doctoral application), unless properly validated by examination.

**Certificate of Recognition or Achievement for Terminally Ill and Deceased Students**

When a student has completed all degree requirements but dies before graduation, the university awards the degree posthumously.

**Certificate of Recognition**

In those instances when a student who is close to completing a degree is terminally ill or dies before completing the degree, the university may award a Certificate of Recognition. The following criteria must be met for receiving the Certificate of Recognition. Any exceptions must be approved by the president.

**Graduate Students**

1. The student must be degree seeking.
2. The student must have completed at least 75% of the requirements for the degree (for the master’s student this will be a minimum of 24 credits; for the doctoral student this will be a minimum of 36 credits).
3. The student must be in good academic (3.00 GPA) and disciplinary standing.
4. The student must be enrolled at ODU at the time of death or diagnosis of terminal illness.
5. The dean of the appropriate college recommends the award of the certificate.

**Certificate of Achievement**

In those instances when a student is terminally ill or dies before completing the degree but does not qualify for a Certificate of Recognition, the university may award a Certificate of Achievement. The following criteria must be met for receiving the Certificate of Achievement. Any exceptions must be approved by the president.

**Graduate Students**

1. The student must be in good academic (3.00) and disciplinary standing.
2. The student must have completed the equivalent of two semesters of full-time study (18 credits) at Old Dominion University.
3. The student must have died or been diagnosed with a terminal illness within 12 months of the last registration.
4. The certificate may be recommended by a faculty member or at the request of others, but the next of kin must approve.
5. The president or delegate will communicate with the next of kin.
6. The certificate will be presented only to the next of kin or their delegate.
Campus Services and Student Information

Career Management Center

The national award-winning Career Management Center (CMC) offers a comprehensive array of career programs for students under the auspices of the Career Advantage Program (CAP). CAP is a series of career-related events and services designed to include a credit-bearing practical work experience related to a student’s major. This practical experience may take the form of an internship, cooperative education experience, clinical rotation, student teaching, or a class containing a real-world, hands-on project.

CAP invites students to link with the Career Management Center and the available resources necessary for them to gain their career advantage early in their career planning process. Services are available from the time they first begin their studies at Old Dominion University. Recognizing that all students do not follow the same path, the program is designed to meet the needs of traditional, non-traditional, transfer, commuter, and distance students alike.

The Student Employment Program assists individuals in locating part-time and seasonal work on or off campus, including federal work-study positions for those who qualify. The Job Posting Unit advertises jobs of all types, including permanent full-time positions, electronically through ODU careerlink. This powerful interactive web-based system, available free to students and alumni, is a database of student and employer information, career information, a career event calendar and interview schedules, and the means to electronically apply for positions posted. It is also the primary tool used by the CMC to communicate with students.

Individual career consultations and electronic assessment tools as well as seminars on career exploration are available to assist in major and career path selection. Each college has an experienced professional CMC staff assigned to offer career assistance to students at all levels. CMC maintains full service satellite offices in the Colleges of Arts and Letters, Business and Public Administration, Engineering and Technology, and Sciences, which house the CMC Liaison to that college and are co-located with academic advisors from the college and Student Success Advisors from Academic Enhancement, creating a “Triad” of advisors for the students within each college. A hybrid satellite office, providing assistance onsite live during published office hours and real time virtual assistance at other times via electronic communication technology, provides services to students at the Virginia Beach and Tri-Cities Regional Centers.

Cooperative education and internship experiences are available at the junior, senior and graduate levels. These programs allow students to gain valuable experience related to their major, while testing out possible career choices. All students are encouraged to participate in one or more practical experiences.

Professional seminars in resume writing, job search strategies, interview skills, salary negotiation and other career-related topics are offered throughout the year and are also available in video streamed and on-line versions. These are complemented by classroom and group presentations and other special career events, including employer information sessions, as well as employer and alumni career information panels and etiquette dinners.

General job fairs are held twice a year and are supplemented by specialized fairs for specific populations, including a teacher fair, a graduate recruitment fair, and a summer job fair. Graduating students can also take advantage of the On-campus Recruiting Program, which provides the opportunity to interview, on campus, with employers for entry-level positions.

Many of the programs and services available on campus are also offered online and via video streaming through the CMC website, ODU careerlink, and the Cyber Career Center. The CMC has developed this exciting opportunity as part of the any-time, any-place virtual career center model for students and alumni who prefer or require assistance from a career professional through electronic means. The Cyber Career Center allows CMC staff to provide quality career assistance from a distance, replicating face-to-face services through interactive media and multiple electronic means of communication. The National Association of Colleges and Employers (NACE) recognized CMC for this initiative with the Chevron Corporation Award as the most innovative career center in the country.

More information is available 24/7/365 Live by calling the Virtual Career Assistants at 800-937-ODU1 or virtually via the internet at www.odu.edu/cmc. During normal working hours please call 757-683-4388 or visit a satellite office in the colleges or the main CMC office in Webb Center North, suite 2202.

Guaranteed Practicum and Career Advantage Program

Old Dominion University is the only four-year, doctoral-granting institution in the United States to guarantee a practical, faculty-directed, for-credit experience related to a student’s major. The Guaranteed Practicum was introduced in 1995 and is administered by the Career Management Center (CMC) as part of the Career Advantage Program (CAP) in partnership with the academic colleges.

The practicum, a practical work experience, may take the form of an internship, cooperative education experience, clinical rotation, student teaching, or a class containing a real-world, hands-on project or experience, as appropriate for each college and its majors. Classes meeting the specifications for the guaranteed practicum are clearly noted in the Courses of Instruction section of this catalog as “(Qualifies as a CAP Experience).” The Guaranteed Practicum is the center piece of the Career Advantage Program. For more information on CAP, see the Career Management Center section of this Catalog.

Student Health Services

Old Dominion University Student Health Services is accredited by the Accreditation Association for Ambulatory Health Care, Inc. The Health Center is located at 1007 South Webb Center (757) 683-3132, Facsimile (757) 683-5930. Health Promotion services are located at 1525 North Webb Center.

Student Health Services provides primary outpatient care and health promotion for Old Dominion University students. These services include medical care for acute illness and minor injury, routine health care, preventive health care and family planning. Student Health Services also provides referrals to health care providers in the local community for services beyond the scope of the campus health center. Laboratory testing sent off campus and x-rays or other diagnostic tests are done at the student’s expense. Full-time Norfolk campus students should complete the immunization requirements before coming to school. Any immunizations administered at Student Health Services are done at the student’s expense.

Health History/Immunization Requirements

All entering full-time Norfolk campus students (undergraduate, graduate, transfer, and English Language Center students) are required to complete the Tuberculosis (TB) Risk Assessment on the health history form submitted to Student Health Services. Each student determined to be part of an at risk population for TB must present the results of a TB skin test ( Mantoux PPD) or TB blood test to Student Health Services within two months prior to matriculation at Old Dominion University. Any student with symptoms of active TB will be required to be tested immediately. Students are expected to be in compliance with the University Policy for TB screening.

All entering full-time Norfolk campus students are required to have all their immunizations up to date. This includes the Meningitis and Hepatitis B vaccines or signed waiver on Part C of their health history form if the student declines these vaccines. Students who do not submit the required health history/immunization documentation will not be allowed to register for the second semester. A complete list of immunization requirements and health history/immunization forms are on the Student Health Services website at www.odu.edu/studenthealth.
Health Promotion
Health promotion provides Old Dominion University students with information, education and programs to address their health concerns and needs. Health promotion focuses on the whole person and seeks to engage students in educational, experiential, and service learning opportunities to illustrate the importance of a healthy lifestyle. Health promotion is also responsible for campus-wide programs. Topics include: alcohol, drugs, sexual health, nutrition, stress and many other factors that affect student success. Students may volunteer as members of the Student Health Advisory Committee (SHAC). Call (757) 683-5927 to speak with a health educator.

Student Health Insurance
All full-time and part-time students are encouraged to make provision for payment of charges for health services not provided by Student Health Services. The University recommends that all students carry adequate personal health insurance. International students are required to have health insurance. See the Student Health Services web site for information regarding health insurance at www.odu.edu/studenthealth.

Housing
Graduate students are encouraged to seek off-campus housing through the Housing and Residence Life Office. Off-Campus Housing Services provides guidance and support to students who desire off-campus housing accommodations. Students are provided resources and educational materials to help them in their search for affordable and convenient housing. Students are also provided access to the listings directory where local landlords and property managers post vacancies specifically intended for ODU students. For further information about living off-campus please visit www.odu.edu/offcampushousing. For answers to specific questions or for one-on-one assistance, contact: Off-Campus Housing Services, 4603 Elkhorn Avenue, Suite 1208, Norfolk, VA 23529 or email offcampushousingservices@odu.edu.

International Student and Scholar Services (ISSS)
The Old Dominion University community includes more than 1000 international students and 100 visiting scholars from more than 110 foreign countries. Serving the cultural, legal and personal needs of these individuals is the main mission of the Office of International Student and Scholar Services. The office provides administrative support and documentation services along with information and regulatory advising to assist international students and scholars in obtaining the best educational experience possible. ISSS also works closely with academic departments and administrative offices, offering workshops to staff members that help build awareness of the international community’s needs as well as to develop and strengthen skills in intercultural communication. Among the specific offerings of the Office of International Student and Scholar Services is a complete range of immigration advising and individual assistance with the many cultural aspects of studying in a foreign country. ISSS administers the International Student Leadership Award Program, which provides tuition support for undergraduate international students who demonstrate extraordinary leadership and academic involvement. Visit the ISSS website at www.odu.edu/issss.

Filipino American Center
In line with Old Dominion’s vision of a multicultural university, the Filipino American Center responds dynamically and creatively to the academic, educational, cultural, and social concerns of Filipino Americans. It serves as a resource and research center for Philippine history and culture and the Filipino American experience. It is a center for social interaction where Filipino culture and values are promoted, revitalized and celebrated. The center serves as a cultural liaison to the University and the Hampton Roads communities. Its strategic location in the College of Arts and Letters allows for an integrated approach in crafting and encountering new avenues of culture with a distinctive academic orientation.

The Center incorporates into its programs a heightened awareness for the diverse heritage of the Filipino American. The goals of the center are to serve as a resource center for the University, the Filipino American and the Hampton Roads communities and conduct research on Filipino Americans, promote courses in Filipino American Studies and plan summer programs or semester abroad (Philippines), and foster close linkages with Filipino American alumni.

The Filipino American Center is located in Dragas Room 2000. For more information, visit the web page at www.al.odu.edu/filipino/.

The Office of Intercultural Relations (OIR)
The Intercultural Center
The Intercultural Center, located at 2114 Webb Center, serves as a cultural hub for students and faculty. With its fully mediated and functional design, faculty can conduct classes, visitors can relax in plush seating while reading books from the Center’s library or watching programs and DVDs on one of the 46” plasma televisions. Students have access to the computer area, can learn a new language with Rosetta Stone programs, or have a group study session. The Intercultural Center is not only a study or work space, it is also an area where students can relax and connect with friends and the University community.

The Diversity Institute
The Diversity Institute (DI) enhances awareness, commitment, knowledge and skills that are needed to develop leaders as change agents in a culturally diverse world. Semester-long sessions include modules and cultural learning labs that train participants on how to operate in a diverse multicultural and global setting. In addition to developing communication skills needed in a pluralistic society and expanding one’s world view, DI is an excellent resume-builder. For more information, visit the Diversity Institute site at http://studentaffairs.odu.edu/oir/DIVEINwebsite/

International Student Programming
As citizens of a new, global community, it is imperative that individuals have the skills to navigate diverse settings and successfully interact with others. Therefore, OIR is committed to the academic, social and cultural support of the international student population, as well as providing opportunities for domestic students to enhance their own cultural competency. OIR strives to sustain a vibrant international student community by providing an array of services, such as arrival assistance, orientation support, on- and off-campus activities, and social networking opportunities. OIR actively encourages international-domestic student relationships by providing cultural programs and events such as International/American Connection, International Flavors, International Education Week, and Chit, Chat and Chew (informal food and discussion sessions). Thus, programs, workshops, activities, and events are designed so that participants will be prepared for successful integration into today’s global society.

Social Entrepreneurship
The Social Entrepreneurship unit consists of the Social Entrepreneurs Council (SEC); Spark Change Theater; Intercultural Matters Series; Faculty Voice Brown Bag Series; and the Dialogue on Emerging Issues. In partnership with the SEC advisory council, the Office of Intercultural Relations presents innovative film forums, workshop series, lecture series, and informal discussions that promote faculty and student engagement and co-curricular opportunities for the exploration of social justice paradigms and intercultural systems.

The Office of Intercultural Relations is located at 2109 Webb Center. Please visit the website at http://studentaffairs.odu.edu/oir; OIR is on Twitter: http://twitter.com/oduoir.

Graduate Student Organization (GSO)
The Graduate Student Organization is an officially recognized group formed especially to meet the needs of Old Dominion University’s graduate
student body. The goal of the organization is to be an outlet for the graduate student voice, to act as a liaison group between the graduate students and the University, and to bring the University the concerns or issues that are specific to the graduate student community. Foremost among its many goals is to form an overall meeting arena for the graduate students to get to know each other outside of individual courses of study.

Current projects include working on such issues as graduate health insurance, graduate housing opportunities, and increased support for graduate research and professional development.

For more information, see orgs.odu.edu/gso.

Recreation and Wellness
The Recreation and Wellness Department offers programming in the following areas:
- Intramural Sports
- Informal Recreation
- Sport Clubs
- Fitness & Wellness
- Outdoor Adventure
- Aquatics
- Summer Camps
- Student Development

The Student Recreation Center is a state-of-the-art facility that features nearly 15,000 square feet of fitness equipment, a rock climbing wall, a multi-activity center gym, racquetball courts, a cycling studio, an outdoor adventure rental center, and much more. In addition, the Fitness Center at University Village provides participants with another state-of-the-art workout facility. Participants must be able to validate their identity with the biometric hand system or a valid University ID card when attempting to enter or participate in programs and activities sponsored by the department.

For daily updates of programs and services, hours and special events, visit the webpage at http://studentaffairs.odu.edu/recsports/ or contact the office at 683-3384.

Women’s Center
The Women’s Center offers programs and services designed to promote gender equity and address the special challenges and opportunities female students encounter in the pursuit of higher education. Recognizing the critical role that both women and men play in promoting an environment free of gender bias, Center programs are designed to educate and inspire students to achieve their personal, academic and professional potential.

S.A.F.E., Sexual Assault Free Environment, provides crisis intervention, education, advocacy and ODU policy/procedure information related to issues of sexual assault, stalking, sexual harassment and relationship violence.

W.I.L.D., Women’s Institute for Leadership Development, provides an opportunity for female students to identify and develop their leadership skills through seven modules. Additional programs are offered throughout the year that address a variety of topics related to women’s academic and personal success including programs in celebration of Women’s History Month in March. Referrals to University and community resources are also available. Students are encouraged to get involved with the Women’s Center as a volunteer, intern or M-POWER Peer Educator.

Programs and services of the Center are open to women and men. For more information, please call 683-4109 or visit www.odu.edu/womenscenter

Dining Services
Monarch Dining Services is responsible for many operations across campus. Webb Center is home to a wide range of dining options including Café 1201, House of Blue Food Court and Monarch Catering. Café 1201 is a residential restaurant dining option that allows students to use their meal plans in Webb Center and provides a value to faculty, staff and students. Also located in Webb Center are franchise favorites like Chick-fil-A and Starbucks. Legends in Whitehurst Hall and Rogers Café in Rogers Hall are dining facilities available to all cash, meal plan, Flex Points, and Monarch Plus card customers. These all-you-care-to-eat locations provide a residential restaurant within the student housing facility.

Dining Services has over 15 locations across campus to satisfy a variety of cravings—including residential restaurants, food court and franchise favorites, convenience stores, and coffee shops.

Monarch Catering offers services from coffee set-ups to extensive dinner menus and everything in between.

For hours of operation and more campus dining information, please visit the website at www.odu.edu/monarchdining.

Parking and Transportation Services
The department of Parking and Transportation Services is responsible for providing quality parking and transportation services throughout campus. A variety of surface parking lots and garages are available throughout campus to students, faculty and staff. All motor vehicles parked in University parking facilities must display a valid parking permit. Students, faculty and staff are required to purchase permits. Permits may be purchased online at www.odu.edu/parking or at the Parking and Transportation Services Office. Visitors and guests may park in metered spaces in garages A and B on 43rd Street and Elkhorn Avenue or the visitor’s parking lot on 49th Street. The Parking and Transportation Services office is located on the corner or 43rd Street and Elkhorn Avenue.

University motor vehicle regulations are enforced year around except as noted in the ODU Motor Vehicle Regulations. Permit regulations are enforced from midnight Sunday until 4:00 p.m. Friday. Evening permits are available for purchase by students attending classes after 3:45 p.m. and are not valid prior to 3:45 p.m.

Parking and Transportation Services has many alternative transportation options for students who do not have a vehicle on campus. ODU shuttle buses take students around the Norfolk campus and to off-campus locations such as Wal-Mart and Kroger. Free Hampton Roads Transit (HRT) bus passes are offered at the Parking and Transportation Services office for the fall and spring semesters for all current students. Zipcars are also located on campus for students 18 years or older to utilize for low hourly or daily rates.

Additional information on rules, regulations, and services may be obtained by calling Old Dominion University Parking and Transportation Services at (757) 683-4004 or by visiting the website at www.odu.edu/af/parking.

University Village Bookstore
The University Village Bookstore is the official on-campus bookstore of Old Dominion University—offering products and services to students, faculty and the surrounding community both in-store and online via shopodu.com. The University Village Bookstore houses 20,000 titles providing the most options to the campus community. The primary purpose is to serve the students of the University by making books and supplies available for courses.

Additionally, the bookstore serves the campus community by maintaining a wide selection of computer products, alumni apparel, ODU football and basketball gear, gifts and accessories. Furthermore, the bookstore provides faculty services, a robust used books program, Rent-A-Text, and a growing CafeScribe digital library. The bookstore also hosts events that include book signings and children’s events. Store partners include eBooks, Greek apparel, Software Shop and Starbucks.

The bookstore is located at 4417 Monarch Way and is open Monday-Friday, 8:00 a.m. to 7:00 p.m., Saturday 10:00 a.m. to 5:00 p.m. and Sunday 12:00 noon – 5:00 p.m. For additional information please call 757-683-0048.

University Card Center
All students who are officially registered for one or more credit hours in the current semester at Old Dominion University are eligible to receive a free student ID card. Student ID cards are issued at the University Card Center located in Room 1056 Webb Center. If the ID card is lost or stolen, there
is a replacement fee. Spouses and dependents of students are not eligible to receive an ID card.

The University ID card is an official form of identification. The ID card lists the bearer’s first name, last name and middle initial, University identification number (UNI) and status with the University. Each student can possess only one valid ODU ID card at a time. The ID card must be carried at all times when at Old Dominion University and presented upon request to University officials. Any misuse of the University ID card will result in disciplinary actions.

Not only is the University ID card an official form of identification, it also serves many other functions. Students can use their card to check out books from the library, participate in University events, obtain free HRT bus passes, access their residence hall, use their meal plan, and make purchases from their Monarch Plus account. The Monarch Plus can be used at on-campus locations and participating merchants off campus. For more information, visit the website at www.odu.edu/cardcenter, email cardcenter@odu.edu or call 757-683-3508.

Webb University Center

Opened in May 1966, Webb University Center was named after the University’s first president, Lewis W. Webb, who served the University from 1962 until 1969. Webb Center is the community center for all members of the University family—students, faculty, staff, administration, alumni, and guests. The Center provides services, conveniences and amenities that members of the University family need in their daily lives on campus. It also provides a place for getting to know and understand one another outside the classroom.

Webb University Center’s staff are dedicated to providing a friendly and attractive environment in which campus constituents can be brought together to build campus community. The staff provide services and maintain the facility in support of student learning and development through student activities, programs, meetings and special events.

Webb Information Desk

Webb Information Desk provides students, faculty/staff, and guests of the University with information about departments, student organizations, activities, classes, policies, and more. In addition, the Information Desk offers the following products and services: postage stamps, student organization event tickets, car assistance program, semester locker rentals, lost and found, game room equipment, free DVD rental service and vending refunds. The Webb Information Desk is located in the front lobby of Webb Center and can be reached by calling (757) 683-5914.

Educational Accessibility

The Office of Educational Accessibility is committed to creating access to higher education for students with disabilities. The University meets the requirements of Section 504 of the Rehabilitation Act of 1973 and the Americans With Disabilities Act of 1990 by providing accommodations and services, which are based upon documentation submitted by the student. Reasonable accommodations are made for students with learning, medical, psychological, visual, hearing, mobility, temporary, and other impairments on an individual basis. Accommodations and other supportive services available in the Office of Educational Accessibility make a positive difference in the educational experience of students with disabilities and contribute significantly to their academic success.

In order to obtain assistance, all students must provide appropriate documentation and register with the Office of Educational Accessibility. Guidelines for documentation and procedures for registration may be located at www.studentaffairs.odu.edu/educationalaccessibility/. More specific information can be obtained by calling (757) 683-4655. Student interactions with the Office of Educational Accessibility remain confidential.

New students needing interpreters are expected to contact the Office of Educational Accessibility at least 45 days before registration to make arrangements. Currently enrolled students need to make arrangements for accommodations as soon as they have pre-registered for a semester.

The Office of Educational Accessibility is located at 1021 Student Success Center.

The Section 504 Coordinator, who is also Assistant Vice President for Institutional Equity and Diversity, is located at 121-A Spong Hall and can be reached at (757) 683-3141.

Division of Student Engagement and Enrollment Services

The Division of Student Engagement and Enrollment Services is a newly formed division and is responsible for the development, implementation, communication, and maintenance of an institutional focus on student success, which includes enrollment management. In partnership with the Provost and other University leaders, this area is responsible for the coordination of student success programs across the University and for student retention. This division provides creative leadership and strategic direction for a diverse array of student engagement services and programs including Student Activities and Leadership, Student Engagement, Housing and Residence Life, Summer Camps and Conferences, Student Conduct and Academic Integrity, Student Ombudsperson Services, Intercultural Relations, International Student Programming, Women’s Center, Student Health Center, Recreation and Wellness, Counseling Center, Divisional IT Support, Assessment/Planning and Budget Management, Admissions, Graduate Admissions, International Admissions, Financial Aid, Transfer Evaluation Services, New Student and Parent Programs/Preview, Career Management Center, Center for Major Exploration, and Campus Ministries.

Student Ombudsperson Services (S.O.S.)

Student Ombudsperson Services (S.O.S.) is available to help students achieve their personal and academic goals. S.O.S. is a place where students can bring their questions and concerns about University rules, policies or procedures and also provides resources to students to help them develop strong and effective working relationships with faculty and staff. Additionally, S.O.S. serves as a resource to ODU’s internal and external customers and assists students in developing resolution strategies for student conflicts with instructors, staff, processes or departments. S.O.S. also assists with student-to-student issues, financial concerns, University policy issues, extended class absence notifications, crisis assistance emergency grants, and withdrawal from the University.

Contact Information:
2008 Webb Center
757-683-3442
Website: http://studentaffairs.odu.edu/sos

Office of Student Activities and Leadership

Office of Student Activities and Leadership

Involvement in student activities contributes to students’ overall development. By discovering and participating in co-curricular activities, students can develop their interpersonal and leadership skills and increase their career-related learning. The Office of Student Activities and Leadership (OSAL) provides experiences, services and opportunities that promote the advancement of social and intellectual development. By encouraging student involvement, OSAL promotes life-long learning, responsible citizenship and a commitment to the Monarch and surrounding communities. For more information, visit the website at http://studentaffairs.odu.edu/osal or call 683-3446.

The office oversees the following:

Leadership Development

To maximize and realize the potential of individual students and student organizations, the Office of Student Activities and Leadership assists in the planning and implementation of leadership conferences, seminars, courses, and retreats throughout the academic year. These programs, available to any special interest group or student organization, focus on the identified purpose or needs of each group. Individual students interested in developing their leadership skills are also urged to participate. Events
include leadership lecture series, LeaderShape, Freshman Summer Institute, Freshman Leadership Experience and Monarch Leaders Retreat.

Center for Service and Civic Engagement
The Center provides students with the opportunity to enhance their educational experience beyond the boundaries of the classroom by engaging in meaningful service to the campus and local and global communities. Events include Relay for Life, Blue Goes Green Week, Adopt-A-Spot, and Haul for Hunger.

Student Organizations
There are close to 300 student organizations that promote student interests in a broad range of fields. Organizations are student-run and a complete list of organizations can be found at http://studentaffairs.odu.edu/osal/studentorgs/index.shtml. To support these organizations, OSAL coordinates the recognition and annual registration process for new and existing organizations, provides officer training, group development, leadership education, budget utilization, and guidance in the organization of major concerts, programs and other activities that groups sponsor.

U-Center
To facilitate collaboration between student organizations and members within student groups, the U-Center includes computers, work spaces, storage, a conference room and lounge area. Students can meet in the U-Center located at 1045 Webb Center.

Fraternity and Sorority Life
OSAL advises 16 international/national fraternities and 10 international/national sororities at Old Dominion University. The purpose of these organizations includes the maintenance of high standards of fraternal life and inter-Greek relations and cooperation with the University in achieving high social standards and sound scholarship. Service to the University and the community, encouragement for leadership and brother/sisterhood are also at the forefront of Greek activity. The groups are coordinated through the National Pan-Hellenic Council (NPHC), Interfraternity Council (IFC), and Panhellenic Council (PHC), along with Student Activities and Leadership. Top Greek leaders and scholars are eligible for membership in the Order of Omega National Greek Honor Society. Any student interested in Fraternity and Sorority Life at Old Dominion University should look at the Frequently Asked Questions located at http://studentaffairs.odu.edu/osal/greeklife/recruitment.shtml

Fraternities at the University
• Alpha Phi Alpha
• Iota Phi Theta
• Kappa Alpha Psi
• Kappa Delta Rho
• Kappa Sigma
• Lambda Chi Alpha
• Lambda Upsilon Lambda
• Omega Psi Phi
• Phi Beta Sigma
• Phi Kappa Tau
• Phi Mu Alpha
• Pi Kappa Alpha
• Sigma Nu
• Sigma Phi Epsilon
• Sigma Pi
• Tau Kappa Epsilon
• Theta Chi

Sororities at the University
• Alpha Phi
• Alpha Kappa Alpha
• Alpha Xi Delta
• Delta Sigma Theta
• Delta Zeta
• Pi Beta Phi
• Sigma Gamma Rho
• Sigma Lambda Upsilon
• Zeta Phi Beta
• Zeta Tau Alpha

Student Activities Council
Student Activities Council (SAC) is a student-run organization with the goal of providing quality events for Old Dominion University including films, special events, speakers, concerts and Homecoming. Committee members help in planning and organizing these events.

Mace and Crown Newspaper
Students at Old Dominion University publish a weekly newspaper, the Mace & Crown, every Wednesday throughout the academic semesters. In addition to keeping the campus informed, the newspaper provides students the opportunity to develop skills in writing, photography, advertising and management.

Student Government Association
The Student Government Association (SGA) is involved in many topical issues touching all areas of University life. Participating in SGA is open to all students who may serve as elected senators or as volunteers on committees. Call 683-3438 for more information regarding these positions.

WODU Radio Station
The student-operated campus radio station serves two main purposes: providing experience for students interested in broadcasting and entertaining and sharing relevant information with the student population. Students involved with WODU can develop their skills in all areas of broadcasting including management, marketing, engineering and news and sports reporting.

Event Management
Through Event Management, OSAL coordinates all space allocations in Webb Center for meetings and events.

Promoting and Building Spirit and Pride through ODU Traditions
OSAL sponsors events to help students feel connected and show Monarch pride. These events include Spirit Fridays, Family Weekend and Rivalry Week. OSAL also advises the Monarch Maniacs, the spirit group on campus.

Implementation of Major Programs and Events
OSAL helps to plan and implement activities and events to enrich the lives of students. These include Main Street (the campus involvement fair), Homecoming, Student Engagement and Enrollment Services Leaders Award Ceremony, Week of Welcome, and Programs All Weekend (PAW).
## Synopsis of Graduate Degree and Post-Baccalaureate Certificate Programs

### College of Arts & Letters

<table>
<thead>
<tr>
<th>Degree</th>
<th>Majors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor of Philosophy (Ph.D.)</td>
<td>Criminology/Criminal Justice, English, International Studies</td>
</tr>
<tr>
<td>Master of Fine Arts (M.F.A.)</td>
<td>Creative Writing</td>
</tr>
<tr>
<td>Master of Music Education (M.M.E.)</td>
<td></td>
</tr>
<tr>
<td>Graduate Certificate Programs</td>
<td>Geographic Information Science, Literature, Modeling and Simulation in International Studies, Professional Writing, Spatial Analysis of Coastal Environments, Teaching of Writing, TESOL, Women’s Studies</td>
</tr>
</tbody>
</table>

### College of Business and Public Administration

<table>
<thead>
<tr>
<th>Degree</th>
<th>Majors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor of Philosophy (Ph.D.)</td>
<td>Business Administration, Public Administration &amp; Urban Policy</td>
</tr>
<tr>
<td>Master of Arts (M.A.)</td>
<td>Economics</td>
</tr>
<tr>
<td>Master of Business Administration (M.B.A.)</td>
<td></td>
</tr>
<tr>
<td>Master of Science (M.S.)</td>
<td>Accounting</td>
</tr>
<tr>
<td>Master of Public Administration (M.P.A.)</td>
<td></td>
</tr>
</tbody>
</table>

### Darden College of Education

<table>
<thead>
<tr>
<th>Degree</th>
<th>Majors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor of Philosophy (Ph.D.)</td>
<td>Community College Leadership, Counseling, Curriculum &amp; Instruction, Early Childhood Education, Educational Leadership, Higher Education, Human Movement Science, Instructional Design &amp; Technology, Literacy Leadership, Occupational &amp; Technical Studies, Special Education</td>
</tr>
<tr>
<td>Educational Specialist (Ed.S.)</td>
<td>Counseling, Educational Leadership, Higher Education</td>
</tr>
<tr>
<td>Master of Science in Education (M.S.Ed.)</td>
<td>Biology, Chemistry, Counseling, Early Childhood Education, Educational Leadership, Elementary Education, English, Physical Education, Reading, Secondary Education, Special Education, Speech-Language Pathology</td>
</tr>
<tr>
<td>Master of Science (M.S.)</td>
<td>Occupational and Technical Studies</td>
</tr>
<tr>
<td>Graduate Certificate Programs</td>
<td>Autism, Military Children and Family Education, Modeling and Simulation</td>
</tr>
</tbody>
</table>

### Batten College of Engineering and Technology

<table>
<thead>
<tr>
<th>Degree</th>
<th>Majors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor of Philosophy (Ph.D.)</td>
<td>Aerospace Engineering, Biomedical Engineering, Civil and Environmental, Electrical and Computer Engineering, Engineering Management, Mechanical Engineering, Engineering, Modeling and Simulation</td>
</tr>
<tr>
<td>Master of Engineering (M.E.)</td>
<td>Aerospace Engineering, Civil Engineering, Electrical and Computer Engineering, Environmental Engineering, Experimental Methods, Mechanical Engineering, Modeling &amp; Simulation, Motorsports Engineering, Systems Engineering</td>
</tr>
<tr>
<td>Master of Science (M.S.)</td>
<td>Aerospace Engineering, Civil Engineering, Electrical and Computer Engineering, Engineering Management, Environmental Engineering, Mechanical Engineering, Modeling and Simulation</td>
</tr>
<tr>
<td>Master of Engineering Management (M.E.M.)</td>
<td></td>
</tr>
</tbody>
</table>
### College of Health Sciences

<table>
<thead>
<tr>
<th>Degree</th>
<th>Majors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor of Philosophy (Ph.D.)</td>
<td>Health Services Research</td>
</tr>
<tr>
<td>Doctor of Nursing Practice</td>
<td></td>
</tr>
<tr>
<td>Doctor of Physical Therapy (D.P.T.)</td>
<td></td>
</tr>
<tr>
<td>Master of Science (M.S.)</td>
<td>Community Health, Dental Hygiene</td>
</tr>
<tr>
<td>Master of Science in Nursing (M.S.N.)</td>
<td></td>
</tr>
<tr>
<td>Master of Public Health (M.P.H.)</td>
<td></td>
</tr>
<tr>
<td>Graduate Certificate Programs</td>
<td>Family Nurse Practitioner, Occupational Safety, Nurse Educator, Molecular Diagnostics, Women’s Health Nurse Practitioner, Nurse Administrator</td>
</tr>
</tbody>
</table>

### College of Science

<table>
<thead>
<tr>
<th>Degree</th>
<th>Majors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor of Psychology (Psy.D.)</td>
<td>Clinical Psychology</td>
</tr>
<tr>
<td>Master of Science (M.S.)</td>
<td>Biology, Chemistry, Computational and Applied Mathematics, Computer Science, Ocean and Earth Sciences, Physics, Psychology</td>
</tr>
<tr>
<td>Graduate Certificate Programs</td>
<td>Geographic Information Science, Psychology, Spatial Analysis of Coastal Environments</td>
</tr>
</tbody>
</table>
The College of Arts and Letters has graduate programs in Applied Linguistics, Applied and stimulating environment that is Old Dominion University. The College is committed to enhancing in every way possible the exciting experiences through the study of cultural heritage, forms of artistic and literary expressions, 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

The Master of Arts degree in Lifespan and Digital Communication requires 36 credit hours (non-thesis option) or 33 credit hours (thesis option). In addition to meeting all general University requirements, an applicant must have an undergraduate average of at least 3.25 in Communication or a related field and a 3.0 overall; two letters of recommendation from faculty members, or those who can evaluate the applicant’s academic potential; GRE scores typically at or above 1000 as a composite of verbal and quantitative scores; and a 500-word essay that outlines the applicant’s professional and personal goals in pursuing this degree, while explaining the relationship of these aforementioned goals to the Lifespan and Digital Communication degree program.

In addition, students pursuing the non-thesis option take 18 credit hours of COMM electives and a required 3-credit hour capstone seminar COMM 685. Students pursuing the thesis option take an additional 9 credit hours of COMM electives, COMM 689 (3 hours) (in the first semester they register for thesis hours) as well as COMM 698 & COMM 699: Thesis (six hours) in lieu of COMM 685. This thesis is based on original scholarly research and must address a specific and viable topic salient to the student’s core and elective coursework in Lifespan and Digital Communication.

The thesis option is recommended for those students who have maintained a high GPA, have the support of a faculty advisor from the Communication Department of Communication & Theatre Arts

3000 Batten Arts and Letters
757-683-3828
Stephen Pullen, Chair

Master of Arts – Lifespan and Digital Communication

Thomas J. Socha (http://www.odu.edu/~tsocha/), Graduate Program Director

The Master of Arts in Lifespan and Digital Communication focuses on the study of human communication and digital media as they develop across the lifespan and is based on the assumption that relational communication, information gathering, conflict management, entertainment consumption, and social media use differ among, within, and between people at various stages of life (childhood, adolescence, young adulthood, middle age, and elder adulthood). Understanding and analyzing the inseparable relationship between lifespan communication and digital media is a key to success in most 21st century jobs, particularly in the interrelated employment areas of applied research and policy, community networking and outreach, creative industries, education and training, and health and wellness.

Admission Information

In addition to meeting all general University requirements, an applicant must have an undergraduate average of at least 3.25 in Communication or a related field and a 3.0 overall; two letters of recommendation from faculty members, or those who can evaluate the applicant’s academic potential; GRE scores typically at or above 1000 as a composite of verbal and quantitative scores; and a 500-word essay that outlines the applicant’s professional and personal goals in pursuing this degree, while explaining the relationship of these aforementioned goals to the Lifespan and Digital Communication degree program.

Degree Requirements

The Master of Arts degree in Lifespan and Digital Communication requires 36 credit hours (non-thesis option) or 33 credit hours (thesis option). No more than 12 credit hours may be taken on the 500 level. Both non-thesis and thesis option students take five required core courses (15 hours) that include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 601</td>
<td>Lifespan Communication Research and Theory</td>
<td>3</td>
</tr>
<tr>
<td>COMM 602</td>
<td>Digital Communication Theory and Research</td>
<td>3</td>
</tr>
<tr>
<td>COMM 603</td>
<td>Social Change and Communication Systems</td>
<td>3</td>
</tr>
<tr>
<td>COMM 604</td>
<td>Lifespan Communication Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>COMM 605</td>
<td>Critical Methods and Digital Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 15

In addition, students pursuing the non-thesis option take 18 credit hours of COMM electives and a required 3-credit hour capstone seminar COMM 685. Students pursuing the thesis option take an additional 9 credit hours of COMM electives, COMM 689 (3 hours) (in the first semester they register for thesis hours) as well as COMM 698 & COMM 699: Thesis (six hours) in lieu of COMM 685. This thesis is based on original scholarly research and must address a specific and viable topic salient to the student’s core and elective coursework in Lifespan and Digital Communication.

The thesis option is recommended for those students who have maintained a high GPA, have the support of a faculty advisor from the Communication Department of Communication & Theatre Arts.
and Theatre Arts department, and who are considering further studies at the doctoral level. The thesis committee, consisting of a chair and two other faculty members certified for graduate instruction, direct and evaluate the student’s work. Approval of the thesis proposal by the student’s committee and GPD is required before the completion of 27 hours of coursework. Upon completion of the thesis, the committee will conduct a two-hour examination and defense of the thesis.

**B.S/BA.-M.A. Program**
A five-year BS/BA-M.A. program is available for selected undergraduate students pursuing a Bachelor of Arts degree. For specific information please refer to the Undergraduate Catalog (http://catalog.odu.edu/undergraduate/collegeofartsletters/communicationandtheatreats/).

## Department of English

5000 Batten Arts and Letters  
757-683-3991  
Dana Heller, Chair

### Graduate Programs in English

There are four graduate programs in the English department:

1. Master of Arts in English;  
2. Master of Arts in Applied Linguistics;  
3. Master of Fine Arts in Creative Writing and  
4. Ph.D. in English.

Each program has its own guidelines and admissions policy.

### Master of Arts - English

Imtiaz Habib, Graduate Program Director

The Master of Arts program in English develops professional competency in literary and textual analysis and in writing. The program offers emphases or options in literature, the teaching of English, rhetoric and composition, and professional writing. The program prepares students for further graduate study in English; for professional writing and editing; for teaching in secondary schools and colleges; for further study in such fields as anthropology, law, psychology, and philosophy; for careers in government and industry; and for other professions requiring analytical, literary, linguistic, digital media, or writing skills.

#### Admission Information

The student must initially meet all general University admission requirements. Scores from the Graduate Record Examination general test are required. For regular admission, students must generally have at least 24 undergraduate hours in English, or a closely related field, with a grade point average of 3.0 or better. However, students applying to the professional writing concentration (see professional writing option) may have little or no undergraduate course work relating to English, provided that they have an average of 3.0 or better in their undergraduate major. Students applying to all concentrations must also, in addition to other admissions materials, provide a writing sample, preferably of previous professional or academic work, that demonstrates their preparation for graduate-level writing. All students in the English graduate program must demonstrate a high level of skill in written expression.

International students must submit scores from the TOEFL examination, a sample of scholarly writing, and three recommendations, at least one of which evaluates ability in English. For regular admission, students must score 230 on the computer-based TOEFL (the equivalent of 570 in the older, paper-based score scale or 80 on the TOEFL iBT). Students may be admitted provisionally with a TOEFL score of 213 (550 in the paper-based scale), but must attain the scores required for regular admission after 12 hours of graduate work.

### Degree Requirements

The Master of Arts degree in English requires 30 credit hours and the passing of a comprehensive oral examination. No more than 12 credit hours on the 500 level may be counted toward a degree. An identifiable unifying principle is required for each student’s program.

### Master of Arts Thesis Option

The opportunity to undertake a long research project or other appropriate project is available to students in the Master of Arts in English. Writing a thesis may be of particular benefit to those who contemplate further graduate work or who have a strong desire to pursue a single topic in great depth. Under the guidance of an advisor (a member of the graduate faculty), the student may earn six hours of credit for a completed, approved thesis.

### Master of Arts Oral Comprehensive Examination

During the first three weeks of the semester in which they intend to graduate, students must contact the graduate program director in English to schedule their comprehensive examination. The oral comprehensive examination covers each student’s particular program of study. Based on the courses taken by the student, the examination tests the student’s mastery of materials and concepts, interpretive skills, and ability to make critical distinctions and connections. The examination of a thesis student will also cover the thesis and its related areas. Students who fail the oral comprehensive examination may retake the test only once in a different semester. Students who fail a second time will no longer be eligible to receive the Master of Arts in English from Old Dominion University.

### Literature Option

Edward Jacobs, Coordinator

This option requires:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 600</td>
<td>Introduction to Research and Criticism</td>
<td>3</td>
</tr>
<tr>
<td>British Literature before 1800</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>British Literature after 1800</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGL 559</td>
<td>New Literatures in English</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 735/835</td>
<td>Postcolonial Literature and Theory</td>
<td>3</td>
</tr>
<tr>
<td>American Literature before 1870</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>American Literature after 1870</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENGL 725</td>
<td>Scholarly Editing and Textual Scholarship</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 764</td>
<td>Theories of Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 735</td>
<td>Postcolonial Literature and Theory</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 730/830</td>
<td>The Digital Humanities *</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 790</td>
<td>Seminar in Textual Studies</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 791</td>
<td>Graduate Seminar in English</td>
<td></td>
</tr>
<tr>
<td>Electives **</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Total Hours</td>
<td>45</td>
<td></td>
</tr>
</tbody>
</table>

* Or other course in interpretive methods approved by the Literature Coordinator and M.A. in English Graduate Program Director  
** At least three hours of which must be in literature.

### Professional Writing Option

Julia Romberger, Coordinator

Designed to prepare students to expand and theorize their practices of workplace writing and to prepare students for doctoral work in the field. This option requires:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 539</td>
<td>Writing in Digital Spaces</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 685</td>
<td>Writing Research</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 706</td>
<td>Visual Rhetoric and Document Design</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 715</td>
<td>Professional Writing Theories and Practices</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 686</td>
<td>Introduction to Rhetoric and Writing Studies</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 760</td>
<td>Classical Rhetoric and Theory Building</td>
<td></td>
</tr>
<tr>
<td>ENGL 765</td>
<td>Modern Rhetoric and Theory Building</td>
<td></td>
</tr>
<tr>
<td>Select one of the following: 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 540</td>
<td>General Linguistics</td>
<td></td>
</tr>
<tr>
<td>ENGL 550</td>
<td>American English</td>
<td></td>
</tr>
<tr>
<td>ENGL 577</td>
<td>Language, Gender and Power</td>
<td></td>
</tr>
<tr>
<td>ENGL 595</td>
<td>Topics in English</td>
<td></td>
</tr>
<tr>
<td>Select one of the following: 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 664</td>
<td>Teaching College Composition</td>
<td></td>
</tr>
<tr>
<td>ENGL 665</td>
<td>Teaching Writing with Technology</td>
<td></td>
</tr>
<tr>
<td>ENGL 680</td>
<td>Second Language Writing Pedagogy</td>
<td></td>
</tr>
<tr>
<td>ENGL 720</td>
<td>Pedagogy and Instructional Design</td>
<td></td>
</tr>
<tr>
<td>Select one of the following: 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 527</td>
<td>Writing in the Disciplines</td>
<td></td>
</tr>
<tr>
<td>ENGL 535</td>
<td>Management Writing</td>
<td></td>
</tr>
<tr>
<td>ENGL 573</td>
<td>Writing with Video</td>
<td></td>
</tr>
<tr>
<td>ENGL 581</td>
<td>Advanced Public Relations</td>
<td></td>
</tr>
<tr>
<td>ENGL 595</td>
<td>Topics in English</td>
<td></td>
</tr>
<tr>
<td>ENGL 662</td>
<td>Cybertexts and Digital Writing</td>
<td></td>
</tr>
<tr>
<td>ENGL 664</td>
<td>Teaching College Composition</td>
<td></td>
</tr>
<tr>
<td>ENGL 665</td>
<td>Teaching Writing with Technology</td>
<td></td>
</tr>
<tr>
<td>ENGL 668</td>
<td>Graduate Internship and Project in Professional Writing</td>
<td></td>
</tr>
<tr>
<td>ENGL 673</td>
<td>Discourse Analysis</td>
<td></td>
</tr>
<tr>
<td>ENGL 680</td>
<td>Second Language Writing Pedagogy</td>
<td></td>
</tr>
<tr>
<td>ENGL 686</td>
<td>Introduction to Rhetoric and Writing Studies</td>
<td></td>
</tr>
<tr>
<td>ENGL 695</td>
<td>Topics</td>
<td></td>
</tr>
<tr>
<td>ENGL 701</td>
<td>Texts and Technologies</td>
<td></td>
</tr>
<tr>
<td>ENGL 716</td>
<td>International Professional Writing</td>
<td></td>
</tr>
<tr>
<td>ENGL 720</td>
<td>Pedagogy and Instructional Design</td>
<td></td>
</tr>
<tr>
<td>ENGL 760</td>
<td>Classical Rhetoric and Theory Building</td>
<td></td>
</tr>
<tr>
<td>ENGL 765</td>
<td>Modern Rhetoric and Theory Building</td>
<td></td>
</tr>
<tr>
<td>ENGL 766</td>
<td>New Media Theory and Practice I</td>
<td></td>
</tr>
<tr>
<td>ENGL 771</td>
<td>New Media Theory and Practice II</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following: 3

| ENGL 685 | Writing Research |
| Select one of the following: 3 |
| ENGL 686 | Introduction to Rhetoric and Writing Studies |
| ENGL 760 | Classical Rhetoric and Theory Building |
| ENGL 765 | Modern Rhetoric and Theory Building |

Select one of the following: 3

| ENGL 540 | General Linguistics |
| ENGL 550 | American English |
| ENGL 577 | Language, Gender and Power |
| ENGL 595 | Topics in English |

Select one of the following: 3

| ENGL 721 | Compositions as Applied Rhetoric |
| ENGL 760 | Classical Rhetoric and Theory Building |
| ENGL 765 | Modern Rhetoric and Theory Building |

Select two of the following: 6

| ENGL 527 | Writing in the Disciplines |
| ENGL 586 | Media Law and Ethics |
| ENGL 595 | Topics in English |
| ENGL 662 | Cybertexts and Digital Writing |
| ENGL 665 | Teaching Writing with Technology |
| ENGL 673 | Discourse Analysis |
| ENGL 680 | Second Language Writing Pedagogy |
| ENGL 687 | Colloquium for Teachers of English |
| ENGL 695 | Topics |
| ENGL 701 | Texts and Technologies |
| ENGL 706 | Visual Rhetoric and Document Design |
| ENGL 720 | Pedagogy and Instructional Design |
| ENGL 721 | Compositions as Applied Rhetoric |
| ENGL 760 | Classical Rhetoric and Theory Building |
| ENGL 763 | Seminar in Discourse Analysis |
| ENGL 765 | Modern Rhetoric and Theory Building |
| ENGL 766 | New Media Theory and Practice I |
| ENGL 771 | New Media Theory and Practice II |
| ENGL 795 | Topics |

6 hours of electives 6

Total Hours 30

**Portfolio Option:**
As one of their oral exam options (the exam alone and thesis plus exam being the other two), students may choose to develop a portfolio as the capstone project for the MA in English professional writing option. Students choosing the portfolio will propose the scope of their individual projects to the graduate program director and the committee chair. Portfolios are a collection of individual texts with a meta-narrative that explains the connection between these texts and the portfolio’s intellectual underpinnings. The entire portfolio should range between 10,000 and 15,000 words. Portfolios can be, but are not limited to, a collection of extensively revised course work, a collection of teaching materials, or a collection of new media texts. Portfolios can be submitted in a notebook or electronically. To help prepare the portfolio, students will be encouraged to take an independent study for up to 3 credits as one of their electives; the student’s committee chair should direct this independent study.

**Rhetoric and Composition Option**
Kevin Moberly, Coordinator
Designed to prepare students to teach and administer writing in language arts, community college, or university contexts, and to prepare students for doctoral work in composition and/or rhetoric.

| ENGL 539 | Writing in Digital Spaces 3 |
| ENGL 664 | Teaching College Composition 3 |

**Teaching of English Option**
Tim Bostic, Coordinator
This option requires:

- **British Literature before 1800** 3
- **British Literature after 1800** 3
- **ENGL 559** New Literatures in English 3
- or **ENGL 735** Postcolonial Literature and Theory
Graduate Certificate in Literature

Easily completed in one calendar year, this certificate gives students who already hold at least a master’s degree in a different field the 18 hours of graduate study in literature that are the minimum requirement for teaching that subject at the post-secondary level in Virginia. Requirements are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Literature before 1800</td>
<td>3</td>
</tr>
<tr>
<td>British Literature after 1800</td>
<td>3</td>
</tr>
<tr>
<td>American Literature</td>
<td>3</td>
</tr>
<tr>
<td>Electives in Literature **</td>
<td>9</td>
</tr>
<tr>
<td>Total Hours</td>
<td>18</td>
</tr>
</tbody>
</table>

** Or Post-colonial Literature and Theory.

** which may include ENGL 600 and ENGL 764.

NOTE: at least nine of the 18 hours must be at the 600-level.

Graduate Certificate in Professional Writing

Easily completed in one calendar year, this certificate is designed for professionals who want to supplement their undergraduate degrees and sharpen their writing and communication skills. To apply for the certificate contact the coordinator of Professional Writing.

Select four of the following: 12

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 527 Writing in the Disciplines</td>
<td></td>
</tr>
<tr>
<td>ENGL 535 Management Writing</td>
<td></td>
</tr>
<tr>
<td>ENGL 539 Writing in Digital Spaces</td>
<td></td>
</tr>
<tr>
<td>ENGL 573 Writing with Video</td>
<td></td>
</tr>
<tr>
<td>ENGL 581 Advanced Public Relations</td>
<td></td>
</tr>
<tr>
<td>ENGL 583 Advanced News Reporting</td>
<td></td>
</tr>
<tr>
<td>ENGL 584 Feature Story Writing</td>
<td></td>
</tr>
<tr>
<td>ENGL 585 Editorial and Persuasive Writing</td>
<td></td>
</tr>
<tr>
<td>ENGL 586 Media Law and Ethics</td>
<td></td>
</tr>
<tr>
<td>ENGL 664 Teaching College Composition</td>
<td></td>
</tr>
<tr>
<td>ENGL 665 Teaching Writing with Technology</td>
<td></td>
</tr>
<tr>
<td>ENGL 668 Graduate Internship and Project in Professional Writing</td>
<td></td>
</tr>
<tr>
<td>ENGL 685 Writing Research</td>
<td></td>
</tr>
<tr>
<td>ENGL 686 Introduction to Rhetoric and Writing Studies</td>
<td></td>
</tr>
<tr>
<td>ENGL 687 Colloquium for Teachers of English</td>
<td></td>
</tr>
<tr>
<td>ENGL 695 Topics</td>
<td></td>
</tr>
<tr>
<td>ENGL 715 Professional Writing Theories and Practices</td>
<td></td>
</tr>
<tr>
<td>ENGL 716 International Professional Writing</td>
<td></td>
</tr>
<tr>
<td>ENGL 760 Classical Rhetoric and Theory Building</td>
<td></td>
</tr>
<tr>
<td>ENGL 765 Modern Rhetoric and Theory Building</td>
<td></td>
</tr>
<tr>
<td>ENGL 766 New Media Theory and Practice I</td>
<td></td>
</tr>
<tr>
<td>ENGL 771 New Media Theory and Practice II</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 12

Graduate Certificate in the Teaching of Writing

Easily completed in one calendar year, this certificate gives students who already hold at least a master’s degree in a different field the 18 hours of graduate study in the teaching of writing that are the minimum requirement for teaching that subject at the post-secondary level in Virginia. Requirements are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 664 Teaching College Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 687 Colloquium for Teachers of English</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 760 Classical Rhetoric and Theory Building</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 765 Modern Rhetoric and Theory Building</td>
<td></td>
</tr>
<tr>
<td>English electives in Rhetoric, Professional Writing, Journalism, Linguistics, or Creative Writing</td>
<td>9</td>
</tr>
</tbody>
</table>

Total Hours 18

NOTE: At least nine of the 18 hours must be at the 600-level.

Master of Arts - Applied Linguistics

Joanne Scheibman, Graduate Program Director.

The Master of Arts in Applied Linguistics prepares students to pursue advanced graduate study or to teach in colleges, adult education programs, businesses, private schools, or institutions in the U.S. or abroad. The program’s two emphases are Teaching English to Speakers of Other Languages (TESOL) and Sociolinguistics. Students in the program may also earn a certificate in TESOL and/or use appropriate courses in the program as requirements toward obtaining the Commonwealth of Virginia Endorsement for English as a Second Language.

Admission Information

In addition to general University admission requirements, applicants must have taken at least 9 hours of upper-level English, linguistics, or foreign language courses. The Graduate Record Examination (GRE), General Test, is required of all applicants. International students must submit scores from the TOEFL iBT, (88 for regular admission and 80 for provisional admission) or from the TOEFL PBT (570 for regular admission and 550 for provisional admission), a sample of scholarly writing, and three recommendations, one of which evaluates proficiency in English. After 12 hours of graduate work, international students must meet the TOEFL requirement for regular admission.

Degree Requirements

The M.A. in Applied Linguistics requires 33 credit hours, and the passing of an oral comprehensive examination, and the completion of a language requirement (12 credits or the equivalent in a single foreign language; international students may meet the requirement based on English proficiency as measured by the TOEFL). No more than 12 hours may be taken on the 500 level. Courses taken PASS/FAIL are not included in the 33 credit hours.

Continuance

Students must:
1. meet all university and program requirements;
2. maintain a 3.0 grade point average or better;
3. retake any core course in which grades below B- are earned.

Exit

In order to graduate from the program, students must
1. complete the required course of study for a total of at least 33 credit hours of course work. Credit hours with grades below B- and courses taken PASS/FAIL are not included in the 33 credit hour total.
2. complete the language requirement by having 12 credits or the equivalent in a single foreign language; this can be at the undergraduate level; international students may meet the requirement based on English proficiency as measured by the TOEFL;
3. submit a program portfolio;
4. pass an oral comprehensive examination;
5. fulfill all university exit requirements.

### Curriculum - TESOL Emphasis

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 540</td>
<td>General Linguistics</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 670</td>
<td>Methods and Materials in TESOL</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 671</td>
<td>Phonology</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 672</td>
<td>Syntax</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 675</td>
<td>Practicum in TESOL</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 679</td>
<td>First and Second Language Acquisition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 550</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 677</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 678</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 679</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 680</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 683</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 685</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 686</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 687</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 688</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 689</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 690</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 691</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 692</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 693</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 694</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 695</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 696</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 705</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 710</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 715</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 720</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 725</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 730</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 735</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 740</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 745</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 755</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 760</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 765</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 770</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 775</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 780</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 785</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 790</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Electives

Select three of the following:

**Total Hours:** 9

### Sociolinguistics Emphasis

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 544</td>
<td>History of the English Language</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 545</td>
<td>English Grammar</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 546</td>
<td>Southern and African American English</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 550</td>
<td>American English</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 577</td>
<td>Language, Gender and Power</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 673</td>
<td>Discourse Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 677</td>
<td>Language and Communication Across Cultures</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 678</td>
<td>Sociolinguistics</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 690</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 695</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 696</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 697</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 698</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 705</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 710</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 715</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 720</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 725</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 730</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 735</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 740</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 745</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 755</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 760</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 765</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 770</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 775</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 780</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Select three of the following:

**Total Hours:** 9

### Master of Arts - Applied Linguistics Thesis Option

Writing a thesis may benefit those who contemplate further graduate work, as well as those who have a desire to pursue a single topic in depth. Under the guidance of a member of the graduate faculty, a student may earn six hours of credit for a completed approved thesis. Students who write a thesis will defend the thesis early in their final semester and complete their oral exam in a separate examination.

### Master of Arts - Applied Linguistics Oral Comprehensive Examination

At the end of the program, all students must complete an oral comprehensive examination that covers each student’s program of study and, where applicable, the thesis. Students who fail the oral comprehensive examination may take the test one more time in a different semester. Students who fail a second time will no longer be eligible to receive the Master of Arts degree in applied linguistics from Old Dominion University. One week before the oral examination, students must submit a portfolio that will include all course syllabi, major assigned papers and a reflection about the entire M.A. experience.

### Graduate Certificate in Teaching English to Speakers of other Languages (TESOL)

This certificate may be of interest to students who want to teach English abroad or in the private sector. It includes five courses (some of which have ENGL 540 as a prerequisite):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 670</td>
<td>Methods and Materials in TESOL</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 671</td>
<td>Phonology</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 672</td>
<td>Syntax</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 675</td>
<td>Practicum in TESOL</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 677</td>
<td>Language and Communication Across Cultures</td>
<td>3</td>
</tr>
</tbody>
</table>

The certificate may be taken independently of the degree, but students must be admitted to the graduate program. A maximum of 6 semester hours of graduate credit may be transferred into the TESOL certificate program. This certificate does not provide a Commonwealth of Virginia endorsement in ESL.

### Master of Fine Arts - Creative Writing

Luisa Igloria, Graduate Program Director

The Master of Fine Arts in creative writing is widely regarded as a terminal degree. It is designed to prepare students for careers as publishing writers in fiction, poetry, or creative nonfiction. A secondary goal is to emphasize not only preparation for college-level teaching (the practical vocational goal of most M.F.A. programs in creative writing), but also includes preparation of graduates for careers in literary editing and publishing, or as free-lance writers (magazines, newspapers, reviews, and features).

### Admission

Applicants must have completed a bachelor’s degree from an accredited institution with at least a 3.0 G.P.A., including a minimum of 24 credit hours in English with at least a B average. The Graduate Record Examination (GRE), General Test, is required of all applicants. Candidates must also submit writing samples in the genre for which they wish to be considered; final admission will depend on faculty evaluation of those writing samples.
Students who have not completed 24 undergraduate credit hours in English may be admitted provisionally and make up the required undergraduate courses.

Requirements

Students in the M.F.A. program must complete 54 total credit hours (39 hours of required courses and 15 hours of approved electives). In addition, students must also maintain a 3.00 GPA overall, satisfy a mid-program review at the end of the third semester in the program, and complete all courses within three years (full-time students) or six years (part-time students). Students choose courses based upon their genre of study, and should consult the graduate program director or their advisor when selecting a schedule.

Students must take at least 12 credit hours of E650 (CREATIVE WRITING WORKSHOP), most of these in the genre area of concentration, to count toward core requirements for the degree.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 650</td>
<td>Creative Writing *</td>
<td>12</td>
</tr>
<tr>
<td>ENGL 660</td>
<td>Craft of Narrative</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 661</td>
<td>Craft of Poetry</td>
<td>12</td>
</tr>
</tbody>
</table>

Literature (select four of the following): **

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 503</td>
<td>Medieval Literature</td>
</tr>
<tr>
<td>ENGL 507</td>
<td>Chaucer’s Canterbury Tales</td>
</tr>
<tr>
<td>ENGL 516</td>
<td>English Renaissance Drama</td>
</tr>
<tr>
<td>ENGL 521</td>
<td>British Literature 1660-1800</td>
</tr>
<tr>
<td>ENGL 523</td>
<td>The Romantic Movement in Britain</td>
</tr>
<tr>
<td>ENGL 533</td>
<td>Victorian Literature</td>
</tr>
<tr>
<td>ENGL 538</td>
<td>The Twentieth-Century British Novel</td>
</tr>
<tr>
<td>ENGL 546</td>
<td>Studies in American Drama</td>
</tr>
<tr>
<td>ENGL 547</td>
<td>The American Novel to 1920</td>
</tr>
<tr>
<td>ENGL 548</td>
<td>The American Novel 1920 to Present</td>
</tr>
<tr>
<td>ENGL 559</td>
<td>New Literatures in English</td>
</tr>
<tr>
<td>ENGL 560</td>
<td>The Literature of Fact</td>
</tr>
<tr>
<td>ENGL 561</td>
<td>Poetry of the Early Twentieth Century</td>
</tr>
<tr>
<td>ENGL 562</td>
<td>Sacred Texts as Literature</td>
</tr>
<tr>
<td>ENGL 565</td>
<td>African-American Literature</td>
</tr>
<tr>
<td>ENGL 566</td>
<td>Asian American Literature</td>
</tr>
<tr>
<td>ENGL 592</td>
<td>Modern World Drama</td>
</tr>
<tr>
<td>ENGL 593</td>
<td>Contemporary World Literature</td>
</tr>
<tr>
<td>ENGL 595</td>
<td>Topics in English</td>
</tr>
<tr>
<td>ENGL 615</td>
<td>Shakespeare</td>
</tr>
<tr>
<td>ENGL 632</td>
<td>18th Century British Literature</td>
</tr>
<tr>
<td>ENGL 641</td>
<td>19th Century British Literature</td>
</tr>
<tr>
<td>ENGL 645</td>
<td>20th Century British Literature</td>
</tr>
<tr>
<td>ENGL 655</td>
<td>Topics in World Literature</td>
</tr>
<tr>
<td>ENGL 656</td>
<td>American Literature to 1810</td>
</tr>
<tr>
<td>ENGL 657</td>
<td>American Literature 1810-1870</td>
</tr>
<tr>
<td>ENGL 658</td>
<td>American Literature 1870-1946</td>
</tr>
<tr>
<td>ENGL 659</td>
<td>American Literature 1945-Present</td>
</tr>
<tr>
<td>ENGL 791</td>
<td>Graduate Seminar in English</td>
</tr>
</tbody>
</table>

ENGL 695 | Topics (The following courses are specifically recommended for MFA Creative Writing students: 695 Topics: Literary Publishing and Editing; 695 Topics: Literature for Writers; and 695 Topics: The Thesis Reading List.)

ENGL 792 | Graduate Seminar in English

ENGL 694 | Thesis Colloquium ***

Students must complete 3-9 Thesis Hours to complete curricular requirements in the program.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 698</td>
<td>Thesis Research</td>
</tr>
<tr>
<td>ENGL 699</td>
<td>Thesis</td>
</tr>
</tbody>
</table>

Applications packets are available online at the Office of Graduate Admissions. The following should be submitted along with the appropriate applications forms: 1) a 1500-word statement of the applicant’s experiences and goals in their field of study.
academic and professional goals and discussion of how the PhD in English will contribute to the achievement of those goals; 2) three letters of reference from sources capable of commenting on the applicant’s readiness for advanced graduate study in English; 3) a 15-20 double-spaced-page writing sample on a topic related to the applicant’s projected plan of study; 4) a resume or curriculum vitae; 5) GRE general exam scores (taken within the last five years). The GRE score is not optional nor can another test substitute for it.

Admission standards include the following, which are required, unless otherwise stated: 1) A completed master’s degree (or its equivalent) in English or in an appropriate field (such as rhetoric, composition, English education, communications, journalism, linguistics, science, or technology) from a regionally accredited institution of higher education; 2) A minimum grade point average (GPA) of 3.5 (on a 4.0 scale) overall for the master’s degree; 3) A score in the 70th percentile or higher on the verbal and writing sections of the GRE General Exam (recommended); 4) For students whose first language is not English, a current score for the Test of English as a Foreign Language (TOEFL) of at least 600 on the paper version, 250 on the computer-based version, or 80 on the iBT version. Students without at least some significant background in an English-related field are encouraged to take master’s level coursework in English before applying.

Degree Requirements
The Doctor of Philosophy degree in English requires 48 credit hours (39 credit hours of course work and 9 credit hours of dissertation), completion of a research competency, and the passing of a candidacy examination and an oral defense of the dissertation. An identifiable unifying principle is required for each student’s program.

Summer Residency Requirement
On-campus and distance students who are part-time (less than 9 credit hours) must complete a residency requirement by attending the summer doctoral institute during two summer

Curriculum
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 810</td>
<td>Major Debates in English Studies</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 840</td>
<td>Empirical Research Methods and Project Design</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 892</td>
<td>Dissertation Seminar</td>
<td>3</td>
</tr>
<tr>
<td>Emphasis 1</td>
<td>Knowledge of Writing and Oral Rhetoric</td>
<td>9</td>
</tr>
<tr>
<td>Emphasis 2</td>
<td>Knowledge of Reading and Critical Analysis</td>
<td>9</td>
</tr>
<tr>
<td>Electives</td>
<td>Electives</td>
<td>12</td>
</tr>
<tr>
<td>ENGL 899</td>
<td>Dissertation</td>
<td>9</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>48</td>
</tr>
</tbody>
</table>

* Students are allowed to take only one English 897 per emphasis with a total of two different sections of English 897 for the entire course of study.

** Students are allowed to take one course at the 600-level towards their course of study.

Emphasis Courses

(18 credit hours)

Students will choose two nine-hour emphases from those described below. NOTES:
A. Some courses appear in multiple emphases, but the same course cannot be counted toward the required nine hours in multiple emphases. (No “double-dipping” is allowed).
B. An emphasis is defined by a minimum of three courses, but students are free to select additional courses from their emphasis areas as electives (see below, ELECTIVES).
C. Students who choose the “Student-Designed Emphasis” as one of their two emphases MUST follow the process for defining it specified in the description below in order for courses they take to constitute an emphasis.
D. Students may count only one “Student-Designed Emphasis” toward the requirement to complete two emphases. That is, all students must select as least one of the pre-defined disciplinary emphases, but all students may also design their own emphasis according to the process stipulated below.

1. Literary and Cultural Studies

The Literary and Cultural Studies emphasis will teach students to apply a range of methodologies to the study of literature and other textually informed cultural practices. Although the emphasis includes course offering intensive study of specific literary-cultural topics (such as Victorian Gothic or Women & Indian Film), the emphasis aims more to professionalize students as experts in the methods of critical traditions of literary, textual, and cultural interpretation than to credential students as specialists in particular literary-cultural periods. By the conclusion of their studies in this emphasis, students will be proficient in interpreting texts and cultural practices by critically employing methodologies that include:

- Theories of Form, such as the technical protocols of scholarly editing and the physical description of manuscript and printed texts.
- Critical Theories such as New Historicism, Feminism, Queer Theory, and Poststructuralism.
- Cultural Theories such as Critical Race Theory, Mass/Popular Culture Theory, and Post Colonial Studies

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 801</td>
<td>Texts and Technologies</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 805</td>
<td>Discourse and Rhetoric Across Cultures</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 825</td>
<td>Scholarly Editing and Textual Scholarship</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 830</td>
<td>The Digital Humanities</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 835</td>
<td>Postcolonial Literature and Theory</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 864</td>
<td>Theories of Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 890</td>
<td>Seminar in Textual Studies</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 891</td>
<td>Graduate Seminar in Literary Studies</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 895</td>
<td>Topics (when appropriate for emphasis)</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Rhetoric, Writing, and Discourse Studies

This emphasis prepares students for placement and advancement in careers centered on the history and theory of rhetoric, composition, writing program administration, workplace studies, and/or rhetorical and linguistic approaches to discourse and culture. It emphasizes how communications are compose, constructed, and produced as well as how they affect (inter)personal, social, cultural, and political situations. Possible areas of inquiry include:

- Institutional assessment procedures for writing and critical thinking
- Writing practices and language use in a variety of educational, public, professional, and workplace settings
- The influence of institutional, cultural, and disciplinary assumptions about language and language users upon rhetorical and linguistic choices.
- The rhetorical constraints and strategies of underrepresented groups.
- The historical development of rhetoric and composition and professional writing in terms of theory, practice, and instruction.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 801</td>
<td>Texts and Technologies</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 805</td>
<td>Discourse and Rhetoric Across Cultures</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 806</td>
<td>Visual Rhetoric and Document Design</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 815</td>
<td>Professional Writing Theories and Practices</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 816</td>
<td>International Professional Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 820</td>
<td>Pedagogy and Instructional Design</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 821</td>
<td>Compositions as Applied Rhetoric</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 860</td>
<td>Classical Rhetoric and Theory Building</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 863</td>
<td>Seminar in Discourse Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 865</td>
<td>Modern Rhetoric and Theory Building</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 878</td>
<td>Seminar in Sociolinguistics</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 883</td>
<td>Seminar in Professional Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 893</td>
<td>Seminar in Rhetoric</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 895</td>
<td>Topics (when appropriate for emphasis)</td>
<td>3</td>
</tr>
</tbody>
</table>
3. Technology and Media Studies
The study of technology as a political, cultural, economic, systematic, and aesthetic force is a crucial area of analysis in contemporary scholarship. This emphasis prepares students for interdisciplinary work with a focus on domains of technological complexity with foundations in the materiality of rhetorical work. A major tenet of this emphasis is that in addition to studying issues of technology, society, communication, and media design, we also develop practical solutions for the situations we confront. This emphasis prepares students for both academic and industry positions where they can use their skills as researchers and strategists. Possible areas of research and application include:

- Ethical, social, and political dimensions of information, technology, and networked communication
- Copyright and intellectual property, including the legal implications of technological regulation and change
- Privacy issues in information technologies and media
- Implications of digital methods in the humanities
- Design and development of digital humanities tools
- Technologically mediated communication such as experience design, usability studies, and information architecture
- Visual and participatory cultures

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 806</td>
<td>Visual Rhetoric and Document Design</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 830</td>
<td>The Digital Humanities</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 866</td>
<td>New Media Theory and Practice I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 871</td>
<td>New Media Theory and Practice II</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 894</td>
<td>Seminar in New Media</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 895</td>
<td>Topics ((when appropriate to emphasis))</td>
<td>3</td>
</tr>
</tbody>
</table>

4. Student Designed Emphasis
A student-designed emphasis is a coherent cluster of at least three courses that are not included in the other emphasis chosen by the student. The courses selected must define a cross-curricular focus that is clearly different from the foci of the pre-defined disciplinary emphases listed above. Examples might include methodology; pedagogy; gender studies; visual rhetoric; discourse and rhetoric across cultures; or professional writing for international contexts. Students should construct emphases under the guidance of an advisor, with advice from other mentors as needed. Students must submit a proposal for the emphasis that includes a title, a description of the focus, and a tentative or exemplary selection of at least three courses. Both the advisor and the GPD must approve the proposal and place a signed approval letter in the student’s advising file. Because course offerings may change, a final description of the emphasis (including a title, a description of the focus, and a justification of how courses taken support the focus) must be approved by the student’s advisor (in a signed letter) and submitted with the letter to the GPD before the student enrolls in English 892 Dissertation Seminar.

Electives
(12 credit hours)
The remaining four courses are electives, which may include additional courses in the student’s chosen emphases, course in other emphases, or other 800-level courses from other programs. Students are encouraged to select electives that contribute to defining a coherent area of specialization or subfield. Note: Students and advisors should select a pedagogy course when students’ previous work experience or course work does not prepare them for instructional activities related to their field.

Dissertation Seminar
(3 credit hours)
Taken in the semester of the student’s candidacy examination, this course supports students in preparing their dissertation prospectus. It sets up writing groups for cohorts of students entering the dissertation stage of their graduate studies.

Dissertation Credits
(minimum of 9 credit hours)
A dissertation is required of all Ph.D. students. A dissertation prospectus will be submitted after the student’s successful completion of the candidacy exam. If the student’s proposed dissertation committee approves the prospectus, the student will proceed to research and write the dissertation. An oral defense of the dissertation will be scheduled after a draft of the completed dissertation is approved by the student’s dissertation committee.

Research Competency
Because the PhD is a research degree, all students are expected to present evidence of mastery of a basic research competency over and above the usual course work. Students select one of the following three options to meet this requirement:

Foreign Language
To enter candidacy for the doctoral degree, students may present evidence of mastery of a foreign language equivalent to second-year undergraduate facility. This can be done by transcript, by demonstration of native language proficiency (for those who speak English as a second language), by taking coursework at Old Dominion or elsewhere equivalent to second-year language facility (at Old Dominion University, through language courses numbered 202), by passing a standardized test at the appropriate level, or by passing an examination administered by the Department of Foreign Languages geared to second-year language mastery. A grade of B or above in both semesters of second-year instruction will demonstrate competency in that language. Evidence of completion of the foreign language requirement should be presented to the GPD as soon as possible in the student’s career and certainly before enrolling in the Dissertation Seminar.

New Media Application
Students may choose the option of presenting evidence of mastery of computer and new media applications beyond the usual knowledge of word processing, spread sheets, projection applications (e.g., PowerPoint), portable document format (pdf), and similar, common applications and software. This would include programming languages such as

- InterDev
- PERL
- JavaScript
- C#
- PHP
- CSS/XML
- Ruby

In lieu of standardized examinations to test such knowledge, students choosing this option must submit a multimodal, new-media project in which demonstration of one of the allowed programming languages is paramount. The project should include:

- a project proposal for approval,
- a project log,
- 3 versions (revisions) of a portfolio of self-produced material,
- a statement of which applications or programs one is presenting and level of expertise,
- and, if needed, a demonstration of facility before members of the PhD Advisory Council, which shall have final say on whether the option has been satisfied.
Projects should be multimodal and interactive. As with seeking credit in a foreign language, students should submit evidence of completion of the requirement to the GPD as soon as possible in their careers and certainly before enrolling in the Dissertation Seminar.

Statistics

Students whose research requires advanced knowledge of quantitative research design and statistics may show mastery of statistical methods through the following:

- Successful completion of one graduate-level course in statistics with a grade of B or higher (courses completed as part of the student’s master’s degree may count for this requirement). Courses offered at ODU that may fulfill this requirement include:
  - STAT 613 – Applied Statistical Methods I
  - ESPR 634 – Statistics in Health, Physical Education, Recreation, and Sports
  - OR
  - Successful completion of two undergraduate-level courses in quantitative research design and statistics with a grade of B or higher in both courses.

  AND

- Providing evidence to the GPD that they designed and completed a project using statistical methods (e.g., a course project, conference paper, or journal article).

Candidacy Exams

After students have completed all course requirements and research requirements, they must pass a written examination related to their chosen field. Exams are designed in consultation with an examination committee approved by the graduate program director of English, and they are directed toward the critical or scholarly project the student plans to pursue in the dissertation. Students who fail the written exam will not be allowed to submit their dissertation proposal or to begin work on their dissertation. The written exam may be retaken only once and no earlier than the semester following the student’s initial attempt.

Grade Requirements

All Ph.D. students will be graded on the traditional A, B, C, F scale (with pluses and minuses) in all courses. Pass/Fail evaluations will be used only in the case of registration for internships or for thesis or dissertation research, or when specifically approved by the director. Graduate students whose grade point averages fall below 3.00 (B) will be placed on a probationary status. After two consecutive semesters below this average or the accumulation of two grades of “C” or below, the graduate program director and the Ph.D. advisory committee may dismiss the student from the doctoral program.

Time Limit and Residency Requirements

The doctoral program must be completed within eight years of entry into Ph.D. course work. Residency requirements can be fulfilled by two semesters of full-time study on campus or by attending two Summer Doctoral Institutes.

Transfer Credit

Twelve graduate hours not used to fulfill the requirements of a degree at other institutions or at Old Dominion University may be applied toward the fulfillment of degree requirements. Transfer credit is accepted as degree credit at the discretion of the graduate program director.

Financial Aid

Full-time students are eligible to apply for university fellowships and teaching and research assistantships, which are awarded on a competitive basis.

Nondegree Students

Nondegree students may not register in doctoral-level English courses.

Additional Information

Additional information is available on the English Department website.

Department of History

8000 Batten Arts and Letters Building
757-683-3949
Austin Jersild, Chair

Master of Arts - History

Ingo Heidbrink, Graduate Program Director

The Department of History offers courses of study leading to the Master of Arts with a major in history.

Admissions

Applicants must meet all University requirements and regulations for admission. Their applications must include a short essay of 500 words or less, addressing their academic interests and goals, and two letters of recommendation. The Graduate Record Examination (GRE), General Test, is required for all applicants.

An undergraduate major or minor in history is desirable but is not required for admission. Generally, 18 semester credit hours in history and closely related cognates are sufficient for admission on a provisional basis. These credit hours should include survey and upper level courses. The graduate program director may prescribe certain undergraduate courses to be completed before recommending admission to the program. Under certain circumstances, students can be admitted to graduate courses while simultaneously completing an undergraduate prerequisite.

The requirement for admission to full standing (regular status) is 24 semester credit hours with an average of at least 3.00 in history and a GPA of 3.00. Provisional admission requires 18 credits (as described above) with an average of 3.00 in history and a GPA of 2.70. Students with averages below these minimums can attempt to improve their standing in undergraduate courses approved by the graduate program director. However, they cannot be admitted to graduate courses until they have achieved acceptable averages in history. Applicants who are denied admission to the M.A. program in history are not permitted to enroll in history graduate courses as non-degree students.

Prospective applicants with questions about their admission status should contact the graduate program director in the Department of History. Those certain of their qualifications should apply through the Office of Admissions.

Admissions forms should reach Old Dominion University well in advance of the intended term of entry, but no later than November 1 for spring admission, March 1 for summer, and June 1 for fall. All required forms and documents should be sent directly to the Admissions Office, which creates a central file for each applicant. Only the one-page application for graduate financial assistance along with a duplicate copy of the 500-word essay should be sent directly to the graduate program director.

Graduate Financial Aid

Old Dominion University offers financial assistance to qualified graduate students. Types of aid include research and teaching assistantships, fellowships, grants, scholarships, and part-time employment. Nearly all forms of aid require that the student be engaged in full-time graduate study.

Fellowships, assistantships, tuition grants, and small research grants may be available. Departmental funds may affect fellowship and assistantship amounts. The establishment of student need and academic promise also affect some grant amounts. The application deadline is February 15. Graduate teaching and research assistants are charged tuition at the in-state
Degree Requirements

Two courses of study are available. One is a 30-credit program capped by written comprehensive examinations in two general fields and an oral examination. The other is a 30-credit program, comprising 24 hours of course work, a thesis for which students earn six credits (HIST 698-HIST 699) on a pass/fail basis, and an oral examination. Either alternative leads to an M.A. in history.

All candidates for the M.A. in history must meet the general graduate degree requirements established for the University. In addition, all students must complete HIST 600 during their first year in the program. No more than nine of the required 30 credits may be earned in 500-level courses. Students are permitted a maximum of six credits in other departments offering graduate courses if the work is germane to their historical studies; prior approval of the graduate program director is required. Students who have received two grades of C+ or below will be indefinitely suspended from the program. Those students whose grade point average falls below 3.00 will be subject to the University’s probation/suspension policy.

Curriculum

Examination Option

Students pursuing the exam option must take course work as follows:

Students choose two fields of concentration for the Examination Option, which will conform to the expertise of two of the three committee members who constitute the student’s exam committee. The fields can be tailored to the following geographic areas: North America, Europe, Russia, Latin America, Asia, or Africa.

Students pursuing the examination option must complete HIST 675 during their last year in the program. Written comprehensive field examinations may be taken in conjunction with HIST 675. The two field exams are taken during a designated time over the course of two weeks with a two-hour oral examination following the completion of written exams. Exams are individualized by the student’s examining committee but competence in the entire field is essential. Examinations are completed no later than 30 days before the end of a semester, and thus are normally scheduled in March, July, and November. A field exam is judged in its entirety and is rated Pass or Fail by the examining committee; the same is true of the oral examination. Students who fail an exam can be re-examined in the next scheduled round of exams. Only one re-examination is permitted.

Thesis Option

Students pursuing the thesis option must take course work as follows:

The Americas 6
Europe, including Russia 6
Africa or Asia 3
Electives 6
HIST 600 Historical Theory and Practice 3
HIST 698 Thesis 6 - 12
& HIST 699 and Thesis

Total Hours 30-36

The thesis option will be recommended for those students who have maintained a high GPA and have the support of a faculty director. A review of the thesis prospectus is required before the completion of 18 hours of course work. The master’s thesis is written under the direction of a thesis advisor selected by the candidate in consultation with the graduate program director. The thesis is reviewed and the candidate examined by a faculty committee chaired by the thesis advisor. The thesis defense—normally a two-hour oral examination—focuses on the thesis, the historical context, and related aspects of the student’s concentration. Final approval of the thesis is the responsibility of the thesis advisor, the graduate program director, and ultimately of the dean of the College of Arts and Letters, who certify the candidate for graduation.

Institute of Humanities

3041 Batten Arts and Letters
757-683-3821

Master of Arts - Humanities

Jeffrey Jones, Graduate Program Director

The Institute of Humanities administers the Master of Arts program in the humanities offered by the College of Arts and Letters. The program, which emphasizes interdisciplinary studies, cultural studies, and critical studies, allows students to pursue individualized programs of study that incorporate work from more than one humanities discipline. Students may enroll in approved graduate courses from the following fields: art history, Asian studies, linguistics, literature, foreign languages, history, music, philosophy, political science and geography, sociology and anthropology, communication and film studies, women’s/gender studies, international studies, etc.

Admission

The program is open to all qualified holders of the B.A. or B.S. degree and is designed for full-time students as well as part-time students, students who have recently completed their bachelor’s degree as well as nontraditional students who are returning to an academic environment after an absence of some years, and students who are planning to pursue the Ph.D. as well as students who wish to broaden and strengthen their understanding of the humanities through advanced work at the master’s level.

In addition to meeting general University requirements, an applicant must have an undergraduate average of 3.00 in the liberal arts and 2.80 overall, as well as 24 hours in liberal arts disciplines. All students seeking admission to the humanities program are required to submit recent GRE scores. Although admission is selective, the University recognizes that each individual possesses unique qualifications that will be taken into consideration. An essay of 500 words must be submitted with the application material. The essay should

1. Propose a general program of study
2. Discuss personal, intellectual, and professional goals
3. Explain the relationship of those goals to the intended program of study

All application inquiries should be made to the Office of Admissions.

Requirements

Students may pursue the 36-hour non-thesis option or the 33-hour thesis option. All students must take HUM 601 and HUM 602. These courses provide an introduction to humanities research, methodology, and critical approaches, and serve as the foundation for each student’s individualized program. In selecting their courses, students may take only 12 hours at the 500 level. All students must complete their graduate work within a six-year period.

Curriculum

All students must take the following two required courses, which provide an introduction to humanities research, methodology, and critical approaches, and serve as the foundation for each student’s individualized program:

HUM 601 Introduction to the Humanities 3
HUM 602 Theory and Methods in Humanities 3

Total Hours 6
Non-thesis Option

Students selecting the non-thesis option must take the capstone seminar, HUM 694. This seminar brings students together in their final semester of study in order to explore the current state of humanities disciplines and theories of interdisciplinary. All students are required to complete a final integrating paper that demonstrates effective interdisciplinary work. Students wishing to undertake special projects other than the research paper must obtain the approval of the graduate program director and appropriate faculty advisors.

Thesis Option

Students pursuing the 33-hour thesis option must take HUM 698-HUM 699 (thesis, six hours) in place of HUM 694. The thesis is to be based on original scholarly research and must reflect the interdisciplinary nature of the humanities degree. In rare cases, students may be permitted to undertake a creative project—the making of a film or video, the production of a musical or multimedia event—with the approval of the director. Each thesis student will be assigned a faculty advisor who will chair a thesis committee appointed by the director of the Institute of Humanities. The committee, consisting of faculty certified for graduate instruction in the College of Arts and Letters, will direct and evaluate the student’s work. The thesis committee must have faculty members from at least two different Arts and Letters disciplines. Upon completion of the thesis, the committee will conduct a two-hour examination and defense of the thesis and the topics related to the student’s program of study. A formal written statement explaining and justifying the project must be submitted before the oral examination.

Sample Study Program Options

The Master of Arts degree in humanities is an interdisciplinary graduate program. Choosing from more than 70 graduate-level courses offered through various departments of the College of Arts and Letters each semester, students may select their own emphasis and design a program in order to meet their own intellectual and professional objectives, or they may select a pre-approved concentration with a more structured program of study. Among the many emphases which may be developed are the following:

- Medieval Studies; Ideologies: Cromwell to Marx; African American Studies; Global Perspectives; American Studies; Ethics, Politics, and Cultural Values; Women’s Studies/Gender Studies; Post-colonial Studies; Revolution and Modernity; Contemporary Art Criticism; Drama/Performance Studies; History and Theory of Film; and Religion and Public Policy.

Culture, Technology, and Social Change Concentration

This concentration was created to enhance humanities students’ professional credentials and to enrich their academic experience by providing a structured program of graduate study that reflects a growing field of interdisciplinary scholarship. This concentration will foster critical thinking about the impact of technology on culture, society, and values. Moreover, it will prepare students for a job market that places increasing value on the ability to comprehend connections between technical and humanistic forms of knowledge.

Women’s Studies Certificate

A Women’s Studies Certificate is available to graduate students through the Institute of Humanities (in association with the women’s studies program) upon completion of the following 15-hour program of course work:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMST 560</td>
<td>Feminist Theory</td>
<td>3</td>
</tr>
<tr>
<td>WMST 570</td>
<td>Feminist Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>At least 9 additional credits in 500 or 600-level courses</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours: 15

* Courses approved for the women’s studies curriculum and drawn from various disciplines (such as English, history, political science and geography, foreign languages, art history, women’s studies, etc.). No more than six of these credits may be taken in any one field. At least one of the courses chosen must be on the 600 level.

Only students who hold a B.A. or B.S. degree with an overall GPA of 2.75 may apply for the graduate women’s studies certificate. Students must maintain a 3.00 grade point average in the 15 graduate credits needed for the certificate. The women’s studies certificate may be undertaken independently or in combination with a graduate degree in humanities (or in combination with another graduate degree). Students wishing to pursue the certificate through the Institute of Humanities must gain admission to the humanities graduate program before the completion of nine graduate hours and must satisfy all of the admission requirements for the program including the GRE.

The director of the women’s studies program or a designee will serve as advisor for students who gain admission to the humanities program only for the purpose of pursuing the graduate women’s studies certificate. Students pursuing the certificate in combination with a graduate degree in the humanities will have their progress monitored by both a women’s studies advisor and the director of the Institute of Humanities.

For additional information please contact the Institute of Humanities at: http://al.odu.edu/hum/

Visual Arts Emphasis

A new emphasis in Visual Arts has been approved for fall 2010. Please visit the Institute of Humanities website for more information: http://al.odu.edu/hum/

International Studies

7045 Batten Arts and Letters
757-683-5700
Regina Karp, Graduate Program Director

Old Dominion University offers M.A. and Ph.D. degrees in international studies through the Graduate Program in International Studies (GPIS). GPIS is an interdisciplinary unit, offering advanced research and graduate training in global problems and transnational issues. Fields of concentration include: U.S. foreign policy and international relations, conflict and cooperation, international political economy and development, interdependence and transnationalism, and comparative and regional studies, modeling and simulation and cultural studies.

Master of Arts—International Studies

Admission Requirements

1. All candidates for admission into the M.A. must submit Graduate Record Examination (GRE) scores;
2. Official transcripts of all undergraduate or prior graduate course work submitted directly by all universities attended;
3. Two letters of recommendation addressing the candidate’s capacity to undertake graduate work in international/global issues;
4. An essay of not more than 500 words describing interest in and capacity for advanced training in global/transnational issues; and
5. One example of writing or research (a paper submitted to a seminar, a publication or report, or another comparable example).

Any prior graduate course work taken at Old Dominion University (e.g., in nondegree status) or at another institution can be counted toward the M.A. degree only in accordance with the provisions governing transfer of credit and the director’s approval.
Admission Standards
1. All applicants to the M.A. program must hold a baccalaureate degree or equivalent.
2. Candidates for the M.A. must attain a 3.00 cumulative GPA in all undergraduate courses. A GRE score of 450 Quantitative, and 156 Verbal is normally expected. (1100 Old Score)
3. Individuals whose native language is not English must submit a score of 230 on the computer-based TOEFL (the equivalent of 570 in the older, paper-based score scale) or 80 on the TOEFL iBT.

Application Deadline, M.A.
Applications for fall semester admission to the M.A. program and for financial assistance must be submitted to the Office of Graduate Admissions no later than February 15. Applications for spring semester admission to the M.A. program (only) are accepted on a limited basis and must be submitted to the Office of Graduate Admissions by October 15.

Degree Requirements
Credits for the M.A.
The M.A. requires 33 credits, of which at least 27 must be at the 600 level or above. The required course work for all M.A. students includes the basic methodology course (IS 600), but does not include any courses needed for demonstrating foreign language competency. M.A. candidates writing theses will incorporate into their 33-credit program six credits of directed research on the thesis. Students pursuing a non-thesis track will take a four and 1/2 hour comprehensive examination after the completion of their course work.

Curriculum
All GPIS Students, both MA and PhD, will NOT be allowed to take more than 9 credit hours per semester. All M.A. and Ph.D. students must take IS 600, Research Methods; IS 655, International History OR IS 606, US Foreign Policy and World Order; ECON 650, International Economics; and IS 601, International Relations Theory. Each required course must be completed with a grade of B (3.00) or above. M.A. students must fulfill the requirements of nine credit hours in one field of concentration.

Required Courses, M.A. in International Studies Course List

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS 600</td>
<td>Research Methods in International Studies</td>
<td>3</td>
</tr>
<tr>
<td>IS 601</td>
<td>Seminar in International Relations Theory</td>
<td>3</td>
</tr>
<tr>
<td>ECON 650</td>
<td>International Economics</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>IS 606</td>
<td>American Foreign Policy and World Order</td>
<td></td>
</tr>
<tr>
<td>IS 655</td>
<td>International History</td>
<td></td>
</tr>
<tr>
<td>Field of concentration</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Electives*</td>
<td>Directed Research</td>
<td>12</td>
</tr>
<tr>
<td>IS 698 or IS 699</td>
<td>Thesis</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 33

* If thesis option, 6 of these credits will be directed research. Up to six credits of elective coursework may be taken at the 500 level.

Fields, Area/Region, Methodology, Language and Foreign Experience Requirements
Fields of concentration include U.S. foreign policy, conflict and cooperation, international political economy and development, interdependence and transnationalism, comparative and regional studies, modeling and simulation and cultural studies.

Methodology Requirements
The M.A. requires one methodology course (IS 600). M.A. students are encouraged to take further methods courses as electives.

Language Requirements
M.A. students must demonstrate reading competence in one foreign language other than English. International students who have English as a second language fulfill this requirement.

Foreign language competence can be demonstrated in one of two ways:
1. Students must complete a third year of language instruction at Old Dominion University (students may choose to enter the third year through a University placement test) or other institutions. A grade of B or above in both semesters of third-year instruction will demonstrate competency in that language.
2. Students may take a language test. Exams are administered (for a fee) by the Department of Foreign Languages and Literatures. GPIS requirements concern reading comprehension competence. For more information about which skills will be tested and what standards of competency are required, contact GPIS. If a student wishes to demonstrate competency in an uncommonly taught language, GPIS will endeavor, so far as practicable, to arrange an examination by Old Dominion University faculty and/or consultants. For more information about this method for demonstrating language competency, contact GPIS.

Comprehensive Examinations
In consultation with their advisors, M.A. students will select either a thesis or non-thesis option. Students selecting the non-thesis track must pass a written comprehensive examination. Thesis students must pass an oral defense of their thesis.

The M.A. comprehensive examination may not be scheduled before students have completed all core and methodology requirements, nor may the M.A. comprehensive examination be scheduled prior to the last semester in which regular course work is taken. M.A. examinations are scheduled twice a year. If M.A. students fail the written comprehensive on the first attempt, they may retake the entire written comprehensive exam only once, no earlier than one semester later.

Theses
M.A. students choosing the thesis option will submit a thesis prospectus to the chair of their thesis committee for approval after the completion of 18 credits or at the beginning of the third semester in the program. The thesis should be submitted to the thesis committee for its approval at least two weeks before a defense is scheduled. The committee will schedule the student’s oral defense of the thesis when the thesis appears to meet GPIS standards for master’s theses. The oral defense will concern questions of substance and methodology.

Grade Requirements
All M.A. students will be graded on the traditional A, B, C, F scale (with pluses and minuses) in all courses. Pass/Fail evaluations will be utilized only in the case of registration for internships or for thesis or dissertation research, or when specifically approved by the director.

Graduate students for whom grade point averages fall below 3.00 (B) will be placed on a probationary status. After two consecutive semesters below this average or the accumulation of two grades of “C” or below, the director will take under consideration, in consultation with faculty, termination of the student’s program.

Time Limit and Residency Requirements
The master’s degree can be completed in four full-time semesters, although many M.A. candidates continue the degree over a longer period on a part-time basis. The M.A. must be completed within a six-year period.

Additional Information
Please see the GPIS Handbook and website at a1.odu.edu/gpis. For other issues concerning GPIS, please contact:
Graduate Program in International Studies (GPIS), 7045 Batten Arts and Letters Building.
Doctor of Philosophy-International Studies

Admission Requirements

All candidates for admission into the Ph.D. must submit:

1. Graduate Record Examination (GRE) scores;
2. Official transcripts of all undergraduate or prior graduate course work submitted directly by all universities attended;
3. Three letters of recommendation (at least two of which should be from prior professors) addressing the candidate’s capacity to undertake graduate work in international/global issues;
4. An essay of not more than 500 words describing interest in and capacity for advanced training in global/transnational issues; and,
5. One example of writing or research (a paper submitted to a seminar, a publication or report, or other comparable example).

Any prior graduate course work taken at Old Dominion University (e.g., in nondegree status) or at another institution can be counted toward the Ph.D. degree only in accordance with the provisions governing transfer of credit and the director’s approval.

Admission Standards

1. Applicants to the Ph.D. program must hold a master’s degree in a related field of study.
2. Ph.D. candidates are generally expected to attain a GRE score of 148 Quantitative and 160 Verbal (1200 Old Score) and have at least a 3.00 cumulative GPA in undergraduate and graduate courses, with a somewhat higher GPA for courses related to international, global or transnational issues.
3. Individuals whose native language is not English must submit a score of 230 on the computer-based TOEFL (the equivalent of 570 in the older, paper-based score scale) or 80 on the TOEFL iBT.
4. The Admissions Committee strongly recommends prior international experience (residence, study or work) and foreign language training for all Ph.D. applicants. Evidence of substantial international and foreign language background is highly desirable for applicants.

Application Deadline, Ph.D.

Applications for fall semester admission to the Ph.D. program and for financial assistance must be submitted to the Office of Graduate Admissions no later than January 15.

Degree Requirements

The Ph.D. requires 78 credits, which must include 48 hours at the post-master’s level (i.e., courses at the 800 level). These 48 hours include a minimum of 12 and a maximum of 18 dissertation credits. The 78 credits do not include any courses needed for demonstrating foreign language competency. Each student’s program of study is supervised by a faculty committee.

Upon completion of coursework, Ph.D. students must pass a written and an oral comprehensive examination, submit a dissertation prospectus, write a dissertation, and undergo an oral defense of the dissertation.

Required Courses

All Ph.D. students must take:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS 600</td>
<td>Research Methods in International Studies</td>
<td>3</td>
</tr>
<tr>
<td>IS 606</td>
<td>American Foreign Policy and World Order</td>
<td>3</td>
</tr>
<tr>
<td>or IS 655</td>
<td>International History</td>
<td></td>
</tr>
<tr>
<td>ECON 650</td>
<td>International Economics</td>
<td>3</td>
</tr>
<tr>
<td>IS 601</td>
<td>Seminar in International Relations Theory</td>
<td>3</td>
</tr>
<tr>
<td>IS 620</td>
<td>Advanced Statistical Techniques for International Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 15

Ph.D. candidates must also take:

Each required course must be completed with a grade of B (3.00) or above. Ph.D. students must take 15 credit hours in one field of concentration and nine credit hours from another field, totaling 24 credit hours. They must also take 6 hours of elective coursework.

Curriculum

Required Courses, Ph.D. in International Studies

All Ph.D. students must take IS 600, Research Methods; IS 620, Advanced Research Methods; ECON 650, International Economics; IS 606, International Relations Theory; and either IS 606, American Foreign Policy and World Order, or IS 655, International History. Each required course must be completed with a grade B (3.00) or above. Ph.D. Students must take 15 credit hours in one field of study and nine credit hours from another field, totaling 24 credit hours. At least 6 credit hours of elective course work must also be completed. 12 to 18 credit hours of dissertation preparation credits must be taken to complete the credit hour requirement of 48 hours at the post-masters level.

Fields, Area/Region, Methodology, Language and Foreign Experience Requirements

Fields of concentration include U.S. foreign policy, conflict and cooperation, international political economy and development, interdependence and transnationalism, comparative and regional studies, modeling and simulation and cultural studies.

Methodology Requirements

All Ph.D. students must complete a sequence of two basic methods courses beginning with IS 600. Students holding an M.A. from another institution who are entering the Ph.D. program may present transcripts showing a B (3.00) or above, plus syllabi and other documentation, from a similar introductory methods course to be exempted from IS 600.

Language Requirements

Ph.D. students must demonstrate reading competence in one foreign language other than English. International students who have English as a second language fulfill this requirement.

Foreign language competence can be demonstrated in one of two ways:

1. Students may complete a third year of language instruction at Old Dominion University (students may choose to enter the third year through a University placement test) or other institutions. A grade of B or above in both semesters of third-year instruction will demonstrate competency in that language.
2. Students may take a language test. Exams are administered (for a fee) by the Department of Foreign Languages and Literatures. GPIS requirements concern reading comprehension competence. For more information about which skills will be tested and what standards of competency are required, contact GPIS. If a student wishes to demonstrate competency in an uncommonly taught language, GPIS will endeavor, so far as practicable, to arrange an examination by Old Dominion University faculty and/or consultants. For more information about this method for demonstrating language competency, contact GPIS.
Comprehensive Examinations
All Ph.D. students must pass a written comprehensive examination. Students who pass the written comprehensive examination must then pass an oral comprehensive examination.

The Ph.D. comprehensive examination may not be scheduled before students have completed all core and methodology requirements, nor may the Ph.D. comprehensive examination be scheduled prior to the last semester in which regular course work is taken. Ph.D. students are also required to fulfill the foreign language requirement before taking the comprehensive examination. Ph.D. examinations are scheduled twice a year. Ph.D. students failing the written comprehensive on the first attempt may retake the written comprehensive exam only once, no earlier than the following semester.

Dissertations
A dissertation is required of all Ph.D. students. A dissertation prospectus will be prepared after the successful completion of the comprehensive examination. If the student’s graduate committee approves the prospectus, the student will proceed to research and write the dissertation. An oral defense of the dissertation will be scheduled after a draft is approved by the committee.

Grade Requirements
All Ph.D. students will be graded on the traditional A, B, C, F scale (with pluses and minuses) in all courses. Pass/Fail evaluations will be utilized only in the case of registration for internships or for thesis or dissertation research, or when specifically approved by the director.

Graduate students for whom grade point averages fall below 3.00 (B) will be placed on a probationary status. After two consecutive semesters below this average or the accumulation of two grades of “C” or below, the director will take under consideration, in consultation with faculty, termination of the student’s program.

Time Limit and Residency Requirements
The doctoral program must be completed within eight years of entry into Ph.D. course work.

Transfer Credit
Twelve graduate credits earned at other institutions or at Old Dominion University may be applied toward the fulfillment of degree requirements. Transfer credit, including nondegree credit earned at Old Dominion, is accepted as degree credit at the discretion of the director.

Financial Aid
Full-time students are eligible to apply for University fellowships, teaching and research assistantships, and tuition grants which are awarded on a competitive basis.

Nondegree Students
Nondegree students must obtain the approval of the director before enrolling in graduate international studies classes.

Graduate Certificates
Students seeking to combine international studies and women’s studies may complete the 15-credit program leading to the certificate in Women’s Studies, which is offered in cooperation with the Institute of Humanities and the Women’s Studies Program. Students should contact the director of women’s studies at (757) 683-3823 for information.

Graduate Certificate in Modeling & Simulation in International Studies
The Graduate Program in International Studies (GPIS) offers a certificate in modeling and simulation.

Program Requirements
Twelve credit hours are required to complete the certificate.

Introductory Course(s): * 3-6
- MSIM 601 Introduction to Modeling and Simulation
- or
- MSIM 611 Modeling and Simulation Fundamentals I
- & MSIM 612 Modeling and Simulation Fundamentals II

Core Courses (select from the following) ** 6-9
- MSIM 722 Cluster Parallel Computing
- IS 762 Game Theory
- IS 765 Agent-Based Modeling and Simulation for International Studies
- IS 795 Topics in International Studies
- IDT 795 Topics in Instructional Design and Technology

Total Hours 12
* Students may take either MSIM 601 (for those students with a background in differential calculus) or the MSIM 611/MSIM 612 sequence (for students with less math background).
** Other courses may be included from across the University’s modeling and simulation programs with approval of the track coordinator.

Additional Information
Please see the GPIS Handbook and website at al.odu.edu/gpis. For other issues concerning GPIS, please contact:
Graduate Program in International Studies (GPIS), 7045 Batten Arts and Letters Building, Old Dominion University, Norfolk, VA 23529-0086, USA
Telephone: 757-683-5700
Fax: 757-683-3701
E-mail: isgpd@odu.edu.
Regina Karp, Graduate Program Director

Department of Music
244 Diehn Fine and Performing Arts Center
757-683-4061
John Toomey, Chair

Master of Music Education, M.M.E.
Nancy K. Klein, Graduate Program Director

The College of Arts and Letter offers the Master of Music Education degree with concentrations in applied performance/conducting, research, or seminar option. The graduate degree is designed to stress the development of advanced knowledge of broad-based principles and practices in music and music education for application in the public or private school, private studio, or higher education setting. A minimum of 34-37 semester hours of course work is required to complete the degree, with the hours distributed according to the area of concentration. The degree does not provide Virginia state licensure for teaching.

Admission
In order to be admitted into the graduate program each candidate must have earned a bachelor’s degree in applied music, music education, music history or music theory and have earned an overall GPA of 3.0 with a 3.0 in the major field of study. All candidates are required to take the GRE or the MAT. Candidates seeking the concentration in applied studies are required...
to audition before the graduate faculty. Video and audio-taped auditions are accepted.

Degree Requirements

The three areas of concentration for the Master of Music Education degree are:

1. Applied Studies, requiring 34 hours of course work and full master’s recital in performance or conducting
2. Research, requiring 34 hours of course work and a thesis or problems paper
3. Seminar Option, requiring 37 semester hours of course work

Before the completion of 12 credits, each candidate must declare an option of study. Those accepted into the applied option must pass an applied jury or performance presented before the graduate faculty for continuance review during each semester of study. Students in all areas of concentration must pass a written comprehensive examination near the completion of their studies.

The following courses are required for each concentration option:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 603</td>
<td>Foundations of Music Education</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 604</td>
<td>Foundations of Music Education</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 600</td>
<td>Introduction to Graduate Research (Taught concurrently with MUSC 603)</td>
<td>1</td>
</tr>
<tr>
<td>MUSC 630</td>
<td>Research in Music Education</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td>10</td>
</tr>
</tbody>
</table>

Additional course requirements are specific to the concentration option:

**APPLIED STUDIES CONCENTRATION**

Additional required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSA 651</td>
<td>Advanced Applied Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSA 652</td>
<td>Advanced Applied Music</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 605</td>
<td>Literature of the Wind Ensemble</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 606</td>
<td>Choral Music Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 609</td>
<td>Literature of the Orchestra</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 560</td>
<td>History of Jazz</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 566</td>
<td>Modern Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 591</td>
<td>Music in the Baroque Era</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 592</td>
<td>Music in the Classical Era</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 594</td>
<td>Music in the Romantic Era</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 30

**RESEARCH CONCENTRATION**

Additional required courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 698</td>
<td>Thesis Research</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 699</td>
<td>Thesis</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 6

**SEMINAR OPTION**

Additional required courses:

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 560</td>
<td>History of Jazz</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 566</td>
<td>Modern Music</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 591</td>
<td>Music in the Baroque Era</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 592</td>
<td>Music in the Classical Era</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 594</td>
<td>Music in the Romantic Era</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
</table>

The remainder of the course work for each option will be chosen from course offerings in the Department of Music.

Department of Political Science and Geography

7022 Batten Arts and Letters Building
757-683-3849
Dr. Jonathan Lieb, Director of Geography, Chief Departmental Advisor

Certificate in Spatial Analysis of Coastal Environments (Undergraduate and Graduate)

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 system (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). 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 undergraduate certification must complete the 400-level courses, and those seeking graduate certification must complete the 500-level courses:

**Core courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 404/504</td>
<td>Digital Techniques for Remote Sensing</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 419/519</td>
<td>Wetland Plants</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 450/550</td>
<td>Principles of Plant Ecology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 455/555</td>
<td>Molecular Systematics</td>
<td>3</td>
</tr>
<tr>
<td>OEAS 411/511</td>
<td>Structural Geology</td>
<td>3</td>
</tr>
<tr>
<td>OEAS 426/526</td>
<td>Concepts in Oceanography for Teachers</td>
<td>3</td>
</tr>
</tbody>
</table>

**Interpretive Analysis Courses:**

Select two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 402/502</td>
<td>Geographic Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 422W/522</td>
<td>Coastal Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 490/590</td>
<td>Applied Cartography/GIS</td>
<td>3</td>
</tr>
<tr>
<td>OEAS 495/595</td>
<td>Special Topics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Capstone Seminar:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 419/519/ OEAS 419/519</td>
<td>Spatial Analysis of Coastal Environments</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 12

Department of Sociology and Criminal Justice

6000 Batten Arts and Letters Building
757-683-3791
Master of Arts - Applied Sociology
Dianne Carmody, Graduate Program Director

The Master of Arts degree in Applied Sociology emphasizes research skills necessary in many professions. The M.A. degree may serve as professional training for students seeking employment in federal, state and local government agencies or in private-sector organizations. In addition, the M.A. program provides excellent training in the fundamentals of sociology for students who wish to pursue a Ph.D. in the social sciences.

The program provides students with training in theory and methods, as well as opportunities to participate in three areas of specialization:

1. General sociology
2. Criminal justice
3. Women’s studies

Admission
Students must hold a bachelor’s degree with at least a 3.00 average on a 4.00 scale and must have completed at least 12 hours of undergraduate work in sociology or criminal justice, including courses in theory, research methods, and statistics. The Graduate Record Examination is required for all applicants.

Those who fail to meet one or more of the above requirements may be admitted as provisional students by the graduate program committee.

Old Dominion University is the institution of formal record for this program.

Deadlines
This program admits students in the fall semester only. February 15 is the deadline for students applying for funding (Graduate Assistantship). Students who do not wish to apply for funding must apply by March 1. All students must submit original application materials directly to Old Dominion University’s Graduate Admissions Office.

Requirements
All students must complete 30 hours of course work including five required core courses (15 credit hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 610</td>
<td>Applied Social Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>SOC 620</td>
<td>Proseminar in Sociological Theory</td>
<td>3</td>
</tr>
<tr>
<td>SOC 630</td>
<td>Applied Social Statistics</td>
<td>3</td>
</tr>
<tr>
<td>SOC 640</td>
<td>Sociological Application of Computer and Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>SOC 650</td>
<td>Research Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 15

Each student must complete a thesis (six credit hours), which will be supervised by a faculty committee from the department.

Any student earning less than a B in a required core course will be required to repeat that course. If the student earns less than a B in the second attempt, that student will be dismissed from the program.

Sociology Track
In addition to the core course requirements listed above, students choosing the sociology track must complete 15 credit hours of electives chosen from graduate sociology courses offered by the Department of Sociology and Criminal Justice, Old Dominion University. Selection of elective courses will be based upon individual advising.

Criminal Justice Track
In addition to the core course requirements listed above, students choosing the criminal justice track must complete CRJS 625 and 12 credit hours of electives chosen from graduate criminal justice courses offered by the Department of Sociology and Criminal Justice, Old Dominion University. Selection of elective courses will be based upon individual advising. Students will be awarded a certificate in criminal justice upon completion of the Master of Arts degree.

Women’s Studies Track
In addition to the requirements listed above, students choosing the women’s studies track must complete WMST 560 and WMST 570 and nine credit hours of electives chosen from selected graduate women’s studies courses and/or courses cross-listed with women’s studies. No more than six hours of these credits can be taken in any one discipline (sociology and criminal justice are considered two separate disciplines). Selection of elective courses will be based upon individual advising. Students will be awarded a certificate in women’s studies upon completion of the Master of Arts degree.

Curriculum

Required Core Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 610</td>
<td>Applied Social Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>SOC 620</td>
<td>Proseminar in Sociological Theory</td>
<td>3</td>
</tr>
<tr>
<td>SOC 630</td>
<td>Applied Social Statistics</td>
<td>3</td>
</tr>
<tr>
<td>SOC 640</td>
<td>Sociological Application of Computer and Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>SOC 650</td>
<td>Research Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 15

* Prerequisite: SOC 610
** Prerequisites: SOC 610, SOC 620, SOC 630, SOC 640.

Criminal Justice Track:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRJS 625</td>
<td>The Administration of Criminal Justice</td>
<td>3</td>
</tr>
</tbody>
</table>

Women’s Studies Track:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMST 560</td>
<td>Feminist Theory</td>
<td>3</td>
</tr>
<tr>
<td>WMST 570</td>
<td>Feminist Research Methods</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 6

Elective Courses:
A variety of graduate elective courses in sociology and criminal justice are offered every semester. All courses are 3 credit hours. Recent elective courses include the following:

- Social Inequalities
- Globalization, Justice and Human Rights
- Violence Against Women
- Criminological Theory and Public Policy
- Cultural Adaptations
- Drugs and Society
- Diversity and the Criminal Justice System
- American Jury
- Community Justice
- Crime in the Workplace
- Life Course Perspective on Crime and Deviance
- Criminal Justice and the Law

Doctor of Philosophy – Criminology & Criminal Justice
Mona Danner, Graduate Program Director (GPD)
http://al.odu.edu/sociology/phdprogram

The PhD in Criminology and Criminal Justice is a sociological criminology program that highlights social inequality and public policy in the study of crime and justice.
of crime and justice issues. The program produces scholars with strong backgrounds in the substantive areas of criminology, criminal justice, theory, inequality and policy as well as in research methods and statistics. Designed primarily for students who are interested in pursuing careers in higher education, the course offerings also provide students the education and skills needed to be employed as researchers in public and private agencies. Graduates are prepared as scholars able to conduct research, teach college and university courses in their areas of specialization, and to provide service to the discipline and community.

**Regular Admission Requirements**

1. A completed master’s degree (or its equivalent) in criminology, criminal justice or in an appropriate field (e.g., administration of justice, sociology, or political science) from a regionally accredited institution of higher education – a thesis is generally expected;
2. A minimum grade point average (GPA) of 3.25 (on a 4.0 scale) overall for the master’s degree;
3. The Graduate Record Examination (GRE) is required of all applicants. The following minimum scores are generally expected: a combined minimum score of 1000 on the GRE general knowledge tests (verbal and quantitative) and a 4.5 on the writing test;
4. Successful completion of prior coursework in research methodology and statistics at least equivalent to that required by the ODU B.A. in sociology / criminal justice and M.A. degree in applied sociology (research methods, statistics, computer and data analysis);
5. Three letters of reference from sources capable of commenting on the applicant’s readiness for advanced graduate study in criminology & criminal justice;
6. A writing sample of at least 20 double-spaced pages on a topic related to the applicant’s expertise or area of interest;
7. A typed statement of approximately 1,000 words summarizing the individual’s motivation for applying to the program as well as the professional contributions s/he intends to make assuming successful completion of the degree;
8. If the applicant’s native language is not English, a current score for the Test of English as a Foreign Language (TOFEL) of at least 560 and/ or an interview in which the applicant’s comprehension and fluency in English can be assessed.

**Conditional Admission**

Provisional admission may be granted when an applicant’s credentials suggest aptitude for doctoral study but do not meet the criteria outlined above. Admission under this standard requires a variable amount of preliminary coursework in addition to that which is normally required for the degree. The amount and content of additional coursework required for conditional admissions is determined by the Ph.D. Committee on a case-by-case basis.

Students who have an appropriate undergraduate degree and a law degree (J.D.) but lack graduate work in the social sciences will normally be required to complete 18 hours of graduate work as follows: 12 hours in theory, research methods, social statistics, computer statistical applications, and 6 hours of substantive courses.

**International Students**

Graduate international students on non-immigrant visas whose native language is not English or who have not lived in the U.S. ten years must provide evidence of English language proficiency through one of the following:

1. Submission of a TOEFL score of 540 or successful completion of Old Dominion University’s Graduate Bridge Program,
2. Possession of an American Bachelor’s or Master’s degree equivalent from an accredited institution located in a country where English is the native language,
3. GRE verbal score of 480.

**Non-degree seeking students** must secure permission from the GPD prior to registering for doctoral classes in the program.

**Deadlines**

January 15 – Students applying for funding (Graduate Assistantship) and fall admission; there is no spring admission. All students must submit all original application materials directly to Old Dominion University’s Graduate Admissions Office. Students requesting funding (Graduate Assistantship) must submit the Application for Graduate Financial Assistance to the Program Director.

**Degree Requirements**

The Ph.D. in Criminology and Criminal Justice requires a minimum of 48 credit hours at the post-master’s level (i.e., courses at the 700 to 800 level) as detailed below. Students must maintain a cumulative GPA of at least 3.25. In addition, each of the core courses must be completed with a grade of B or better. The core courses may be taken a maximum of two times. Students who receive two grades of B- or below in any course, or whose grade point average falls below a 3.25 will be dismissed from the program.

Students must maintain a cumulative GPA of at least 3.25. In addition, each of the required Core and Research Skills Courses must be completed with a grade of B or better. The core courses may be taken a maximum of two times. Students who receive two grades of B- or below, or whose grade point average falls below 3.25 will be dismissed from the program.

**Coursework**

**Core Courses**

| CRIM 800 | Proseminar in Criminology and Criminal Justice | 3 |
| CRIM 801 | Criminology and Public Policy | 3 |
| CRIM 802 | Advanced Criminological Theory | 3 |
| CRIM 803 | Inequality, Crime and Justice | 3 |

**Research Skills**

| CRIM 805 | Multivariate Statistics in Criminological Research | 3 |
| CRIM 810 | Qualitative Methods in Criminology and Criminal Justice | 3 |
| CRIM 815 | Advanced Quantitative Techniques in Criminology & Criminal Justice | 3 |
| CRIM 820 | Advanced Research Methods in Criminology & Criminal Justice | 3 |

**Electives**

| 12 |

**Dissertation Credits (minimum of 9 credit hours)**

| CRIM 890 | Dissertation Research Seminar | 3 |
| CRIM 899 | Dissertation | 9 |

**Continuous Enrollment**

| CRIM 999 | Criminology 999 | 48 |

* Students complete 12 hours of electives selected from 700- or 800-level courses within the Department or across the University. The selection of electives will be guided by input from the program director depending upon course availability, program resources and student goals.

**Qualifying and Comprehensive Examinations**

The qualifying exam evaluates a student’s comprehension and ability to integrate and apply knowledge from first year courses and to demonstrate critical thinking skills in a written format. “First year coursework” refers to the six required core research skills courses offered during each cohort’s
first year. The exam will use course materials as a foundation but is not limited to them. The qualifying exam will consist of various sections that cover historical and contemporary issues and problems in the field, query students about theory, inequality and policy, and assess their understanding of research methodology and statistics.

Written qualifying exams will be taken at the end of the first year of coursework by students enrolled full-time. The written exam will be in a take-home format distributed during August. Details about the structure of the exam will be announced to students by the end of the spring semester before the exam. Students names will be removed from the exams for grading. No more than three faculty members will grade each part of the exam as “pass” or “fail” and more than one negative vote from the exam committee will result in a failure of exam. Students may pass or fail the exam in whole or in part. Students need to retake only those sections that are failed. Students who fail any section of the exam may register for fall classes but must retake the failed section at the announced time which will normally be in late November/early December of that same year. The same format will apply. Students who do not successfully pass the qualifying exam following the retake will be dismissed from the program; these students may complete fall classes for credit if they wish.

Part-time students must take the qualifying exams at the end of their second year in the program. In exceptional cases, part-time students may petition the PhD Program Committee to take the exam before taking all first year coursework. In these cases, the students are subject to all rules and expectations and may not challenge the policy or committee decisions on the basis that they took the exam “early.”

The comprehensive exam assesses a student’s expertise of the literature in criminology and criminal justice (in terms of both breadth and depth) in theory, research methods and statistics, inequality and policy as applied to questions of criminological interest; and her/his ability to think broadly and critically and to present her/himself as a sophisticated intellectual thinker. Preparation for the comprehensive exam gives students the opportunity to organize their knowledge of the field as gained from coursework, their own independent readings, teachings and research.

The written comprehensive exam is taken by students following completion of all coursework except the dissertation seminar; students may petition the PhD Committee to take the exam prior to the completion of all coursework. The written exam will be in a take-home format distributed during August. Details about the structure of the exam will be announced to students by the end of the spring semester before the exam. Student names will be removed from the exams for grading. No more than three faculty members will grade each section of the exam as “pass” or “fail” and more than one negative vote from the exam committee will result in a failure of the section. Students may pass or fail the exam in whole or in part. Students need to retake only those sections that are failed. Students who fail any section of the exam may register for fall classes but must retake the failed section in accordance with the directions stipulated by the comprehensive exam committee, generally in late November/early December of that same year. Students who do not successfully pass the written comprehensive exam following the retake will be dismissed from the program; they may complete the classes they are enrolled in that semester for credit if they wish. Students may not defend a dissertation proposal until they have passed the written comprehensive exam.

Admission to Candidacy
A student is admitted to candidacy for the degree once the following criteria are satisfied:

• S/he has completed all Ph.D. coursework (excepting dissertation hours) with a GPA of at least 3.25;
• S/he has successfully passed the qualifying and comprehensive examinations;
• S/he has successfully defended a dissertation prospectus.

The Dissertation
The dissertation is a scholarly work investigating a problem of significance and should constitute a meaningful contribution to the body of existing knowledge regarding matters of criminology and criminal justice policy or practice. It is the culmination of a program of advanced study leading to a doctoral degree and, as such, is expected to demonstrate a high level of scholarly competence. It must show that the candidate is capable of conceptualizing and conducting sophisticated original research, analysis and reporting on an approved topic related to crime and justice by use of accepted scientific methods. Complete information about the dissertation is found on the program website.

Department of Women's Studies
3041 Batten Arts and Letters Building
(757) 683-3823
Jennifer Fish, Chair

Women’s studies is a multi- and interdisciplinary field of study encompassing all aspects, historical and contemporary, of women’s, men’s, and gender studies. Old Dominion University offers a graduate certificate in women’s studies, which may increase a student’s career opportunities in governmental and non-governmental agencies, law, criminal justice, public relations, journalism, communications, counseling, the health professions, education, business, social welfare, and many other fields; it can also prepare students for new and exciting research opportunities in graduate and doctoral programs.

Graduate students desiring to obtain a certificate in women’s studies have several options:

A 15-credit-hour graduate women’s studies certificate is offered through the Institute of Humanities. Students who are pursuing a graduate degree in humanities may do almost all their work in the field of women’s studies or they may combine women’s studies with emphases in other liberal arts disciplines.

Students who want only the graduate certificate without a graduate degree may attain it, but must apply, nonetheless, for graduate standing in the Institute of Humanities.

Students wishing to pursue the certificate through the Institute of Humanities must gain admission to the humanities graduate program before the completion of nine graduate hours and must satisfy all of the admission requirements for the program, including the GRE. Only students who hold a B.A. or B.S. degree with an overall GPA of 2.80 may apply for the graduate women’s studies certificate.

The chair of the Women’s Studies Department or a designate will serve as advisor for students who gain admission to the humanities program only for the purpose of pursuing the graduate women’s studies certificate. Students pursuing the certificate in combination with a graduate degree in the humanities will have their progress monitored by both a women’s studies advisor and the director of the Institute of Humanities.

Graduate students may also earn a women’s studies certificate in addition to a graduate degree in another department or college. Students who have already earned or are pursuing graduate degrees in other fields may enhance their qualifications with a women’s studies certificate. Those admitted to a graduate program and obtaining a master’s degree in fields such as English, history, psychology, international studies, applied sociology, or counseling have the option of obtaining that degree with the women’s studies certificate. For more information consult the chair of women’s studies and see the relevant sections of the Catalog.

Students must maintain a 3.00 GPA in the 15 graduate credits needed for the women’s studies certificate. The certificate is awarded upon the completion of the following program of course work.

Certificate Requirements
WMST 560 and WMST 570
At least nine additional credits in 500- or 600-level courses approved for the women’s studies curriculum and drawn from various disciplines (such as women’s studies, English, history, political science and geography, foreign languages, sociology, criminal justice, etc.) No more than six of these credits
may be taken in any one field, except women’s studies. At least one of the
courses chosen must be at the 600 level.
Students seeking an M.A. who wish to teach women’s studies at a post-
secondary level in Virginia should take 18 rather than 15 graduate credits
in approved women’s studies courses in order to meet accreditation
requirements.
College of Business and Public Administration

www.odu.edu/~business/

2004 Constant Hall
Old Dominion University
Norfolk, VA 23529
(757) 683-3520
Gilbert R. Yochum, Dean
Ali Ardalan, Associate Dean

Ph.D:
• Business Administration
• Public Administration and Urban Policy

Master’s:
• Accounting (M.S.)
• Business Administration (M.B.A.)
• Computer Science (M.S.)
• Economics (M.A.)
• Public Administration (M.P.A.)

Certificates:
• Homeland Security Certificate
• Maritime, Ports and Logistics Management
• Advanced Certificate in Public Administration and Policy
• Modeling and Simulation
• Public Procurement and Contract Management

Overview

Old Dominion University’s College of Business and Public Administration has as its principal objective the preparation of liberally educated specialists who will enter the challenging world of business or 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. This foundation enables graduates of these programs to advance in a broad range of careers in the public and private sectors.

The College of Business and Public Administration is one of approximately 469 schools in the world to have achieved accreditation for business programs on the graduate and undergraduate levels by the Association to Advance Collegiate Schools of Business - International (AACSB). The Master of Science in accounting program has received its 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).

The college offers master’s degrees in accounting, business administration, economics, and public administration. Also, the college offers a joint master’s degree in computer information science with the Computer Science Department. The college also offers a Ph.D. program in business administration and a Ph.D. program in public administration and urban policy.

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.

Vision Statement

The vision of the College of Business and Public Administration is to be recognized as an innovative leader in business and public administration education and to become a valued center of excellence in the mid-Atlantic coast region.

Mission Statement

The college’s mission is to develop students, within a global and ethical context, for successful careers in business and government; to perform basic, applied and pedagogical research; and to offer services to the community; all of which support the economic development of Hampton Roads and beyond.

Graduate School of Business and Public Administration

Gilbert R. Yochum, Dean
Ali Ardalan, Associate Dean

The Graduate School of Business and Public Administration offers the following degree programs: Master of Arts in Economics; Master of Business Administration; Master of Public Administration; Master of Science in Accounting; Ph.D. in Business Administration—finance, information technology, management, or marketing tracks; and Ph.D. in Public Administration and Urban Policy. In addition, the school offers a master’s in computer information science option jointly with the Computer Science Department.

Graduate courses are taught during the day and in the evening facilitating flexible combinations of formal learning and full- or part-time employment. Students come from a variety of backgrounds with undergraduate degrees from many different colleges and universities.

All graduate students are advised to check specific program requirements before enrolling in 400/500 level courses. Nondegree graduate students must satisfy the admission index for graduate study or receive special permission from the graduate program director in the College of Business and Public Administration in order to enroll for graduate credit.

Master of Business Administration

Larry Filer, Graduate Program Director
Shanna Wood, Associate Director

The Master of Business Administration (M.B.A.) program at Old Dominion University is designed to present broad but thorough insights into issues relevant to all effective managers. In an ever changing and increasingly global environment, these skills are applicable to both the private and public sectors. The Old Dominion University M.B.A. program is structured to provide students with the opportunity to design a program of study to meet their individual needs.

The program provides students with a great deal of flexibility to select courses of interest. Some may choose a program with a nine-hour concentration plus six hours of electives. Others may elect not to choose a concentration and develop a general M.B.A. program with fifteen hours of general electives. Concentrations are available in each of the following areas: Business and Economic Forecasting, Financial Analysis and Valuation, Information Technology, Health Sciences Administration, International Business, Maritime and Port Management, and Public Administration.

Additional flexibility is provided by the requirement that each student select three one-hour electives from a wide series of choices. Among the topics included are: effective business writing, business plan development, international business, creative thinking, business ethics, and employment law. Each student also selects an advanced course in international business in a discipline of his or her choice.
Students have the opportunity to interact with the business community on projects with faculty supervision. In addition, students may participate in internships. The program leading to the degree of Master of Business Administration is designed for the student whose undergraduate preparation is in non-business areas as well as for students with undergraduate training in business and is open to any qualified holder of a bachelor’s degree, regardless of the undergraduate field of study.

The program is designed to accommodate both full-time and part-time students with courses offered during the day as well as in the evening at four locations—the main campus in Norfolk, the Virginia Beach Higher Education Center, the Tri-Cities Center in Portsmouth, and the Peninsula Higher Education Center in Hampton. Case studies, lectures, and independent research projects are major components of an integrated approach to the study of business management, and the M.B.A. program at Old Dominion University is fully accredited by the AACSB - International.

Admission
Prospective students may apply for entrance into the program for the fall and spring semesters. The Graduate School of Business and Public Administration welcomes applicants who have earned bachelor’s degrees from accredited institutions. Admission to the program is competitive and is granted only to those who show high ability and likely success in graduate business study. Evidence of ability means that successful applicants will stand well above average in most criteria used to measure graduate promise.

Criteria used for admission include the candidate’s score on the Graduate Management Admission Test (GMAT) or Graduate Record Examination (GRE) for students pursuing dual degrees, undergraduate grade averages and the trend of the grades during undergraduate work, letters of reference, a goals statement, and work experience.

The application procedure is as follows: submit to the Admissions Office
1. application forms for graduate study in business,
2. official transcripts of all previous college work,
3. one letter of recommendation,
4. an essay on personal and professional goals,
5. resume; and
6. scores on the Graduate Management Admission Test or GRE.

Applicants whose native language is not English are also required to submit an acceptable score on the Test of English as a Foreign Language (TOEFL).

Application deadlines for U.S. citizens and permanent residents are June 1 for fall admission and November 1 for spring admission. International student deadlines are April 1 (fall semester) and October 1 (spring semester).

Requirements
College-level calculus is required of all applicants. Students admitted without calculus will have provisional status until the successful completion of MATH 200 (Calculus for Business & Economics) or its equivalent at another accredited institution which must be taken during the first semester of course work. All students will be required to take MGMT 602 and BNAL 600 in their first semester of course work. In addition, newly admitted students will be required to attend orientation prior to taking any classes. All students will be required to take an international elective, either as part of their concentration or as a general elective.

Program of Study

<table>
<thead>
<tr>
<th>Core</th>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 601</td>
<td>Accounting for Managers</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BNAL 600</td>
<td>Foundations of Statistics for Business and Economics</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ECON 604</td>
<td>Managerial Economics and International Trade</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>FIN 605</td>
<td>Financial Management</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MGMT 602</td>
<td>Organizational Management</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives</th>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INBU 630</td>
<td>Fundamentals of International Business</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Capstone</th>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 750</td>
<td>Business Policy and Strategy</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>INBU 631</td>
<td>International Business Issues</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 48

Core Course Waiver Policies
Core courses (with the exception of MGMT 602 and BNAL 600) may be waived for students who have at least a 3.0 average in 9 or more designated undergraduate credit hours coursework (designated by each of the respective departments) and who are within 5 years of graduation. Please contact the MBA Program Office for the list of undergraduate courses required for an MBA core class waiver. Course waivers must be approved by the MBA Program Office and are based on departmental recommendations.

Additionally, for those who feel they have the appropriate knowledge but not the coursework, written waiver exams may be taken to demonstrate knowledge equivalent to the core courses. Waiver exams will be offered and graded by the respective departments. Exceptions to waiver by examination can be made if the student has the appropriate undergraduate coursework as described above. Students must complete all waiver exams prior to the start of the second semester of course work. A course may be challenged only one time. Students may complete waiver exams prior to beginning their course work if they choose to do so. Students who waive core courses may waive both the courses and the hours. Students are permitted to waive a maximum of 18 credit hours of the core.

Students may also refer to the Policy on Experiential Learning Credit Options at the Graduate Level found in a previous section of this Catalog.

M.B.A. Concentrations:

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business and Economic Forecasting</td>
<td>ECON 625</td>
<td>Mathematical Economics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 706</td>
<td>Econometrics I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ECON 707</td>
<td>Econometrics II</td>
<td>3</td>
</tr>
<tr>
<td>Financial Analysis and Valuation</td>
<td>FIN 735</td>
<td>Portfolio Analysis</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>FIN 737</td>
<td>International Financial Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>FIN 740</td>
<td>Futures and Options</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>FIN 741</td>
<td>Corporate Financial Policy and Control</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>FIN 668</td>
<td>Finance Internship</td>
<td>1-3</td>
</tr>
<tr>
<td>Health Sciences Administration</td>
<td>NURS 707</td>
<td>Informatics/Database Management</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MBA Electives and Concentrations</th>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Sciences Administration</td>
<td>NURS 707</td>
<td>Informatics/Database Management</td>
<td>3</td>
</tr>
</tbody>
</table>

OLD DOMINION UNIVERSITY  85
The Global Executive Master of Business Administration (GEMBA) is an MBA program that is custom designed for experienced executives to continue working full-time while preparing for expanded executive-level responsibilities in the future. Considering the time constraints of executives, this accelerated program is designed to be completed in one calendar year (three academic enrollment periods). It provides for high level and intensive interactions and group activities among program participants. The program is offered in six modular residency periods during the year. Four one-week residency periods are in the Hampton Roads, and two one-week residency periods are held outside of the United States. In between these residency periods, synchronous and asynchronous distance learning instruction is provided to the students. GEMBA is a lockstep, integrated program with no electives and no waiver for previous coursework.

The GEMBA candidate must be able to be away from work thirty days, typically in five-day blocks of time during the calendar year. In addition, s/he must be prepared to invest roughly ten to fifteen hours a week between residency periods in order to attend distance learning sessions, conduct course readings, and complete written deliverables. While students can continue to be in contact with their sponsoring firm while in residency, this time away from work is nonnegotiable and classroom attendance is mandatory. While unexpected student absences will be unavoidable during the academic year, the candidate will not be admitted if they know beforehand that they cannot attend all residency periods or set aside enough time to perform the work required in a timely fashion.

Admission Criteria

There will be five primary criteria used for admission.

1. The candidate must have earned an undergraduate degree from a recognized and accredited institution of higher learning.
2. The candidate must achieve a grade point average that meets the minimum threshold established for admission.
3. The candidate must be able to speak and read fluently in English. In cases where the candidate’s mastery of English is questionable, a TOEFL test will be required and a minimum score of 213 must be attained by the test taker. Possession of a bachelor’s or master’s degree equivalent from an accredited institution located in a country where English is the native language can be substituted for TOEFL requirement.
4. The candidate will preferably have at least five years of managerial experience. In no case will the candidate be accepted if s/he has no managerial experience. Candidates who have less than five years of experience will be required to provide a GMAT score that meets the minimum threshold established for admission.
5. The candidate will respond to several short essay questions where the candidate explains his/her motivation and qualifications for such a program.

In addition, the candidate should engage in a face-to-face or telephone interview with admissions personnel. The key issue here is to determine the candidate’s motivation of participating in this highly interactive and demanding program and ability to make a substantial contribution to the cohort’s understanding of managerial issues confronted by global executives.

Application deadline is November 15 for the following year, but exceptions can sometimes be arranged for applications after this deadline. Early admission decisions will be made on July 1, and admissions is on a rolling basis. Due to the competitive nature of this program and the need for advance preparation upon acceptance, early applications are encouraged.

Additional Requirements

Students who are deemed ready to start the program will complete the following six courses. For those students without previously completed coursework in economics, statistics, and accounting, online modules will be offered prior to the start of the program.

B.A./M.B.A. Program

A five-year B.A./M.B.A. program is available for selected undergraduate students pursuing a Bachelor of Arts degree. For specific information please refer to the undergraduate catalog.

Doctor of Philosophy in Business Administration (Ph.D.)

John Ford, Graduate Program Director

The Doctor of Philosophy degree in business administration (Ph.D.) is a scholarly, research-based program with a professional orientation. The
Objective of the program is to prepare individuals of superior promise and potential for careers in higher education as faculty members engaged in teaching and research and for high level administrative and research careers in the private and public sectors. Persons completing the degree program must have demonstrated an in-depth knowledge of international business, research methods, and high potential for making significant contributions to their field of specialization in business.

The Ph.D. degree requires competence in basic disciplines of international business, research tools, and in one of the following functional areas of business: finance, information technology, marketing, or strategic management.

Requirements for Admission
Work for the doctoral degree is usually preceded by the successful completion of the a Master’s degree in a business related field (i.e. MBA) from a recognized AACSB-accredited college or university. The applicant must submit an application, official transcripts of all college or university-level work, provide scores on the Graduate Management Admission Test taken within the last five years, and provide three letters of recommendation, two from academic references, which attest to the individual’s academic potential and ability for achievement. The applicant must also submit a personal statement of goals, approximately two to three pages, on how the completion of the doctoral program will assist in achieving personal and professional career goals.

The completed application materials will be reviewed by the graduate program director and faculty in the major area of study. They will evaluate the individual’s abilities and motivation to succeed in the doctoral program. A personal interview may be required before the admission decision can be reached. A recommendation is made by the faculty and a final decision on admission is made by the graduate program director.

Requirements of the Ph.D. Degree
The following are the minimum requirements for the Ph.D. degree and must be considered in preparing the student’s plan of study:

1. Satisfactory completion of at least 57 semester hours of course work including the dissertation for finance curriculum and at least 58 semester hours of course work including the dissertation for information technology, marketing or strategic management curriculums. (At least 48 hours of post-master’s course work (including dissertation) is a University requirement);

2. Demonstrated competency in the following areas: international business, research methods and techniques, and the chosen functional field of business. Passage of a comprehensive examination covering international coursework is required.

3. Acceptable performance on a written and oral candidacy examination in the major field of study. A student may retake the candidacy examinations only one time;

4. Completion of a dissertation representing the candidate’s ability to conduct scholarly, original research. The quality of this research should be such that it would be worthy of publication in a refereed, scholarly journal; and,

5. Successful oral defense of the dissertation.

Retention Standards
To remain in good standing after admission to the program, students must maintain a minimum, cumulative grade point average of 3.20 in all course work attempted at the University. Students who fall below this minimum standard will have one semester to remedy this deficiency. Further, students may earn no more than three credit hours with a grade of C. Any student receiving a grade lower than C– in course work will be removed from the program.

Time Limitation and Residency
The Ph.D. program assumes that a well qualified and highly motivated student can complete all degree requirements in four years of full-time work. If a student is unable to pursue the degree on a full-time basis, or if the major field is different from previous academic training, more time to complete the degree is usually required. The maximum time allowed to complete all degree requirements is eight calendar years from the date of initial enrollment in the program.

Each student is required to complete at least four regular semesters in full-time residency. These need not be consecutive. Full-time residency is defined as a minimum of nine credit hours per semester.

Transfer Credit
A maximum of 12 semester-hour credits (or equivalent) may be transferred from another university (including six hours earned through experiential learning credit options) and applied toward the Ph.D. course requirements. Transfer credit is approved at the discretion of the program director in consultation with the faculty in the student’s major field of study.

Waivers Using Previous Graduate Work
A maximum of nine semester hours of master’s-level graduate work may be applied toward completion of the requirements for the doctoral degree. The previous course work must have been of B letter-grade quality or better, and must have been completed within the five years immediately preceding entry into the doctoral program.

Candidacy Examination
The examination qualifying the doctoral student for candidacy for the Ph.D. in business administration is comprehensive in nature and designed to test the student’s knowledge of subject matter in the major field, international business, and the ability to engage in independent research. These examinations are given in two parts:

1. international business and
2. field of study.

The International Business Exam is a written exam scheduled for the third week of May and may be taken by a student in good standing after the student has completed BUSN 800, MGMT 821, and MKTG 826. The candidacy examination in the field of study is scheduled at the beginning of fall semester classes. Students in good standing may take the Field of Study Examination after completing all courses in their field which are to be taken during the first two years of the program. See Curriculum. The Field examination contains both a written and oral component. The written portion is administered first. After successful completion of the written examination, the student sits for an oral examination, which includes topics discussed in the written examination and any additional materials that the advisory committee feels are appropriate. The student will be expected to perform well on both the written and oral components of the examination. Rather than being merely pro forma, the oral examination is a serious and integral part of the qualifying procedure for candidacy. A student must pass both the written and oral sections. The candidacy examinations are prepared and evaluated by the examination committees composed of the graduate faculty who are primarily responsible for teaching doctoral courses in international business and the field of study. The results of all examinations are reported to the student and program director.

Dissertation
The dissertation represents the final stage in obtaining the doctoral degree and provides evidence of the student’s ability to conduct independent scholarly research. To effectively initiate, conduct, and conclude the dissertation phase of the program, the candidate must:

1. form a dissertation committee;
2. develop and defend a dissertation proposal;
3. complete the dissertation research and report the results in writing; and
4. orally defend the dissertation.
Dissertation Committee

The dissertation committee is formed by the student with the approval of the program director. The committee’s purpose is to supervise the selection of the dissertation topic, constructively critique the research methodology, and serve as a guidance body until its completion. The committee should have at least three members, one of whom is from outside the department of the major field of study. The chair of the committee will be from the candidate’s major field and be an authority in the field of specialization chosen for the dissertation research. The proposal, dissertation, and the final oral defense of the dissertation must have the majority approval of the members of the dissertation committee and subsequent approval by the program director and dean of the college.

Dissertation Proposal Defense

A candidate will select a topic for dissertation research under the guidance of his/her committee. The candidate will defend a proposal for the dissertation demonstrating the originality of the research, requisite literature review, and the methodology that will be used in conducting the research. The committee will judge the merits of the proposal, making any suggestions and/or additions as deemed necessary, and approve the proposal in writing, providing copies to the program director.

Dissertation Research and Preparation

Progress on the dissertation should be reported on a periodic basis to the chair of the dissertation committee and the appropriate members. In most instances, research results, drafts of the manuscript, and guidance will be forthcoming between the committee and the candidate during the research phase. While preparing the dissertation, candidates must be continuously enrolled for a minimum of one credit hour per semester. The total number of credit hours for the dissertation shall be no less than 18 and no more than 24 credit hours. Advice or assistance from committee members should not be expected unless the candidate is officially enrolled. General regulations and procedures governing the submission of the doctoral dissertation are provided in the University Guide for Preparation of Theses and Dissertations available from the Office of the University Registrar.

Oral Dissertation Defense

The objective of the oral defense of the dissertation is to explore with the candidate the methodological and substantive contributions of the dissertation. Through this process, the examiners and the candidate reach a common understanding of the research area and can mutually agree upon its merits for publication. Majority approval by the examiners constitutes successful completion of the defense of the dissertation. The Doctor of Philosophy in business administration will be awarded upon successful completion of this examination and all other program requirements within the eight-year time limit.

Finance Curriculum

<table>
<thead>
<tr>
<th>First Year</th>
<th>First Term</th>
<th>Hours</th>
<th>Second Term</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSN 800</td>
<td>3</td>
<td>ECON 807</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ECON 801</td>
<td>3</td>
<td>FIN 864*</td>
<td>3-6</td>
<td></td>
</tr>
<tr>
<td>ECON 806</td>
<td>3</td>
<td>MKTG 826</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9-12</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th>First Term</th>
<th>Hours</th>
<th>Second Term</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 808</td>
<td>3</td>
<td>FIN 861</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FIN 860</td>
<td>3</td>
<td>FIN 863</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FIN 862</td>
<td>3</td>
<td>MKTG 821</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Year</th>
<th>First Term</th>
<th>Hours</th>
<th>Second Term</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 899</td>
<td>9</td>
<td>ECON 852</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Total credit hours: 54-57

* Advanced doctoral level statistical/research methods course (3 hours) can substitute for FIN 864.

Information Technology Curriculum

<table>
<thead>
<tr>
<th>First Year</th>
<th>First Term</th>
<th>Hours</th>
<th>Second Term</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSN 800</td>
<td>3</td>
<td>BNAL 712</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BNAL 700</td>
<td>1</td>
<td>MKTG 826</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BNAL 711</td>
<td>3</td>
<td>IT 800</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th>First Term</th>
<th>Hours</th>
<th>Second Term</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIN 862</td>
<td>3</td>
<td>IT 891</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>IT 850</td>
<td>3</td>
<td>IT 892</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>IT 890</td>
<td>3</td>
<td>IT 893</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Year</th>
<th>First Term</th>
<th>Hours</th>
<th>Second Term</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 895</td>
<td>3</td>
<td>IT 899</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>IT 899</td>
<td>6</td>
<td></td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

Total credit hours: 55

* Or other (3 HRS) research methodology courses at the approval of PhD Area Coordinator.

Marketing Curriculum

<table>
<thead>
<tr>
<th>First Year</th>
<th>First Term</th>
<th>Hours</th>
<th>Second Term</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSN 800</td>
<td>3</td>
<td>BNAL 712</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BNAL 700</td>
<td>1</td>
<td>MKTG 826</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BNAL 711</td>
<td>3</td>
<td>MKTG 801</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th>First Term</th>
<th>Hours</th>
<th>Second Term</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 803</td>
<td>3</td>
<td>MKTG 827</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MKTG 813</td>
<td>3</td>
<td>MKTG 814</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>FIN 862</td>
<td>3</td>
<td>MKTG 802</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MKTG 821</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Year</th>
<th>First Term</th>
<th>Hours</th>
<th>Second Term</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 895</td>
<td>3</td>
<td>MKTG 899</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>MKTG 899</td>
<td>6</td>
<td></td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

Total credit hours: 55

* Advanced doctoral level statistical/research methods course (3 hours) can substitute for MKTG 895.

Strategic Management Curriculum

<table>
<thead>
<tr>
<th>First Year</th>
<th>First Term</th>
<th>Hours</th>
<th>Second Term</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSN 800</td>
<td>3</td>
<td>BNAL 712</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Homeland Security Certificate

The need to address problems related to Homeland Security is increasing in numerous government and private organizations. This certificate program in Homeland Security is designed to provide knowledge useful in the development and improvement of organizational processes related to avoiding, preparing for, dealing with and recovering from major security-related problems. The certificate allows students to draw courses from several colleges of the University to tailor a program particularly suited for their needs.

Admission Requirements

Admission to the certificate program will require a bachelor’s degree (or equivalent).

Program Requirements

The Homeland Security Certificate Program consists of 12 credit hours of graduate level course work that can be taken across colleges. The four courses comprising the certificate program will be offered on a regular schedule to enable the completion of the program in two years. The program will provide the opportunity for students to further their knowledge and become more competent in their profession.

The program consists of three tracks. Courses are taught in Business, Engineering and Arts and Letters. An overall grade point average of 3.0 or better is required to earn the certificate.

Required courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENMA 724</td>
<td>Risk Analysis *</td>
<td>3</td>
</tr>
<tr>
<td>or ENMA 714</td>
<td>Crisis Project Management</td>
<td></td>
</tr>
<tr>
<td>PADM 695</td>
<td>Advanced Topics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 6

* Students may elect to take ENMA 714 in place of ENMA 724 with approval.

Track One:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 646</td>
<td>Contingency Readiness and Facility</td>
<td>3</td>
</tr>
<tr>
<td>ENGN 622</td>
<td>Remote Sensing</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 6

Track Two:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PORT 612</td>
<td>Port Operations and Management</td>
<td>3</td>
</tr>
<tr>
<td>PORT 614</td>
<td>Port Planning and Economics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 6

Track Three:

Select two from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS 701/801</td>
<td>Global Change and American Foreign Policy</td>
<td>3</td>
</tr>
<tr>
<td>IS 702/802</td>
<td>Approaches to Collective Security</td>
<td>3</td>
</tr>
<tr>
<td>IS 706/806</td>
<td>The Causes of War</td>
<td>3</td>
</tr>
<tr>
<td>IS 707/807</td>
<td>Interdependence, Power, and Transnationalism</td>
<td>3</td>
</tr>
<tr>
<td>IS 720/820</td>
<td>Research Seminar in Global Security</td>
<td>3</td>
</tr>
<tr>
<td>IS 740/840</td>
<td>Political Economy of Development</td>
<td>3</td>
</tr>
<tr>
<td>IS 795/895</td>
<td>Topics in International Studies</td>
<td>3</td>
</tr>
<tr>
<td>IS 795/895</td>
<td>Topics in International Studies</td>
<td>3</td>
</tr>
<tr>
<td>CRJS 575</td>
<td>Criminal Justice Systems Around the World (from Sociology and Criminal Justice)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 6

Maritime, Ports and Logistics Management Certificate

This certificate program is designed to help working maritime and port professionals develop and sharpen their maritime and port management skills. The program consists of four graduate courses that expose students to international shipping, port management, maritime law, port operations and planning and port economics.

Admission Requirements

Admission to the certificate program will require a bachelor’s degree (or equivalent).

Program Requirements

The certificate is awarded based upon the student’s successful completion of 12 credit hours of graduate level courses in Ports and Maritime Management:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PORT 611</td>
<td>International Maritime Transport</td>
<td>3</td>
</tr>
<tr>
<td>PORT 612</td>
<td>Port Operations and Management</td>
<td>3</td>
</tr>
<tr>
<td>PORT 613</td>
<td>International Maritime and Admiralty Law</td>
<td>3</td>
</tr>
<tr>
<td>PORT 614</td>
<td>Port Planning and Economics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 12

Graduate Certificate in Public Procurement and Contract Management

This certificate program is designed for students to satisfy their elective requirements or it can be taken as a stand alone certificate program. This certificate program is designed for Public Administration graduate students, however, business administration students, engineering students, and students from other disciplines would also be eligible to participate in the program. The program consists of four required courses and one elective (15 credits total).

Admission Requirements

Admission to the certificate program will require a bachelor’s degree (or equivalent).

Program Requirements

The award of this certificate is based upon the student’s successful completion of 15 credit hours of graduate level courses in Public Administration:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PADM 718</td>
<td>Public Sector Contract Administration</td>
<td>3</td>
</tr>
<tr>
<td>PADM 726</td>
<td>Introduction to Public Procurement</td>
<td>3</td>
</tr>
<tr>
<td>PADM 728</td>
<td>Public Sector Contract Planning and Formation</td>
<td>3</td>
</tr>
<tr>
<td>PADM 731</td>
<td>Public Sector Procurement Law and Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PADM 672</td>
<td>Public Financial Management</td>
<td>3</td>
</tr>
</tbody>
</table>
Prior to admission, each candidate must have completed: an acceptable score on the Test of English as a Foreign Language (TOEFL). Applicants whose native language is not English are also required to submit Office The application process is as follows: submit to the Graduate Admissions program’s prerequisite courses. Goals statement, and previous work experience. Students must earn a grade and the trend in grades during undergraduate work, one letter of reference, a Management Admission Test (GMAT), undergraduate grade point averages Criteria used for admission include the candidate’s score on the Graduate Admission to the program is competitive and is granted only to those who will stand well above the average in most of the criteria used to show high ability and likely success in graduate business study. Successful prospective students may apply for admission to the program for the fall, spring, and summer semesters. The Department of Accounting welcomes applicants who have earned bachelor’s degrees from accredited institutions. Admission to the program is competitive and is granted only to those who show high ability and likely success in graduate business study. Successful applicants will stand well above the average in most of the criteria used to measure graduate student promise. Criteria used for admission include the candidate’s score on the Graduate Management Admission Test (GMAT), undergraduate grade point averages and the trend in grades under-graduate work, one letter of reference, a goals statement, and previous work experience. Students must earn a grade of B- or better in each undergraduate business course used to satisfy the program’s prerequisite courses. The application process is as follows: submit to the Graduate Admissions Office application forms (may be done on-line) for graduate study in business, official transcripts of all previous college work, one letter of recommendation, an one-page essay setting forth the applicant’s work experience, and goals and objectives for the program, and scores on the Graduate Management Admission Test (GMAT). Applicants whose native language is not English are also required to submit an acceptable score on the Test of English as a Foreign Language (TOEFL) Exam. Prior to admission, each candidate must have completed: Six Hours of Financial Accounting

ACCT 201 Principles of Accounting I & ACCT 301 Intermediate Accounting I * 6

Six hours of Management Accounting

ACCT 202 Principles of Accounting II & ACCT 311 and Managerial Accounting * 6

Three hours of Taxation Courses

ACCT 421 Taxation * 3

And eighteen hours in economics, statistics/decision sciences, marketing, management, finance, and commercial law. Total Hours 33

* Or equivalent.

Application deadlines are July 1 for fall admission, November 1 for spring admission, and April 1 for summer admission. International student deadlines are April 15 (fall semester), October 1 (spring semester), and February 15 (summer semester).

Applicants who have not obtained an acceptable GMAT score, or an acceptable TOEFL score for those applicants whose native language is not English, will not be permitted to enroll in graduate accounting courses.

Fast-Track Undergraduate Admission

Undergraduate students majoring in Accounting at Old Dominion University may apply for conditional status in the Master of Science in Accounting program after completing ACCT 301, Intermediate Accounting I, with a minimum Overall and Accounting Grade Point Average of 3.00. These students can then achieve regular admission status by completing their undergraduate degree with a minimum Overall and Accounting Grade Point Average of 3.00, and obtaining an acceptable GMAT score.

Degree Requirements

A minimum of 30 semester hours of graduate courses are required to complete the Master of Science in Accounting. Students must maintain a cumulative grade point average of at least 3.00 in all graduate work taken. Additionally, students must successfully complete at least one part of one of the following professional exams during the final two semesters of their graduate course work:

- Certified Public Accountant (CPA) exam,
- Certified Management Accountant (CMA) exam, or
- Certified Internal Auditor (CIA) exam.

Students who already hold one or more of these professional designations must successfully complete at least one part of one of the other professional exams during the final two semesters of the graduate work.

The Program of Study

The program of study is designed for the student interested in a professional career in accounting either as an assurance services provider (auditor) or management accountant in public accounting or in industry and government. The curriculum, especially the required courses, are designed to improve the student’s chances of passing the Certified Public Accountant (CPA) exam. However, there is enough flexibility in the choice of electives to tailor programs of study to successfully complete other certification exams such as:

- Certified Internal Auditor (CIA),
- Certified Management Accounting (CMA),
- Certified Information Systems Auditor (CISA),
- and the Certified Fraud Examiner (CFE) exams.

Additionally, a student completing the four auditing courses meets the requirements of the Institute of Internal Auditors Endorsed Internal Auditing Program.

Required Courses—Accounting Credits

ACCT 626 Financial and Global Accounting 3
ACCT 630 Financial Statement Analysis 3
Required core economics courses for the graduate program are:

- ACCT 631 Advanced Financial Auditing 3
- ACCT 640 Professional Ethics and Legal Issues In Accounting 3
- TAX 650 Tax Strategies for Business Decisions 3
- ACCT 727 Strategic Cost Management 3
- Graduate accounting courses * 6
- Graduate business or public administration elective courses at the 600 level 6

Total Hours 30

* Excluding ACCT 601.

Department of Economics

2044 Constant Hall
(757) 683-3567
Christopher B. Colburn, Chair

Master of Arts—Economics

David D. Selover, Graduate Program Director

The Master of Arts in economics is a flexible degree that can meet a wide range of student needs. The program allows students to pursue a traditional approach as preparation for entry into a doctoral program or an applied approach geared toward policy analysis in a specialized area.

Some graduates of the M.A. in economics have chosen to continue their graduate training and have successfully completed Ph.D. programs at universities across the nation. Other graduates have become economics teachers, primarily at the community-college level. Others have gone to research and analysis positions in governmental agencies and private business firms. Finally, still others have chosen to pursue careers in general business management.

All students in the program are trained in theory and research methods, and take several courses emphasizing business or government policy analysis in chosen specialty areas. An independent research project is required, permitting students to apply theory and empirical techniques to real-world problems.

The Department of Economics also encourages interdisciplinary training. The master’s program can be adapted for students desiring a diverse background by combining economics with graduate courses in sociology, political science, computer science, statistics, mathematics, finance, management, marketing research, or public administration.

Admission

In addition to the University’s graduate admission requirements, applicants seeking regular admission must have at least a 3.00 grade point average in their major. In addition, applicants are required to take either the Graduate Record Examination or Graduate Management Admission Test, and they must submit at least one letter of recommendation. If the undergraduate grade point average falls below that required for regular status, applicants may qualify for provisional admission.

Requirements

Undergraduate prerequisites include principles of economics, calculus (three hours), statistics (six hours), intermediate microeconomics, and intermediate macroeconomics with grades of at least B-.

Thirty semester hours of approved graduate work are required for the award of the Master of Arts degree in economics. A maximum of six hours of 500-level courses approved for graduate credit may be applied toward the degree. The remaining 24 hours of credit must be taken from 600- and/or 700-level courses. Up to six hours of electives (approved by the graduate program director) may be taken from courses outside the Department of Economics. Required core economics courses for the graduate program are:

- ECON 625 Mathematical Economics 3
- ECON 701 Advanced Economic Analysis: Microeconomics 3
- ECON 703 Advanced Economic Analysis: Macroeconomics 3
- ECON 706 Econometrics I 3

Total Hours 12

Writing skills commensurate with the level of this degree are also a requirement for graduation from this program.

Near the completion of formal course work, candidates conduct independent research projects with thesis or non-thesis options. Students who choose the thesis option should register for ECON 699 in the final semester. Six hours of credit are given for this course. The thesis is guided and approved by the committee of at least three members of the department. Detailed instructions, requirements, and deadlines are contained in the guide for Preparation of Theses and Dissertations, available from the Office of Graduate Studies website, http://www.odu.edu/graduatestudies.

Students who choose the non-thesis option register for ECON 697 and ECON 698 in the last semesters of course work. Non-thesis students conduct independent research projects under the guidance of a department faculty member. Students must first register for ECON 697, a reading course under the supervision of a faculty member, for three credits, and then register for ECON 698, the research project writing course, also under the supervision of a faculty member, for three credits. All master’s candidates must pass written comprehensive examinations covering microeconomics, macroeconomics, econometrics, one elective course area selected by the student.

Required Courses – Economics

- ECON 625 Mathematical Economics 3
- ECON 701/801 Advanced Economic Analysis: Microeconomics 3
- ECON 703/803 Advanced Economic Analysis: Macroeconomics 3
- ECON 706/806 Econometrics I 3
- ECON 697 Readings in Economics 3
- ECON 698 Economic Methodology and Research 3

Select four Electives * 12

Total Hours 30

* These are generally 600- or 700-level courses from within the economics discipline. However, two of the courses may be approved 500-level courses, and two of the courses may be outside of the Department of Economics.

Department of Information Technology and Decision Sciences

2074 Constant Hall
(757) 683-3488
G. Steven Rhiel, Chair

Master of Science–Computer Science Major with an Emphasis in Computer Information Sciences

Li Xu, Graduate Program Director

The Department of Information Technology and Decision Sciences offers this degree program jointly with the Department of Computer Science; please see the entry under the Department of Computer Science (p. 199) for degree requirements.
Graduate Certificate in Modeling and Simulation (M&S) for Business and Public Administration

Business applications constitute some of the earliest used simulation modeling, with some dating back over 50 years, and the literature of many businesses and social science disciplines is rich with both practical and theoretical usage of simulation. Recent developments in simulation, such as agent-based simulation and virtual worlds, open even avenues for M&S applicability. This certificate gives CBPA graduate students an opportunity to develop competency in Modeling and Simulation.

Admission Requirements:
Admission to the certificate program requires a bachelor’s degree (or equivalent).

Program Requirements:
The Certificate requires four (4) three-hour courses for a total of twelve (12) credits. A basic simulation core of three or six credits is required, plus six or nine credits of discipline-specific work. A 3.00 GPA for the four-course sequence is required for successful completion.

CBPA M&S Certificate - Version 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSIM 611</td>
<td>3</td>
</tr>
<tr>
<td>MSIM 612</td>
<td>3</td>
</tr>
<tr>
<td>BNAL 721</td>
<td>3</td>
</tr>
<tr>
<td>BNAL 722</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours</td>
<td>12</td>
</tr>
</tbody>
</table>

* For students with substantial mathematics and computing backgrounds, MSIM 601 may replace MSIM 611 and MSIM 612. A fourth course must be chosen to complete the 12-hour credit requirement.

Department of Urban Studies and Public Administration

2090 Constant Hall
(757) 683-3961
John R. Lombard, Chair
Meg Jones, Graduate Program Manager

Master of Public Administration
Bill Leavitt, Graduate Program Director
Meg Jones, Graduate Program Manager

The mission of the Master of Public Administration program at Old Dominion University is to prepare students for careers as professionals in public service and to provide students who have considerable experience in the public sector an opportunity to enhance their professional knowledge, skills, and abilities, enabling them to advance their careers.

Curriculum
The MPA curriculum consists of 39 credit hours (13 courses). Courses are required in two categories:
1. Core Concentration (seven required courses)
2. Electives (six courses)

Core Curriculum
The following courses are required of all public administration students.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PADM 651</td>
<td>3</td>
</tr>
<tr>
<td>PADM 652</td>
<td>3</td>
</tr>
<tr>
<td>PADM 671</td>
<td>3</td>
</tr>
<tr>
<td>PADM 701</td>
<td>3</td>
</tr>
<tr>
<td>PADM 733</td>
<td>3</td>
</tr>
<tr>
<td>PADM 753</td>
<td>3</td>
</tr>
<tr>
<td>PADM 746</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours</td>
<td>21</td>
</tr>
</tbody>
</table>

Electives
Students may take elective courses in a number of different areas related to Public Administration. Students may choose to focus their elective courses in specific areas, such as:
- Human Resource Administration;
- Port and Maritime Management;
- Urban Research and Planning;
- Non-Profit Management;
- or other specific areas relevant to Public Administration

Students may also choose to take their elective courses in the general area of Public Management. With the approval of the MPA Program Director students may take Graduate level courses outside of the Department.

MPA Elective courses include the following:
Select 18 Credit Hours of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PADM 632</td>
<td>3</td>
</tr>
<tr>
<td>PADM 633</td>
<td>3</td>
</tr>
<tr>
<td>PADM 634</td>
<td>3</td>
</tr>
<tr>
<td>PADM 640</td>
<td>3</td>
</tr>
<tr>
<td>PADM 655</td>
<td>3</td>
</tr>
<tr>
<td>PADM 672</td>
<td>3</td>
</tr>
<tr>
<td>PADM 695</td>
<td>1-3</td>
</tr>
<tr>
<td>PADM 702</td>
<td>3</td>
</tr>
<tr>
<td>PADM 704</td>
<td>3</td>
</tr>
<tr>
<td>PADM 705</td>
<td>3</td>
</tr>
<tr>
<td>PADM 708</td>
<td>3</td>
</tr>
<tr>
<td>PADM 711</td>
<td>3</td>
</tr>
<tr>
<td>PADM 712</td>
<td>3</td>
</tr>
<tr>
<td>PADM 714</td>
<td>3</td>
</tr>
<tr>
<td>PADM 715</td>
<td>3</td>
</tr>
<tr>
<td>PADM 718</td>
<td>3</td>
</tr>
<tr>
<td>PADM 719</td>
<td>3</td>
</tr>
<tr>
<td>PADM 720</td>
<td>3</td>
</tr>
<tr>
<td>PADM 721/821</td>
<td>3</td>
</tr>
<tr>
<td>PADM 723</td>
<td>3</td>
</tr>
<tr>
<td>PADM 724</td>
<td>3</td>
</tr>
<tr>
<td>PADM 725</td>
<td>3</td>
</tr>
<tr>
<td>PADM 726</td>
<td>3</td>
</tr>
<tr>
<td>PADM 727</td>
<td>3</td>
</tr>
<tr>
<td>PADM 728</td>
<td>3</td>
</tr>
<tr>
<td>PADM 730</td>
<td>3</td>
</tr>
<tr>
<td>PADM 731</td>
<td>3</td>
</tr>
<tr>
<td>PADM 734</td>
<td>3</td>
</tr>
<tr>
<td>PADM 737</td>
<td>3</td>
</tr>
<tr>
<td>PADM 738</td>
<td>3</td>
</tr>
</tbody>
</table>
Financial aid may be available in the form of University fellowships, tuition grants, and research assistantships. The M.P.A. program offers graduate research assistantships each semester. Research assistantships provide stipends, and research assistants pay the in-state tuition rate. In addition to the financial aid offered by the University, graduate students may be eligible for aid and student loans administered by other agencies. For information about part-time employment, scholarships, and student loans, contact the Office of Student Financial Aid.

For information and forms concerning application, contact:
Admissions Office
Old Dominion University
Norfolk, VA 23529
Phone: (757) 683-3685

For information concerning financial aid, contact:
Office of Student Financial Aid
Old Dominion University
Norfolk, VA 23529
Phone: (757) 683-3683

For information about on-campus housing, contact:
The Director of Housing Operations
Old Dominion University
Norfolk, VA 23529
Phone: (757) 683-4283

Visit the Old Dominion University web site at: http://www.odu.edu.

Required Course Sequence

Students are required to enroll in Administrative Theory I: The Context of Public Administration (PADM 651) and Administrative Theory II: The Process of Public Administration (PADM 652) as early as possible in their program of study. Research Methods (PADM 753) should be completed before students enroll in Public Policy Analysis and Evaluation (PADM 701). The remaining core courses are not required to be taken in a specific order however, the Capstone Seminar (PADM 746) must be taken after the other core courses have been completed (or in the same semester as the last of the core courses are being completed). Students should note that core courses are rarely offered during the summer term and should plan accordingly.

Internship/Field Experience

Practical professional experience in a public or nonprofit agency setting is an important component of the MPA curriculum. A formal internship is required for students who lack significant experience in a public or nonprofit agency. Internships give students the opportunity to gain professional level experience and provide government or nonprofit agencies with the services of graduate students with high potential for future achievement. MPA students have the opportunity to earn three semester credits for internships and apply these credits as one of their electives. PADM 668 Internship/Field Experience is a 300-hour public service experience in an approved agency. Please contact Dr. Leavitt with specific questions you may have regarding internships, wleavitt@odu.edu.

The Application Package

The Old Dominion University Graduate Application can be downloaded from the website, www.odu.edu, or a Graduate Application Package may be received by calling (757) 683-3685. This package includes all forms necessary to apply to the Master of Public Administration program. To be considered for admission, applicants must submit the following:

1. An official transcript of previous college degree program(s).
2. A written statement describing how one’s experience in work and in other settings and the choice of graduate study in public administration will lead to achieving career goals;
3. Scores on the aptitude section of the Graduate Record Examination (GRE) or the Graduate Management Admission Test (GMAT), taken within the past six years. The requirement for the GRE or GMAT may be waived for applicants with at least three years supervisory, managerial or professional level experience in a local, regional, state, federal, military or nonprofit agency. Applicants who wish to be exempted from the GRE or GMAT requirement should complete the “Request for GRE/GMAT Waiver” form and submit it with their application package for review by the admissions committee. The decision to waive the GRE or GMAT is the sole responsibility of the admissions committee and its decision is final;
4. Two letters of recommendation (forms provided) from academic sources or employment supervisors; and
5. Applicants whose native language is not English are required to submit an acceptable score on the Test of English as a Foreign Language (TOEFL).

Financial Assistance

Financial aid is available to graduate students at Old Dominion University. Financial aid may be available in the form of University fellowships, tuition grants, and research assistantships. The M.P.A. program offers graduate research assistantships each semester. Research assistantships provide stipends, and research assistants pay the in-state tuition rate. In addition to the financial aid offered by the University, graduate students may be eligible for aid and student loans administered by other agencies. For information about part-time employment, scholarships, and student loans, contact the Office of Student Financial Aid.

For information and forms concerning application, contact:
Admissions Office
Old Dominion University
Norfolk, VA 23529
Phone: (757) 683-3685

For information concerning financial aid, contact:
Office of Student Financial Aid
Old Dominion University
Norfolk, VA 23529
Phone: (757) 683-3683

For information about on-campus housing, contact:
The Director of Housing Operations
Old Dominion University
Norfolk, VA 23529
Phone: (757) 683-4283

Visit the Old Dominion University web site at: http://www.odu.edu.

Doctor of Philosophy - Public Administration and Urban Policy

John C. Morris, Graduate Program Director
Meg Jones, Graduate Program Manager

The principal objective of the Ph.D. in Public Administration and Urban Policy is to assure that graduates become content area experts with 48 hours of doctoral level course work and 12 hours of dissertation credit. Specifically, students will learn a common body of knowledge in three areas:

- Foundation in Public and Urban Policy (core courses) 12
- One of either of two tracks with courses specific to public administration or public policy (concentration courses) 12
- Foundation in research (quantitative and qualitative research courses) 12

Unique Cognate Courses 9
Dissertation Seminar 3

Total Hours 48

* Selected by the student with advice and consent of the student’s advisory committee and the Graduate Program Director.

Through this approach, all program graduates will have the opportunity to develop a substantive knowledge of a body of work in public administration and public policy as well to acquire analytical and research skills that will enable them to become educators, leaders and researchers in their chosen specialty areas. The Ph.D. program in Public Administration and Urban Policy, therefore, will focus on:

1. developing effective public, non-profit sector and policy leaders throughout Hampton Roads. The Commonwealth of Virginia, and the nation who have both content knowledge and research skills;
2. educating individuals who intend to pursue teaching as a vocation in colleges and universities in Virginia as well as nationally and internationally;
3. building collaborative research and demonstration initiatives with community and government (state, national, and international) agencies that link research initiatives to public management and policy improvement and economic development; and
4. providing the linkages among content knowledge, research, and field experiences for all doctoral students.
Admission
Applications for admission to the program will be considered once per year in April (see the website for specific details). Students generally begin classes in the fall, but admitted students may enroll in the summer after they are admitted.

Candidates for admission to the doctoral program must have a master’s degree in an appropriate discipline in a program that is accredited by an appropriate specialized accrediting agency and from an institution of higher education that is regionally and/or nationally accredited. A minimum grade point average of 3.25 (on a 4.0 scale) overall and in the major area of study in the master’s degree and an acceptable score on the Graduate Record Examination (GRE) is required; a minimum score of 500 on the verbal section is required. Applicants whose native language is not English must score a minimum of 550 on the Test of English as a Foreign Language. Upon admission, the student must contact the Ph.D. Program Director in the Department of Urban Studies and Public Administration for advisement.

A student seeking admission to the doctoral program should request an application from the Office of Graduate Admissions of Old Dominion University. The application should be filled out completely and promptly returned to the Office of Graduate Admissions.

Each application must contain the following materials:
1. Three letters of recommendation, including at least one from an academic source;
2. A three to six-page double-spaced written statement of academic and professional goals.
3. Official copies of transcripts from all institutions of higher education attended and
4. Aptitude scores on the Graduate Record Examination (GRE) taken within five years prior to application for admission must be sent directly to the Office of Admissions.

Time Limitation and Retention Standards
The Ph.D. program assumes that well-qualified and highly motivated student can complete all degree requirements in four years of full-time work. If a student is unable to pursue the degree on a full-time basis, or if the major field is different from previous academic training, more time to complete the degree is usually required. The maximum time allowed to complete all degree requirements is eight calendar years from the date of initial enrollment in the program.

To remain in good standing after admission to the program, students must maintain a minimum grade point average of 3.25 in all course work attempted in the Plan of Study. Students who fall below this minimum standard will have one semester to remedy this deficiency. Further, students may learn no more than three hours with a grade of C+ or lower. Any student receiving a grade of F in any course work will be immediately removed from the program.

Financial Aid
Old Dominion University offers financial assistance to graduate students. Types of aid include research assistantships, teaching assistantships, fellowships, grants, scholarships, and part-time employment. Nearly all forms of aid require that the student be engaged in full-time graduate study, and in the case of assistantships, students are required additionally to work 20 hours per week with an assigned faculty member.

Students may receive an assistantship or fellowship. Amounts for assistantships are typically $6,000 to $12,000 and fellowships from $7,500 to $15,000 per academic year. College funds affect fellowship and assistantship amounts, as well as the continuation of funding. Tuition is waived for research assistants. All assistants and fellowships recipients are evaluated each semester; satisfactory progress toward the degree and acceptable work output are required for the continuation of funding. Funding students must be full-time students, and full-time or part-time work outside of the assistantship or fellowship is not allowed without the express written permission of the Graduate Program Director.

In addition to financial aid offered by the University, graduate students may be eligible for aid administered by other agencies. For information about part-time employment, scholarships, and student loans, contact:
The Office of Student Financial Aid
Old Dominion University
Norfolk, VA 23529-0052
(757) 683-3683

Program Policies
The Department of Urban Studies and Public Administration maintains an official Ph. D. Program Handbook that contains information about degree requirements, advising, comprehensive examinations, dissertation planning and execution, and many other program policies. Please refer to the department’s website for a downloadable copy of the program handbook.

Prerequisites
Applicants who have insufficient background in any of the prerequisite competency areas (PADM 651 Administrative Theory I: The Context of Public Administration, FOUN 722 Quantitative Research Design or (or any course so designated by the GPD) will be required to enroll in courses in the area(s) of deficiency. Such courses must be completed with a grade of B or better. Depending on previous qualifications, students may be advised to take additional prerequisite courses as well. These prerequisite courses will not be included in the required credit hours to complete the doctoral program.

Course Offering
Students are required to complete a minimum of 45 hours of course work and maintain a minimum grade point average of 3.25 or better. Up to 12 hours of appropriate course work beyond the master’s degree and with a grade of B or better may be transferred into the program with the approval of the Ph.D. Program Director. In addition to course work, students are required to take three hours of dissertation seminar and a minimum of 12 hours of dissertation credit.

Core courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAUP 801</td>
<td>Theories of Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>PAUP 805</td>
<td>Urban Law and Public Policy</td>
<td>3</td>
</tr>
<tr>
<td>PAUP 808</td>
<td>Intellectual Foundations of Public Administration</td>
<td>3</td>
</tr>
<tr>
<td>PAUP 810</td>
<td>Governance and Accountability</td>
<td>3</td>
</tr>
</tbody>
</table>

Research Core courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAUP 802</td>
<td>Logic of Social Inquiry</td>
<td>3</td>
</tr>
<tr>
<td>HLSC 803</td>
<td>Targeted Therapeutics</td>
<td>3</td>
</tr>
<tr>
<td>PAUP 853</td>
<td>Research and Evaluation Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Major Concentration (Select one of the following tracks) 12

Public Administration Track *(Select three from the following:)*
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAUP 813</td>
<td>Contemporary Public Administration Theory</td>
<td>3</td>
</tr>
<tr>
<td>PAUP 820</td>
<td>Public Personnel Administration</td>
<td></td>
</tr>
<tr>
<td>PAUP 823</td>
<td>Ethics in Public Administration</td>
<td></td>
</tr>
<tr>
<td>PAUP 830</td>
<td>Theories of Conflict Resolution and Problem Solving</td>
<td></td>
</tr>
<tr>
<td>PAUP 845</td>
<td>Managing Development and Change in Public Organizations</td>
<td></td>
</tr>
<tr>
<td>PAUP 895</td>
<td>Advanced Topics in Public Personnel Administration</td>
<td></td>
</tr>
<tr>
<td>PAUP 898</td>
<td>Directed Research (may register for up to two, with consent of the student’s Advisory Committee and the Graduate Program Director)</td>
<td></td>
</tr>
</tbody>
</table>

Public Policy Track *(Select three from the following:)*
ADVISOR, THE STUDENT SELECTS A TRACK.*

The certificate program. Each is to be seen as a subspecialty in the field of management, by developing analytical and management capabilities.

Students will take at least nine credit hours designated by their Advisory Committee and the Graduate Program Director. Cognates may be formed of courses offered within USPA, or a combination of both. Students may include up to two Independent Study/Directed Research courses in their cognate area.

Advanced Certificate in Public Administration and Policy

Bill Leavitt, Graduate Program Director
Meg Jones, Graduate Program Manager

The Department of Urban Studies and Public Administration in the College of Business and Public Administration at Old Dominion University offers an Advanced Certificate in Public Administration and Policy for individuals who submit evidence of having completed a master’s degree at an accredited college or university. The objective of the program is to help working professionals upgrade their skills in the areas of policy analysis and public management, by developing analytical and management capabilities.

A student enrolling in the certificate program may be eligible to apply to the Ph.D. program in Public Administration and Urban Policy (PAUP). If accepted, the full 12 credit hours earned in the certificate program may be transferred into the Ph.D. Program.

All courses are taught in the evening.

Curriculum

The curriculum consists of five tracks of courses listed below. Students are required to take four courses, a total of 12 credit hours, to complete the certificate program. Each is to be seen as a subspecialty in the field of public administration and policy. WITH GUIDANCE FROM A FACULTY ADVISOR, THE STUDENT SELECTS A TRACK.*

Conflict Resolution and Negotiation

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PADM 730</td>
<td>Theoretical Conflict Resolution and Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>PADM 734</td>
<td>Negotiation and Dispute Resolution</td>
<td>3</td>
</tr>
<tr>
<td>PADM 738</td>
<td>Conflict Mediation and Arbitration</td>
<td>3</td>
</tr>
<tr>
<td>PADM 745</td>
<td>Managing Development and Change in Organizations</td>
<td>3</td>
</tr>
</tbody>
</table>

Human Resource Management

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PADM 651</td>
<td>Administrative Theory I: The Context of Public Administration</td>
<td>3</td>
</tr>
</tbody>
</table>

Minor (Cognate) ** 12

Dissertation 12

PAUP 890 Dissertation Seminar 3

Total Hours 60

* Other courses may be considered for substitution for courses listed in each concentration track. In addition, students may take up to one course from the concentration area other than their chosen area, with the permission of the student’s Advisory Committee and the Graduate Program Director.

** Students will take at least nine credit hours designated by their Advisory Committee, in consultation with the student’s cognate Professor and the Graduate Program Director. Cognates may be formed of courses offered within USPA, or a combination of both. Students may include up to two Independent Study/Directed Research courses in their cognate area.

Business and Public Administration Affiliates

The college has several external units which 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 in Eastern Virginia.

Center for Asian Business

The Center for Asian Business has been established to enhance the college’s capacity to teach and conduct research on the subjects related to Asian business practices. The center collects and disseminates information on Asian businesses, supports course offerings on Asian management, and publishes research monographs and articles on the subject. Also, the center provides managerial training and consulting services for Asian companies and executives.

The Center for Economic Education

The center is an integral part of the national effort dedicated to improving economic literacy and promoting a greater understanding of the free enterprise system. A nonpartisan, nonprofit organization, the center is an affiliate of the Virginia Council on Economic Education and the National Council on Economic Education. The center works cooperatively with school systems promoting increased effectiveness of economics instruction in grades K-12 through workshops, credit classes and consultations.

Executive Development Center

The center’s mission is to provide businesses, organizations, and individuals with high quality professional development and continuing education programs in virtually all areas of business, management, and executive education. The center offers public programs for individuals seeking professional certificate programs, preparation for certification exams, career advancement and career change. In addition, the center develops and delivers custom training programs and consulting services to meet specific organizational and employee development needs of businesses and organizations regionally, nationally and internationally.

Regional Studies Institute

The primary objectives of the institute are to conduct research and develop a knowledge base on regional issues in the Eastern Virginia area. In addition,
it provides a forum for regional collaboration involving educational, business, and government organizations.

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).

Maritime Institute
The mission of the institute is to provide world quality maritime, ports and logistics management education, training, and research to meet regional, national and international needs. The Maritime Institute serves as a positive catalyst for the delivery of education, training, research, and service programs, thus supporting the economic growth and international competitiveness of greater Hampton Roads and Virginia. Courses are available at both the undergraduate and graduate levels. Professional and executive-level seminars, workshops, and short courses will also be offered.

E.V. Williams Center for Real Estate and Economic Development
The mission of the center is to provide information and resources for the Hampton Roads real estate and economic development communities in their quest to improve the regional economy through job creation and investment. The center fosters relationships with the development community by hosting topical seminars on key development issues affecting the region and works closely with all related professional service organizations. The center maintains a comprehensive collection of information including detailed demographic and real estate data and employs the latest in geographic information and mapping software. The 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.
Darden College of Education

www.education.odu.edu/
218 Education Building
757-683-3938 (office)
757-683-5083 (fax)
Linda Irwin-DeVitis, Dean
Sharon Judge, Associate Dean, Graduate Education and Assessment

The Darden College of Education offers the Master of Science (M.S.), Master of Science in Education (M.S.Ed.), and Educational Specialist (Ed.S.) degrees as well as the Doctor of Philosophy (Ph.D.) degree in the following broad concentrations and areas:

Counseling
• Ph.D. in Education, Counseling Concentration
• Ed.S. Counseling
• M.S.Ed. Counseling

Communication Disorders and Special Education
• Ph.D. in Education Special Education Concentration
• M.S.Ed. Special Education–Research Emphasis (for currently licensed teachers)
• M.S.Ed. Special Education with initial K-12 licensure
• M.S.Ed. Communication Sciences and Disorders

Educational Foundations and Leadership
• Ph.D. in Education, Educational Leadership Concentration
• Ed.S. Educational Leadership
• Ed.S. Educational Leadership with PreK-12 licensure
• M.S.Ed. Educational Leadership with PreK-12 Licensure
• Ph.D. in Education, Higher Education Concentration
• Ed.S. Higher Education
• M.S.Ed. Higher Education

Human Movement
• M.S.Ed. Athletic Training
• M.S.Ed. Athletic Training with Initial Virginia Licensure in Physical Education and Health Education (PreK-12)
• M.S.Ed. Exercise Science and Wellness
• M.S.Ed. Physical Education and Health Education Curriculum and Instruction
• M.S.Ed. Physical Education and Health Education Curriculum and Instruction with Initial Virginia Licensure (PreK-12)
• Ph.D. in Education, Human Movement Science Concentration
• M.S.Ed. Recreation and Tourism Studies
• M.S.Ed. Sport Management

Science, Technology, Engineering, and Mathematics, (STEM) Education and Professional Studies
• Ph.D. in Education, Instructional Design and Technology Concentration
• M.S.Ed. Elementary/Middle School Instructional Design and Technology
• M.S.Ed. Secondary Instructional Design and Technology
• Ph.D. in Education, Occupational and Technical Studies Concentration
• Ed.S. in Occupational and Technical Studies
• M.S. Business and Industry Training
• M.S. Community College Teaching
• M.S. Career and Technical Education
• M.S.Ed. Elementary/Middle School-Science

Teaching & Learning
• Ph.D. in Education, Curriculum and Instruction Concentration
• Ph.D. in Education, Early Childhood Education
• Ph.D. In Education, Literacy Leadership
• M.S. Ed. Reading Education (Reading Specialist licensure)
• M.S.Ed. Early Childhood Education (PreK-3 Initial Licensure)
• M.S.Ed. Early Childhood Education (non-licensure)-Research Emphasis
• M.S. Ed. Elementary Education (IDS 5th Year, PreK-6 Initial Licensure)
• (Continuation of undergraduate Interdisciplinary Studies program)
• M.S.Ed. Elementary Education (PreK-6 Initial Licensure)
• M.S. Ed. Elementary Education (Middle School 6-8 Initial Licensure)
• M.S Ed. Secondary Education (6-12 Initial Licensure)
• Library Science (Initial Licensure)
• Library Science (Endorsement for Licensed teachers)
• M.S. Ed. Elementary Education (non-licensure)
• M.S Ed. Secondary Education (non-licensure)
• Field-Based Masters Program
• Military Career Transition Program

Overview

The Darden College of Education is comprised of the following departments:
• Communication Disorders and Special Education;
• Counseling and Human Services;
• Educational Foundations and Leadership;
• Human Movement Sciences;
• Science, Technology, Engineering and Mathematics (STEM) Education and Professional Studies; and
• Teaching & Learning.

The Office of Teacher Education Services and Advising in the Darden College of Education supports teacher education programs in the College of Arts and Letters, the College of Sciences, and the Darden College of Education. The college also houses the Center for Educational Partnerships, a research center charged with assisting school divisions within the Commonwealth of Virginia to meet the requirements of PL 107-110, the No Child Left Behind Act of 2001. The college is the headquarters for Virginia Troops to Teachers and houses Career Switchers, an accelerated alternate pathway to teacher licensure.

Mission

The Darden College of Education is committed to excellence in teaching, scholarly activities, and service. The college strives to meet the needs of the community while maintaining national and international prominence and is dedicated to preparing distinguished professionals who are leaders in their field. The college fulfills its mission through its undergraduate and graduate programs in the fields of education, counseling and human services, exercise science, athletic training, sport management, recreation, training, fashion, communication sciences and disorders, and instructional and industrial technology as well as its continuing education activities.
Old Dominion University’s major purpose in its teacher education programs is to prepare teachers and educational leaders 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 which reflect commitment to teaching and learning as well as lifelong professional growth and development. In addition to teacher education, the Darden College of Education also prepares individuals to work in agencies and other settings.

**Goals**

The teacher preparation programs embrace several broad goals. Candidates will possess the following:

1. Knowledge of their teaching field(s);
2. Pedagogical knowledge of principles and strategies which pertain to classroom organization and instructional practices;
3. Knowledge of curricular content, classroom organization, instructional materials, and industrial technology;
4. Knowledge of learners’ developmental characteristics and diversity;
5. Knowledge of educational contexts, ranging from group dynamics in classrooms, to the governance and financing of school divisions, to the characteristics and expectations of communities which schools serve;
6. Knowledge of educational values, purposes, ends, history, and philosophies which pertain to schooling in a democracy;
7. Ability to conduct research and utilize research findings in decisions to improve long-range planning, school operation and student learning.
8. All education programs are accredited by the National Council for the Accreditation of Teacher Education (NCATE). Teacher licensure programs are also approved by the Department of Education of the Commonwealth of Virginia.

The graduate programs provide Virginia and other regions with eleven broad majors for the Master of Science in Education, three majors in the Master of Science and two majors for the Education Specialist. The Doctor of Philosophy degree is offered in 11 areas. Within these graduate majors are over 50 related interest areas designed to address the professional needs of students and the communities they serve. The prime objective of graduate programs is to improve the professional skills and attitudes of students to enable them to influence the quality of education (teaching, leadership, counseling, research, training, and community services) at the state, regional, national and international levels.

**Portfolio Assessment Policy**

All students seeking admissions into any Teacher Education Program upon enrolling/registering for their first Education class are required to purchase the Web-based Portfolio Assessment System approved by the Teacher Education Council. In addition, any student taking a course in which the instructor requires the Web-based Portfolio Assessment System will be required to purchase this system. Information can be found on the DCOE website: http://education.odu.edu

**Fast Track Admissions Policy**

Fast Track graduate admission will be available to undergraduate students in the Old Dominion University Interdisciplinary Studies, Teacher Preparation Concentration as well as undergraduate students who have completed teacher preparation emphasis degrees in art, dance, English, foreign languages, geography, history, marketing education, math, music, physical education, political sciences, sciences, technology education, and theatre. To be considered under the Fast Track graduate admissions policy, students must earn the B.S. or B.A. degree from Old Dominion University and must be applying to an M.S.Ed. degree in PreK-3/early childhood education, PreK-6 elementary education, middle school education, secondary education, or special education.

In addition, to be considered for Fast Track graduate admission, an applicant must:

1. have a minimum 3.20 undergraduate cumulative GPA at Old Dominion University; and
2. have passing scores in EACH of the three sections of the PRAXIS I examination (or equivalent SAT/ACT test scores) as established by the Commonwealth of Virginia. Composite scores will not be considered.

**Graduate Certificate in Military Children and Families**

John A. Nunnery – Program Director

The Military Child and Families Certificate is an interdisciplinary program that will provide educators with specialized expertise in meeting the academic, social, and emotional needs of military connected P-12 students. Teachers, counselors and school leaders in this program will take 12 credit hours of course and field work that will actively engage them in: (a) building the foundational research-based knowledge and skills that are requisite for identifying, understanding and meeting the needs of military children and families, (b) collecting and analyzing school-wide, classroom and individual assessment data to identify and prioritize the specific support needs of their military connected students and families; and (c) applying their foundational and assessment knowledge and skills to design and implement research-based, flexible, adaptable and assessable programs that meet the identified needs in order to help ease transition, facilitate adjustment, and approve academic and social development outcomes for these students.

Requirements:

The students who pursue this certificate must complete 12 graduate credit hours. This includes:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUN 689</td>
<td>Understanding Military Connected Children and Families</td>
<td>4</td>
</tr>
<tr>
<td>ELS 623</td>
<td>Design of Service Delivery Plans to Meet the Needs of Military Connected Children and Families</td>
<td>4</td>
</tr>
<tr>
<td>FOUN 662</td>
<td>Assessment and Evaluation for Schools Serving Military Connected Children and Families</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Hours 12

* Includes a service learning component that accounts for approximately 25% of students’ time and effort in the certificate program.

**Department of Communication Disorders and Special Education**

Nicholas G. Bountress, Chair

Child Study Center

757 683-4117

The Department of Communication Disorders and Special Education is housed in the Lions Child Study Center (4501 Hampton Blvd.), a building that was made possible through the generosity of civic clubs, alumni, patrons and students and which opened in 1997. The clinical programs, housed in the center, give students valuable practical experience, deliver needed professional and educational services to members of the Hampton Roads community, and provide a laboratory setting for innovative faculty and student research. The department’s strategic objective is to prepare future clinicians, educators, leaders, researchers, and policy makers to be a resource for state and national initiatives, and to serve as an exemplary center for educational research and practice. The faculty is dedicated to preparing professionals to serve as recognized leaders in the fields of education, clinical settings and agencies. PhD program is offered in special education, and master’s degree programs are offered in special education,
and communication sciences and disorders. Licensure-only program is offered in special education.

Due to changing University requirements, national accreditation standards, and Commonwealth licensure regulations, the programs in the Darden College of Education 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 website at http://education.odu.edu/.

Individual programs are described on the following pages in this order:

**Special Education**
- Master of Science in Education with Research Emphasis
- Master of Science in Education with Special Education: General Curriculum, K-12 Licensure
- Master of Science in Education with Special Education: Adapted Curriculum, K-12 Licensure
- Master of Science in Education with Early Childhood Special Education Licensure
- Post Baccalaureate Endorsement Program with Special Education: General Curriculum, K-12 Licensure
- Post Baccalaureate Endorsement Program with Special Education: Adapted Curriculum, K-12 Licensure
- Post Baccalaureate Endorsement Program with Early Childhood Special Education
- Post Baccalaureate Endorsement Program with Visual Impairments, K-12 Licensure
- Autism Certificate Program
- Doctor of Philosophy in Education with a concentration in Special Education

**Communication Sciences and Disorders**
- Master of Science in Education

**Master of Science in Education–Special Education**
Cheryl S. Baker, Graduate Program Director
Child Study Center, (757) 683-4383

Within the Master of Science in Education Special Education degree program, there are two programs: one for licensed teachers who seek an advanced degree with a research emphasis and the other for those who seek initial licensure in special education and a master’s degree. The special education graduate program is committed to a philosophy of serving as a catalyst to promote awareness, understanding, and acceptance of individuals with disabilities. The course work focuses on the improvement of the quality and scope of educational and related services available to individuals with disabilities from infancy to adulthood.

**Special Education, Research Emphasis**
A master’s degree in special education with research emphasis will provide educators with an advanced professional degree and qualifications beyond licensure. The emphasis will include a focus on scholarly research, statistical analysis, and writing for professional journals. This emphasis will also serve as the prerequisite course work to the Ph.D. in special education, thereby facilitating entry into the Ph.D. program for master educators seeking terminal degrees. This program is well grounded in current federal education law, which mandates familiarity with and use of evidence-based practices for educators.

**Admission**
Admission to the graduate program in special education is granted by the department’s graduate program director in conjunction with special education faculty. The following requirements are necessary for admission to the program. Students must:
1. hold a baccalaureate degree from an accredited institution;
2. hold a Virginia Collegiate Professional License or an equivalent license from another state for special education;
3. have an undergraduate grade point average of 2.80 or better;
4. take and receive satisfactory scores on either the Graduate Record Examination (score of 900 combined on verbal and quantitative with a minimum of 450 verbal for regular admission and 4.5 on the analytical writing section); Revised Graduate Record Examination (see graduate program director) or Miller Analogies Test (score of 403 for regular admission); and,
5. submit a 400-500 word goal statement indicating why the student wishes to enroll in the special education program. Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate program director.

**Continuance**
Students must:
1. maintain a grade point average of 3.00 overall, and
2. successfully complete all competencies relative to their program of study.

**Exit**
Students must:
1. have a grade point average of 3.00 overall and a grade of B- or better in all course work;
2. satisfactorily complete all program requirements including the written comprehensive exam;
3. complete a Graduate Student Assessment;
4. complete the Post Task Rating Form; and
5. submit a written research project according to program guidelines prior to the awarding of the master’s degree in special education.

**Program Requirements**
For all students who have met the prerequisite requirement of licensure in special education, the master’s degree requires a minimum of 30 credits of graduate study.

**Curriculum**

<table>
<thead>
<tr>
<th>Required Content Courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 701/801</td>
<td>Historical and Contemporary Research in Special Education</td>
</tr>
<tr>
<td>SPED 702/802</td>
<td>Cognitive Processes and Learning Strategies for Students with Special Needs</td>
</tr>
<tr>
<td>SPED 707</td>
<td>Advanced Instructional Procedures in Special Education</td>
</tr>
</tbody>
</table>

**Research Core**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 612</td>
<td>Applied Research Methods in Education</td>
</tr>
<tr>
<td>FOUN 722</td>
<td>Introduction to Applied Statistics and Data Analysis</td>
</tr>
<tr>
<td>CDSE 636</td>
<td>Problems in Education</td>
</tr>
<tr>
<td>SPED 720</td>
<td>Curriculum and Instruction: Research Into Practice</td>
</tr>
</tbody>
</table>

Select at least three electives from the following: 9
Special Education, K – 12 Licensure

The special education master’s program prepares teachers and agency personnel to design and implement programs for individuals with disabilities in a variety of settings. This master’s degree program, with endorsement, can be completed in approximately two years during which the enrolled students will specify either special education: general curriculum K – 12, early childhood special education, or special education: adapted curriculum, K - 12. Due to changing University requirements, national accreditation standards, and state licensure regulations, the programs in teacher education are under constant revision. Students are encouraged to obtain current program information from the Special Education Program website at: http://education.odu.edu/esse/.

The graduate licensure programs in special education, in addition to meeting the Master of Science in Education degree requirements, satisfy Virginia Board of Education teacher endorsement competencies. Graduates are prepared to work effectively with children, adolescents, and adults who require special educational services. Classroom instruction is supplemented by field experiences with children, adolescents, and adults in a variety of settings. Teacher interns have been placed in children’s hospitals, special education classes in public and private facilities, regional education programs, residential psychiatric hospitals, mental health centers, and community agencies.

Graduates in special education serve as key members of child study teams and are prepared to address educational, emotional, and physical disabilities. They also find employment as educational therapists, psycho-educational diagnosticians, and special education teachers and staff members in public and private schools.

Admission

Admission to the graduate program in special education is granted by the department’s graduate program director in conjunction with special education faculty. The following requirements are necessary for admission to the licensure program. Individuals who have a non-teaching B.S. or B.A. and wish to earn an M.S. Ed. and qualify for a teaching license in special education must meet the liberal arts and sciences content requirements by successfully passing the Praxis II Elementary Education: Context Knowledge test (0014; 5014).

Regular admittance requirements
1. a baccalaureate degree in the liberal arts and sciences from an accredited institution. For candidates with other degrees from accredited institutions, successful completion of the Praxis II Elementary Education: Content Knowledge exam (0014; 5014) prior to exit from the program may be substituted to meet the liberal arts and sciences requirements. The Virginia Board of Education determines passing Praxis II scores;
2. an undergraduate grade point average of 2.80 or better in an academic content area;
3. a Graduate Record Examination score of at least 900 (Verbal and Quantitative sections with a minimum Verbal score of 450 or better) and a 4.5 on the Analytical Writing section; Revised Graduate Record Examination (see graduate program director) OR a Miller Analogies Test (MAT) minimum score of 403;
4. a 400-500 word goal statement indicating why the student wishes to enroll in the special education program; and
5. successful completion of the Praxis I, the Scholastic Aptitude Test (SAT) or the American College Testing exam (ACT) according to the scores established by the Virginia Department of Education.

Provisional admittance requirements

Provisional admittance may be offered to students with marginal GRE or MAT scores or grades. In this case, the committee takes into consideration other factors. Individuals who do not meet the Praxis I or SAT requirements may be admitted to the graduate program. Provisional admittance requires:
1. a baccalaureate degree in the liberal arts and sciences from an accredited institution. For candidates with other degrees from accredited institutions, successful completion of the Praxis II Elementary Education: Content Knowledge exam (0014; 5014) prior to exit from the program may be substituted to meet the liberal arts and sciences requirements. The Virginia Board of Education determines passing Praxis II scores;
2. an undergraduate grade point average of 2.80 or better in an academic content area;
3. a Graduate Record Examination score of at least 900 (Verbal and Quantitative sections with a minimum Verbal score of 400 or better), Revised Graduate Record Examination (see graduate program director) and 4.0 on the Analytical Writing section OR a Miller Analogies Test (MAT) minimum score of 396;
4. a 400-500 word goal statement indicating why the student wishes to enroll in the special education program; and
5. successful completion of the Praxis I, the Scholastic Aptitude Test (SAT) or the American College Testing exam (ACT) according to the scores established by the Virginia Department of Education.

Fast Track Teacher Preparation Admission Policy

Please refer to the appropriate section in the undergraduate catalog.

Continuance

Students must:
1. complete the Pre-Task Rating Form at time of admission.
2. maintain a grade point average of 3.00,
3. achieve a grade of B- or better in all course work and a grade of B or better in all practicum coursework;
4. successfully complete all competencies relative to their area(s) of emphasis; and
5. must successfully pass the Virginia Board of Education Professional Assessments required for licensure prior to the start of the teacher candidate internship. The following assessments must be completed with a passing score: Virginia Communication and Literacy
Assessment (VCLA) with a passing composite score of 470; Praxis II Elementary Education: Content Knowledge (0014; 5014) exam with a passing score of 143; and Virginia Reading Assessment (VRA) with a passing score of 235 or Reading for Virginia Educators (RVE) (5306) with a passing score of 157.

Exit

Students must:
1. maintain a grade point average of 3.00 and a grade of B- or better in all course work;
2. provide passing scores on the Praxis II: Elementary Education Content Knowledge assessment, the written comprehensive examination (with no more than one successful re-examination) and the internship/ student teaching experience;
3. complete a Graduate Student Assessment;
4. complete the Post Task Rating Form; and
5. submit a professional portfolio according to program guidelines before the awarding of the master’s degree. Candidates seeking initial special education licensure will be required to successfully complete the Virginia Reading Assessment (VRA) or Reading for Virginia Educators (RVE) assessment and the Virginia Communication and Literacy Assessment (VCLA) (see Continuance section for passing scores).

Comprehensive Examination

All students seeking a master’s degree in special education are required to complete successfully a written comprehensive examination. On this examination, students will be required to answer questions in general special education and questions from their areas of specialization. Specialization questions will be congruent with the student’s academic and professional preparation. If not passed during the first administration, the exam may be repeated only one time. Failure to successfully pass the comprehensive examination will result in not completing the requirements for the Master of Science in Education.

Program Requirements

For all students who have the prerequisite undergraduate course work in special education, the master’s degree requires a minimum of 30 semester hours of graduate study in special education to complete licensure. Students are expected to demonstrate dedication to special education clients and to programming in classroom and clinical settings before graduation is certified.

Special Education, K-12 Licensure – General Curriculum K-12

This program is designed to prepare professionals who are able to design and to implement appropriate educational programs for students who manifest mild disabilities. The program combines course work, supervised practica and internship to facilitate the integration of theory and practice in the development of evidence-based interventions applicable for individuals with special needs from preschool through adult in both public and private facilities. Program competencies prepare students to work in school-based programs, clinics, hospitals, and agency settings. Program practica and internship allow students opportunities to apply management, instructional and problem-solving skills in one-to-one and group settings.

Curriculum

Prerequisite Courses (or Undergraduate Minor or IDS in special education)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 313</td>
<td>Fundamentals of Human Growth and Development: Birth through Adolescence</td>
<td>3</td>
</tr>
</tbody>
</table>

Special Education, K-12 Licensure - Early Childhood Special Education and Special Education - Adapted Curriculum K - 12

The early childhood special education program is designed to prepare students to teach children from birth to age six who manifest disabilities or who are at risk of later school failure. Students endorsed in the area of early childhood special education will be eligible to teach in infant and preschool programs in both public and private settings. The adapted curriculum program is designed to prepare teachers to instruct individuals traditionally labeled with multiple, moderate, severe, or profound disabilities who may have disabling conditions such as cerebral palsy, autism, or a sensory impairment.
Curriculum

Prerequisite Courses (or Undergraduate Minor or IDS in special education)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 313</td>
<td>Fundamentals of Human Growth and Development: Birth through Adolescence</td>
<td>3</td>
</tr>
<tr>
<td>SPED 400/500</td>
<td>Foundations of Special Education: Legal Aspects and Characteristics</td>
<td>3</td>
</tr>
<tr>
<td>SPED 402/502</td>
<td>Instructional Design I: Learner Characteristics and Assessment</td>
<td>3</td>
</tr>
<tr>
<td>SPED 411/511</td>
<td>Classroom and Behavioral Management Techniques for Students with Diverse Needs</td>
<td>3</td>
</tr>
<tr>
<td>SPED 415/515</td>
<td>Instructional Design II: Curricular Procedures and Individualized Education Planning *</td>
<td>3</td>
</tr>
<tr>
<td>SPED 417/517</td>
<td>Collaboration and Transitions</td>
<td>3</td>
</tr>
</tbody>
</table>

Graduate Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 504</td>
<td>Medical Aspects of Disabling Conditions</td>
<td>3</td>
</tr>
<tr>
<td>SPED 569</td>
<td>Communication/Language Development and Intervention Strategies</td>
<td>3</td>
</tr>
<tr>
<td>SPED 633</td>
<td>Sensorimotor Development and Intervention Strategies *</td>
<td>3</td>
</tr>
<tr>
<td>TLED 568</td>
<td>Language Acquisition and Reading for Students with Diverse Learning Needs</td>
<td>3</td>
</tr>
</tbody>
</table>

Early Childhood Special Education

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 630</td>
<td>Teaching Preschoolers with Disabilities *</td>
<td>3</td>
</tr>
<tr>
<td>SPED 631</td>
<td>Developmental and Ecological Assessment Strategies *</td>
<td>3</td>
</tr>
<tr>
<td>SPED 637</td>
<td>Infant/Family Intervention and Teamwork *</td>
<td>3</td>
</tr>
</tbody>
</table>

Special Education - Adapted Curriculum K-12

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 621</td>
<td>Effective Interventions for Children and Youth with Challenging Behavior *</td>
<td>3</td>
</tr>
<tr>
<td>SPED 623</td>
<td>Characteristics and Advanced Procedures: Intellectual Disabilities *</td>
<td>3</td>
</tr>
<tr>
<td>SPED 625</td>
<td>Characteristics of Students with Autism Spectrum Disorders</td>
<td>3</td>
</tr>
<tr>
<td>SPED 628</td>
<td>Teaching Students with Autism Spectrum Disorders **</td>
<td>3</td>
</tr>
</tbody>
</table>

Internship

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 586</td>
<td>Teacher Candidate Internship for Special Endorsement **</td>
<td>9</td>
</tr>
</tbody>
</table>

Total Hours: 63

* Requires a 45-hour practicum and passing scores on Praxis I or equivalent as prescribed by the Virginia Board of Education Assessment for admission to an approved teacher education program (see Practicum Experiences Policy).

** SPED 483/SPED 583 prerequisite.

Due to changing University requirements, national accreditation standards, and Commonwealth licensure regulations, the programs in the Darden College of Education are under constant revision. Any changes resulting from these factors supersede the program requirements described in the catalog. Students are encouraged to obtain current program information from their advisors and the Darden College of Education website at http://education.odu.edu/.

Post Baccalaureate Endorsement Program

Cheryl S. Baker, Graduate Program Director
Child Study Center, (757) 683-4383

Many students who already possess an undergraduate degree enter Old Dominion University for the sole purpose of meeting Virginia’s teaching licensure standards. When these students apply for admission into an approved teacher education program, they are considered to be post baccalaureate endorsement only candidates and must meet the college’s policy 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. The special education post baccalaureate endorsement option is available for those students who wish to pursue licensure in special education and do not meet the master’s degree admission requirements or hold provisional licensure in special education and wish to complete licensure requirements.

The Post Baccalaureate Endorsement Program meets Virginia Department of Education endorsement requirements. Graduates find employment as special education teachers within the continuum of services provided for children with special needs and may also serve as key members of child study teams; they are prepared to address the educational, emotional, and physical needs of students with disabilities.

Admission

Regular admittance requires:

1. completion of an undergraduate degree in the arts and sciences (or equivalent); a major in interdisciplinary studies or passing scores on Praxis II (0014; 5014) Elementary Education: Content Knowledge;

2. admission to Old Dominion University as a non-degree seeking graduate student;

3. cumulative GPA of 2.80 for all college credit courses taken in the baccalaureate degree program from an accredited college/university;

4. passing Praxis I or equivalent assessments scores;

5. an interview and recommendation for admittance from a department representative, Teacher Education Services advisor, or site director; and

6. submission of an application for admittance into the Darden College of Education Teacher Post-Baccalaureate Endorsement Program.

Provisional admittance requires:

1. completion of an undergraduate degree in the arts and sciences (or equivalent); a major in interdisciplinary studies or passing scores on Praxis II (0014; 5014) Elementary Education: Content Knowledge;

2. admission to Old Dominion University as a non-degree seeking graduate student;

3. cumulative GPA of 2.50-2.74 for all college credit courses taken in the baccalaureate degree program from an accredited college/university;

4. passing Praxis I or equivalent assessments scores;

5. an interview and recommendation for admittance from a department representative, Teacher Education Services advisor, or site director; and

6. submission of an application for admittance into the Darden College of Education Teacher Post-Baccalaureate Endorsement Program.

Continuance Requirements

1. completion of the Pre-Task Rating Form upon acceptance;

2. successful completion of all courses required for licensure in an endorsement area(s);

3. maintenance of a GPA of 3.0 with a B- or better in all course work, and B or better in all practicum coursework; and
Exit Requirements

1. completion of the Post Task Rating form;
2. passing scores on the Reading for Virginia Educators (RVE) or Virginia Reading Assessment (VRA) and Virginia Communication and Literacy Assessment (VCLA) prior to teacher candidate internship (student teaching);
3. completion of all requirements for the program including passing scores on the Praxis II Elementary Education: Content Knowledge exam (0014; 5014) and Virginia Reading Assessment (VRA) and Virginia Communication and Literacy Assessment for admission to an approved teacher education program (see Practicum Experiences Policy);
4. completion of SPED 583 prior to teacher candidate internship (student teaching); and
5. passing scores on the Special Education Exit Exam.

Curriculum

Special Education Licensure Only—General Curriculum, K - 12

**SPED 313** Fundamentals of Human Growth and Development: Birth through Adolescence 3

**SPED 400/500** Foundations of Special Education: Legal Aspects and Characteristics 3

**SPED 402/502** Instructional Design I: Legal Aspects and Assessment 3

**SPED 411/511** Classroom and Behavioral Management Techniques for Students with Diverse Needs 3

**SPED 415/515** Instructional Design II: Curricular Procedures and Individualized Education Planning * 3

**SPED 417/517** Collaboration and Transitions 3

**TLED 468/568** Language Acquisition and Reading for Students with Diverse Learning Needs 3

**SPED 610** Characteristics of Student Accessing the General Curriculum 3

**SPED 611** Instructional Strategies for Students accessing the General Education Curriculum * 3

**READ 680** Reading to Learn Across the Curriculum 3

**TLED 430/530** PK-12 Instructional Technology 3

**Internship** 9

**SPED 583** Field Experience Seminar in Special Education 1

**SPED 586** Teacher Candidate Internship for Special Endorsement 3-12

**Total Hours** 46-55

* Requires a practicum of 45 hours and passing scores on Praxis I or equivalent as prescribed by the Virginia Board of Education Assessment for admission to an approved teacher education program (see Practicum Experiences Policy).

Early Childhood Special Education/Special Education—Adapted Curriculum, K - 12 Licensure Only; Early Childhood Special Education

Core Requirements

**SPED 313** Fundamentals of Human Growth and Development: Birth through Adolescence 3

**SPED 400/500** Foundations of Special Education: Legal Aspects and Characteristics 3

**SPED 415/515** Instructional Design II: Curricular Procedures and Individualized Education Planning * 3

**SPED 404/504** Medical Aspects of Disabling Conditions 3

**SPED 411/511** Classroom and Behavioral Management Techniques for Students with Diverse Needs 3

**SPED 417/517** Collaboration and Transitions 3

**SPED 469/569** Communication/Language Development and Intervention Strategies 3

**TLED 468/568** Language Acquisition and Reading for Students with Diverse Learning Needs 3

**TLED 430/530** PK-12 Instructional Technology 3

**Early Childhood Special Education Licensure Only**

**SPED 630** Teaching Preschoolers with Disabilities * 3

**SPED 631** Developmental and Ecological Assessment Strategies * 3

**SPED 637** Infant/Family Intervention and Teamwork * 3

**Internship** 9

**SPED 583** Field Experience Seminar in Special Education 1

**SPED 586** Teacher Candidate Internship for Special Endorsement 3-12

**Total Hours** 22-31

* Requires a practicum of 45 hours and passing scores on Praxis I or equivalent as prescribed by the Virginia Board of Education Assessment for admission to an approved teacher education program (see Practicum Experiences Policy).

Due to changing University requirements, national accreditation standards, and Commonwealth licensure regulations, the programs in the Darden College of Education are under constant revision. Any changes resulting from these factors supersede the program requirements described here. Students are encouraged to obtain current program information from their advisors and the Darden College of Education website at http://education.odu.edu/.

Special Education – Visual Impairments, PreK-12 Licensure only

Endorsement Requirements

**SPED 400/500** Foundations of Special Education: Legal Aspects and Characteristics 3

**SPED 411/511** Classroom and Behavioral Management Techniques for Students with Diverse Needs 3

**SPED 417/517** Collaboration and Transitions 3

**SPED 432/532** Characteristics of Students with Visual Impairments 1

**SPED 433/533** Braille Code 3

**SPED 434/534** Medical and Educational Implications of Visual Impairments * 3
The curriculum described below contains elements that will provide research skills to work with school systems to address the diverse learning needs and behavior challenges associated with the education of students with special needs and those students at risk. Program graduates will attain a degree of proficiency in research and writing that will prepare them to make contributions to the professional literatures of special education and related disciplines.

The curriculum described below contains elements that will provide research expertise, administrative skills and experience, and the ability to serve the nation’s colleges, universities, and agencies providing special education services.

**Admission**

The criteria for admission into the Ph.D. in special education will include:

1. A completed master’s degree in special education or an equivalent degree, in an appropriate discipline in a program that is accredited by an appropriate specialized accrediting agency and from an institution of higher education that is regionally accredited. A minimum grade point (GPA) of 3.60 (on a 4.0 scale) overall for the master’s degree and in the major area of study in the master’s degree will be expected. In extraordinary circumstances, an individual may be accepted into the Ph.D. in special education program on a provisional status without having received a master’s degree. This individual first must complete the master’s degree in the selected concentration area and meet all other admission criteria prior to beginning Ph.D. coursework;

2. An acceptable overall total score on the Graduate Record Examination (minimum 550 on the verbal portion) and no less than a 4.5 on the writing sample. Applicants whose native language is not English must submit a current score for the Test of English as a Foreign Language (TOEFL) that meets the University’s current standard;

3. Submission of a professional vitae (3 years minimum teaching experience preferred);

4. A 500-800 word statement of academic and professional goals. This statement must address how the applicant would work within the research agenda of the concentration to achieve his/her goals;

5. Three letters of reference from sources capable of commenting on the applicant’s readiness for the advanced graduate study. At least two of these letters must be from an academic source;

6. Prior course work in statistics and in theories of learning. If this requirement is not met, a student may be admitted and additional course work will be added to the candidate’s program of study; and

7. An on-campus interview with concentration area faculty.

Applications for admission will be reviewed by the admissions committee from the special education concentration. Admission to the special education program is competitive with the number of applications expected to exceed the number of available openings. Admission criteria will be weighted with competitive applicants invited to participate in an on campus interview. Most full time students will begin their course of study each summer semester as a cohort following a summer orientation.

**Continuance**

Students must:

1. maintain a grade point average of 3.00 overall;

2. complete an annual continuance review and,

3. successfully complete all competencies relative to their program of study.

**Exit**

In order to complete the program, students must fully complete the curriculum below and all requirements noted elsewhere in the University catalog for graduate students and within the Ph.D. in Education Handbook. It is the responsibility of the student to obtain these materials and comply with all requirements.

**Program Requirements**

The Ph.D. program in special education is comprised of courses totaling a minimum of 60 academic credit hours beyond the master’s degree. The curriculum includes a content concentration totaling 24 credit hours, an introductory core of nine hours, a research component including 15 credit hours, and the dissertation, which will include a minimum of 12 hours. The dissertation will often include more than 12 credit hours depending on the length of time necessary for completion. Students entering the program
Curriculum Applicants must submit completed applications and all related material no earlier than one year in order to build efficient cohort groups for this type of advanced study. In order to enhance the experience of the students and to increase the efficiency by which courses are offered, a cohort of 10 students will be admitted each year. This limited number of students is necessary to ensure that there is an adequate number of full-time faculty to serve the students through advising and other duties, particularly when the cohorts reach the dissertation stage of the program.

To build a cohesive cohort group, a series of intensive courses will be offered on the Old Dominion University campus each summer. It is expected that all newly admitted students will come to campus for one of these seminars during the summer after they are admitted to the program and complete two courses together as a group. These courses will be selected from the introductory core requirements. A third course will be available for regular study during the summer so that students may comply with one of the residency requirements.

Applicants must submit completed applications and all related material no later than February 1 of each year, and students will be admitted for study beginning in June or July of the same year.

Curriculum

Prerequisite Course work

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 722</td>
<td>Introduction to Applied Statistics and Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>SPED 701/801</td>
<td>Historical and Contemporary Research in Special Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Introductory Core

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 821</td>
<td>Critical Issues I: Readings in Special Education and Professional Writing</td>
<td>3</td>
</tr>
<tr>
<td>SPED 822</td>
<td>Critical Issues II: Research and Professional Writing</td>
<td>3</td>
</tr>
<tr>
<td>SPED 893</td>
<td>Professional Seminar: Teaching, Research, and Service</td>
<td>3</td>
</tr>
</tbody>
</table>

Research Core

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 822</td>
<td>Applied Linear Models in Educational Research</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 812</td>
<td>Advanced Research Design and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 813</td>
<td>Advanced Program Evaluation in Education</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 814</td>
<td>Qualitative Research Design in Education</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 816</td>
<td>Single Subject Research Designs</td>
<td>3</td>
</tr>
</tbody>
</table>

Special Education Concentration

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 700/800</td>
<td>Social/Emotional Aspects of Child Development</td>
<td>3</td>
</tr>
<tr>
<td>SPED 702/802</td>
<td>Cognitive Processes and Learning Strategies for Students with Special Needs</td>
<td>3</td>
</tr>
<tr>
<td>SPED 707/807</td>
<td>Advanced Instructional Procedures in Special Education</td>
<td>3</td>
</tr>
<tr>
<td>SPED 720/820</td>
<td>Curriculum and Instruction: Research Into Practice</td>
<td>3</td>
</tr>
<tr>
<td>CDSE 795/895</td>
<td>Topics in Education</td>
<td>1-3</td>
</tr>
<tr>
<td>SPED 868</td>
<td>Internship: Urban Child Study/Special Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives *

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dissertation</td>
<td>12</td>
</tr>
</tbody>
</table>

Total Hours 64-66

Practicum Experiences Policy

A candidate may participate in a course with a practicum experience through one of two tracks:

1. A candidate may be eligible to participate in the early practicum experience course if s/he has been admitted into an approved teacher education program. This requires that candidates pass the Praxis I exam or equivalent as prescribed by the Virginia Board of Education Assessment Program (see Practicum Experiences Policy). In addition, candidates must meet the GPA for their individual programs, professional education courses, and minimum grade requirements, along with any other course prerequisites.

2. A provisionally licensed teacher may participate in an early practicum course if s/he is currently employed with a school division, have a letter from the Virginia Department of Education listing the course as a required course, and have a Virginia Communication and Literacy Assessment (VCLA) score. The provisionally licensed teacher will have to meet all the requirements of the course as stated in the syllabus.

3. Candidates seeking admission to an approved teacher education program must satisfy one of the Virginia Board of Education Prescribed Assessment for Admission to an Approved Teacher Education Program. This requirement can be satisfied by meeting a passing score in one of the selected criteria below:

   A. Passing Praxis I composite score of 532; or
   B. Approved substitute test score for Praxis I:
      1. SAT score of 1000 with at least 450 verbal and 510 mathematics taken prior to April 1, 1995; or
      2. SAT score of 1100 with at least 530 verbal and 530 mathematics taken after April 1, 1995; or
      3. ACT composite score of 21 with ACT mathematics score of less than 21, and ACT English plus Reading score of no less than 37, taken prior to April 1, 1995. ACT scores taken prior to 1989 are not valid; or
      4. ACT composite score of 24 with ACT mathematics score of less than 22, and ACT English plus Reading score of no less than 46, taken after April 1, 1995; or
      5. Praxis I Math test score of 178 and a composite Virginia Communication and Literacy Assessment (hereafter referred to as the VLSA) composite score of 470; or
      6. SAT Mathematics test score of at least 510 taken prior to April 1, 1995 and a VCLA composite score of 470; or
      7. SAT Mathematics test score of at least 530 taken after April 1, 1995 and a VCLA composite score of 470; or
      8. ACT Mathematics test score of at least 21 taken prior to April 1, 1995 and a VCLA composite score of 470; or
Master of Science in Education – Communication Sciences and Disorders
Child Study Center
757-683-4117
Nicholas G. Bountress, Graduate Program Director

This program leads to a Master of Science in Education with a major in communication sciences and disorders. The program is accredited by the American Speech-Language and Hearing Association’s Council on Academic Accreditation (CAA) and is intended to prepare professionals to understand, identify, assess and structure intervention programs for children and adults who present a wide array of speech and language disorders. Content areas of coursework include language development and disorders, articulation and phonological disorders, voice disorders, fluency disorders, hearing disorders and evaluation, dysphasia, aphasia, motor speech disorders, orofacial disorders and social dialects, among others. Students engage in supervised on-campus practica in the university Speech and Hearing Clinic/Scottish Rite Center for Childhood Speech and Language Disorders, as well as a public school rotation. They also engage in off-campus practica in a wide variety of area hospitals, private practice settings, rehabilitation centers, clinics and public schools. Graduate students also complete a research paper in an area of their interest under the supervision of a program faculty member and must successfully pass a written comprehensive examination. All students must complete the national examination in Speech-Language Pathology (Praxis II) and essential paperwork for ASHA certification prior to graduation.

Graduates of the program hold positions as speech-language pathologists in a variety of professional settings, such as hospitals, children’s hospitals, private practice agencies, medical schools, rehabilitation centers and public schools. Many graduates have become administrators, clinical supervisors and instructors at universities, and researchers.

Students with and without an undergraduate degree in communication sciences and disorders are eligible for acceptance into the program. The normal matriculation for a student who holds an undergraduate degree in the field is two full years of full-time enrollment. Students who do not hold an undergraduate degree in the field typically require two additional semesters to complete prerequisite and required master’s degree coursework.

Admission

Admission to the graduate program in communication sciences and disorders is granted by the department’s graduate program director with the advisement of the communication sciences and disorders faculty. Individuals entering the master’s degree program must possess an undergraduate degree.

The following requirements are necessary in order to be considered for admission to the program.

Regular admission requires:

1. a baccalaureate degree from an institution accredited by a regional accrediting body or an equivalent degree from a foreign institution;
2. an undergraduate grade point average of 2.80 or better;
3. a Graduate Record Examination (GRE) score of 400, minimum, on the verbal section and 4.0, minimum, on the analytical section. Students meeting these minimal scores enter a selection pool of candidates;
4. three letters of recommendation, at least two of which should be from prior university instructors;
5. a 400-500 word essay indicating the student’s academic and professional goals as well as a description of the reasons the student believes he or she is a competitive candidate.

Continuance

Students must:

1. maintain a grade point average of 3.00;
2. satisfactorily complete all practica;
3. earn no more than two grades below B-. Students must retake courses in which grades below B- are earned and receive grades of B- or higher. Obtaining three grades below B- leads to expulsion from the program;
4. meet prerequisite competencies, including the Grammatical Categories Test, in order to be admitted to clinical practica;
5. receive permission from the faculty in order to be admitted to any clinical practicum.

Exit

Students must:

1. have a grade point average of 3.00;
2. pass the department writing proficiency examination;
3. meet all academic competencies;
4. meet all clinical competencies;
5. pass a written comprehensive examination;
6. complete Praxis II (Speech-Language Pathology);
7. successfully complete a written research project; and,
8. complete an exit interview with the graduate program director.

Comprehensive Examination

All students seeking a master’s degree in communication sciences and disorders are required to successfully complete a written comprehensive examination. Areas of examination are based upon program coursework and related areas of professional preparation. If any area is not successfully completed during the first administration, the student is allowed one more attempt. Failure of any question on the second administration leads to expulsion from the program.

Program Requirements

All students who have met prerequisite requirements must complete a minimum of 36 semester hours of graduate study in communication sciences and disorders. Students are expected to satisfy all professional, academic and clinical requirements and demonstrate ethical and interactive behaviors commensurate with the standards of the profession.

Curriculum

Prerequisite

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSD 351</td>
<td>Anatomy of Speech, Language, and Hearing</td>
<td>3</td>
</tr>
<tr>
<td>CSD 352</td>
<td>Phonetics</td>
<td>3</td>
</tr>
<tr>
<td>CSD 447</td>
<td>Introduction to Language Disorders in Children</td>
<td>3</td>
</tr>
<tr>
<td>CSD 450</td>
<td>Survey of Communication Disorders</td>
<td>3</td>
</tr>
<tr>
<td>CSD 449W</td>
<td>Introduction to Clinical Procedures in Speech-Language Pathology</td>
<td>3</td>
</tr>
<tr>
<td>CSD 451</td>
<td>Articulation and Phonological Disorders</td>
<td>3</td>
</tr>
<tr>
<td>CSD 452</td>
<td>Voice Disorders</td>
<td>3</td>
</tr>
<tr>
<td>CSD 453</td>
<td>Language Development</td>
<td>3</td>
</tr>
<tr>
<td>CSD 458</td>
<td>Speech and Hearing Science</td>
<td>3</td>
</tr>
<tr>
<td>CSD 459</td>
<td>Seminar in Speech Pathology Methods and Materials</td>
<td>3</td>
</tr>
<tr>
<td>CSD 460</td>
<td>Hearing Disorders and Basic Audiometry</td>
<td>3</td>
</tr>
<tr>
<td>CSD 461</td>
<td>Aural Rehabilitation I</td>
<td>3</td>
</tr>
</tbody>
</table>

Required

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSD 549</td>
<td>Introduction to Clinical Procedures in Speech-Language Pathology</td>
<td>3</td>
</tr>
</tbody>
</table>
specialty is required. The program aims to stimulate within students social and cultural diversity; human growth and development; career development; helping relationships; group work; assessment; and research for the Accreditation of Counseling and Related Programs (CACREP). The master’s degree program (including the three specializations) and the Ph.D. degree program on the Norfolk campus are accredited by the Council for the Accreditation of Counseling and Related Programs (CACREP). CACREP does not accredit education specialist degree programs. Objectives for programs offered and other important program information can be found in the program handbooks which are located on the program web pages at http://education.odu.edu/chs/academics/counseling/.

Department of Counseling and Human Services
110 Education Building
chs@odu.edu
757-683-3326
Danica G. Hays, Chair, dhays@odu.edu

Counseling
• Master of Science in Education (Norfolk Campus)
  • College Counseling
  • Clinical Mental Health Counseling
  • School Counseling
• Master of Science in Education (Distance Learning Program)
• School Counseling
• Education Specialist
• Doctor of Philosophy in Education
  • Counselor Education
  • Leadership in Counseling

Counseling Graduate Program
The graduate program on the Norfolk campus offers a master’s degree, an education specialist degree, and a Ph.D. in counseling. Master’s degrees are offered in three specialty areas on the Norfolk campus: college counseling, clinical mental health counseling, and school counseling. An independent graduate distance learning program offers a master’s degree in clinical mental health counseling and school counseling. The distance learning program is housed at the New College Institute located in Martinsville, Virginia. The two master’s degree programs have a separate faculty, admissions process, curriculum, and accreditation status.

The master’s, education specialist, and doctor of philosophy degrees may be designed to meet the requirements for becoming an LPC in Virginia or a licensed school counselor in Virginia.

The master’s degree program offers a curriculum that emphasizes the following core components: professional orientation and ethical practice; social and cultural diversity; human growth and development; career development; helping relationships; group work; assessment; and research and program evaluation. In addition, coursework specific to a counseling specialty is required. The program aims to stimulate within students social advocacy and systems understanding in order to reduce disparities among groups. Field placement experiences (practicum and internship) are required to assure that students are able to apply the counseling skills and knowledge they learned in the courses they completed to help clients. The admissions process, the use of experimental and didactic learning approaches, and the ongoing evaluation of students ensures that counseling students possess the personal characteristics necessary to be effective counselors.

The clinical mental health counseling specialty area prepares graduate students for careers in community mental health settings and in private practice. The clinical mental health counseling specialty includes an emphasis on diagnosis and treatment planning, psychopharmacology, and psychopathology. The program of study in the mental health counseling specialty includes all of the courses necessary to achieve licensure as a Licensed Professional Counselor (LPC) in Virginia. The school counseling specialty area engages students in the acquisition and application of knowledge relevant to a new vision of school counseling. Through content and experiential learning in both classroom settings and in the schools, graduate students are prepared to become school counselors who are systemic thinkers, leaders, partnership builders, advocates for children, and proactive professionals who embrace the belief that all children are capable of achieving at high levels. By defining the roles and functions of the school counselor in innovative ways, this new paradigm in school counseling stresses the concepts that school counselors are a major force in closing the achievement gap and that changes in students and programs will be observable and measurable. The program of study in the school counseling specialty includes all of the courses and experiences necessary to achieve licensure as a school counselor in Virginia. The college counseling specialty prepares counselors to work in institutions of higher education including community colleges, technical colleges, four-year colleges, and universities.

The education specialist (Ed.S.) degree extends counseling knowledge and skills for individuals who already hold master’s degrees in counseling. The Ed.S. degree also provides core master’s level counseling coursework for individuals who have master’s degrees in other fields who wish to become counselors.

The Ph.D. in counseling prepares individuals for employment as counselor educators, counselor faculty members in colleges and universities, and as clinicians and leaders in counseling settings in colleges, community mental health agencies, private practices, and schools. This program provides doctoral students with the skills to supervise other counselors, teach counseling skills, conduct scholarly research, lead organizations, and create new knowledge in the field of counseling.

The master’s degree program (including the three specializations) and the Ph.D. degree program on the Norfolk campus are accredited by the Council for the Accreditation of Counseling and Related Programs (CACREP). The master’s degree distance learning program is CACREP-accredited.

Deadlines for Admission
• New students are admitted twice each year and are eligible to begin fall, spring, or summer semester.
• Fall Semester (or Summer Semester)
  • January 1 – Review of completed applications begins
  • March 1 – Deadline for completed applications

• For admission for summer semester (beginning early May) or fall semester (beginning mid-August), for review of completed applications will begin January 1 and the final deadline for receipt of applications is March 1.

• Spring Semester
  • September 1 – Review of completed applications begins
  • November 1 – Deadline for completed applications

• For admission for spring semester (beginning early January), review of completed applications will begin September 1 and the final deadline for receipt of applications is November 1.

**Application Requirements**

For details regarding the application process, criteria used to select students, materials required of applicants, where to send application materials, and taking courses prior to admission as a non-degree graduate student, see the program web site at http://education.odu.edu/chs/academics/counseling.

**Continuance**

Students must meet all university and program requirements to continue toward degree completion once they have been admitted. Students who earn two or more grades of C+ or less will be dismissed from the Counseling graduate program.

**Program Completion and Exit**

Students must successfully complete a written comprehensive examination and the required course of study and must have a minimum GPA of 3.00 to graduate.

**Program Requirements**

A minimum of 60 semester credits is required for the Master of Science in Education with a specialty in college counseling, clinical mental health counseling, or school counseling. Toward the conclusion of the program, all students must pass a comprehensive exam. All students are required to take 33 credits of common-core course work. Additional course work in specialty areas is required. All students complete a practicum and internship.

**LPC Electives**

Students in college counseling and school counseling specializations who wish to qualify to become a Licensed Professional Counselor (LPC) in Virginia should include the elective courses COUN 647 (Addictive Disorders) and COUN 691 (Family Systems and Family Development). School counseling students should also include COUN 685 (Diagnosis and Treatment Planning in Mental Health Counseling).

**Curriculum**

**Core Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUN 601</td>
<td>Principles of Professional Counseling and Ethics</td>
<td>3</td>
</tr>
<tr>
<td>COUN 631</td>
<td>Counseling for Lifespan Development</td>
<td>3</td>
</tr>
<tr>
<td>COUN 633</td>
<td>Counseling and Psychotherapy Techniques</td>
<td>3</td>
</tr>
<tr>
<td>COUN 634</td>
<td>Advanced Counseling and Psychotherapy Techniques</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 611</td>
<td>Introduction to Research Methods in Education</td>
<td>3</td>
</tr>
<tr>
<td>COUN 644</td>
<td>Group Counseling and Psychotherapy</td>
<td>3</td>
</tr>
<tr>
<td>COUN 645</td>
<td>Testing and Client Assessment</td>
<td>3</td>
</tr>
<tr>
<td>COUN 648</td>
<td>Foundations of Career Development</td>
<td>3</td>
</tr>
<tr>
<td>COUN 650</td>
<td>Theories of Counseling and Psychotherapy</td>
<td>3</td>
</tr>
<tr>
<td>COUN 655</td>
<td>Social and Cultural Issues in Counseling</td>
<td>3</td>
</tr>
</tbody>
</table>

**Specialty Courses and Electives**

**College Counseling**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUN 685</td>
<td>Diagnosis and Treatment Planning in Mental Health Counseling</td>
<td>3</td>
</tr>
<tr>
<td>COUN 707</td>
<td>Adult and College Student Development</td>
<td>3</td>
</tr>
<tr>
<td>HIED 710</td>
<td>Introduction to Student Affairs Administration</td>
<td>3</td>
</tr>
<tr>
<td>COUN 666</td>
<td>Internship in College Counseling (600 hrs minimum)</td>
<td>6</td>
</tr>
<tr>
<td>COUN 686</td>
<td>College Counseling</td>
<td>3</td>
</tr>
<tr>
<td>COUN Electives</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

**Total Hours**

| 33 |

**Mental Health Counseling**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUN 647</td>
<td>Addictive Disorders</td>
<td>3</td>
</tr>
<tr>
<td>COUN 670</td>
<td>Introduction to Counseling Supervision</td>
<td>3</td>
</tr>
<tr>
<td>COUN 680</td>
<td>Mental Health Counseling</td>
<td>3</td>
</tr>
<tr>
<td>COUN 685</td>
<td>Diagnosis and Treatment Planning in Mental Health Counseling</td>
<td>3</td>
</tr>
<tr>
<td>COUN 691</td>
<td>Family Systems and Family Development</td>
<td>3</td>
</tr>
<tr>
<td>COUN 667</td>
<td>Internship in Mental Health Counseling (600 hrs minimum)</td>
<td>6</td>
</tr>
<tr>
<td>COUN Electives</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

**Total Hours**

| 27 |

**School Counseling**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUN 676</td>
<td>Professional Issues in School Counseling K-12</td>
<td>3</td>
</tr>
<tr>
<td>COUN 677</td>
<td>School Culture, Learning, and Classroom Management</td>
<td>3</td>
</tr>
<tr>
<td>COUN 678</td>
<td>Counseling Children and Adolescents in School Settings</td>
<td>3</td>
</tr>
<tr>
<td>COUN 679</td>
<td>School Counseling Program Development K-12</td>
<td>3</td>
</tr>
<tr>
<td>COUN 668</td>
<td>Internship in School Counseling (600 hrs minimum)</td>
<td>6</td>
</tr>
<tr>
<td>COUN Electives</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

**Total Hours**

| 27 |

**Education Specialist–Counseling**

110 Education Building
coun@odu.edu
757-683-3326

Tim Grothaus, Graduate Program Director, tgrothau@odu.edu

The Education Specialist (Ed.S.) degree in counseling is designed to further develop and broaden students’ knowledge and skills in counseling and to cultivate their capacity for leadership as professionals. The Ed.S. is suitable for master’s degree level counselors who wish to earn an additional graduate degree in counseling, or for individuals with master’s degrees in related fields who wish to satisfy the academic portion of the state requirements for licensure as a professional counselor. It is considered a terminal counseling practitioner’s degree.

**Admission**

Applicants may hold a bachelor’s degree in any field. A master’s degree in counseling or another field is required.

**Deadlines for Admission**

• New students are admitted twice each year and are eligible to begin fall, spring, or summer semester.
• Fall Semester (or Summer Semester)
• January 1 – Review of completed applications
• March 1 – Deadline for completed applications

• For admission for summer semester (beginning early May) or fall semester (beginning mid-August), for review of completed applications will begin January 1 and the final deadline for receipt of applications is March 1.

• Spring Semester
  • September 1 – Review of completed applications begins
  • November 1 – Deadline for completed applications

• For admission for spring semester (beginning early January), review of completed applications will begin September 1 and the final deadline for receipt of applications is November 1.

Application Requirements
For details regarding the application process, criteria used to select students, materials required of applicants, where to send application materials, and taking courses prior to admission as a non-degree graduate student, see the program web site at http://education.odu.edu/chs/academics/counseling.

Non-matriculated or non-degree status
Students may take a maximum of 6 credits beyond their master’s degree as a non-matriculated or non-degree student before being admitted into the program.

Continuance
Students must meet all University requirements. Students who earn two or more grades of C+ or less will be dismissed from the Counseling graduate program. If faculty members have serious concerns about a student’s satisfactory progress in the program, they may initiate a process that could lead to the student being asked to withdraw. Students have the right to appeal decisions made by faculty

Exit
Students must successfully complete the required course of study (30 credits) with a grade point average of 3.00 or better, and pass a written comprehensive examination.

Program Requirements
The Education Specialist degree in counseling requires a minimum of 30 semester hours of course work beyond the master’s degree. When licensed as a professional counselor or school counselor is an objective, more than 30 semester hours usually is required.

Required Courses
Ed.S. students select courses depending on their objectives. For required courses, see the website at http://education.odu.edu/chs/academics/counseling/eds.shtml.

Doctor of Philosophy in Education – Counseling Emphasis
110 Education Building
coun@odu.edu
757-683-3326
Tim Grothaus, Graduate Program Director, tgrothau@odu.edu

The Doctor of Philosophy degree in counseling prepares individuals for employment as counselor educators in colleges and universities, and as leaders in clinical mental health counseling or school counseling.

Admission

Deadlines for Admission
• February 1 of each year
• New students are admitted once each year and are eligible to begin fall, spring, or summer semester
  • December 1 – Review of completed applications begins
  • February 1 – Deadline for completed applications

• For admission review of completed applications will begin December 1 and the final deadline for receipt of applications is February 1.

For details regarding the application process, criteria used to select students, materials required of applicants, and where to send application materials, see the program website at http://education.odu.edu/chs/academics/counseling.

Program Course Requirements
The Ph.D. program in counseling is comprised of courses totaling a minimum of 60 academic credit hours beyond the master’s degree. The curriculum includes advanced courses in counseling, supervision, teaching, and research, a doctoral practicum and internship, and 12 credits of dissertation.

Program Completion and Exit
In order to complete the program, students must complete required courses in a satisfactory manner, pass examinations, and complete an acceptable dissertation. Ph.D. students must meet all requirements included in the University Graduate Catalog, the Ph.D. in Education Handbook, and the Counseling Ph.D. Program Handbook. It is the responsibility of the student to obtain these documents and complete requirements.

Prerequisites
Graduation from a master’s degree program in counseling that was accredited by the Council on Accreditation of Counseling and Related Educational Programs (CACREP) is a prerequisite. If a doctoral student’s master’s degree program was not accredited by CACREP, the student must take master’s-level courses and field experiences they are missing as a part of their Ph.D. program. Two courses (or their equivalent) must be completed prior to entering the Ph.D. program or must be taken early in the Ph.D. program, and will not count toward the required 60 credits:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUN 670</td>
<td>Introduction to Counseling Supervision</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 722</td>
<td>Introduction to Applied Statistics and Data Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUN 801</td>
<td>Current Issues in Counseling and Counselor Education</td>
<td>3</td>
</tr>
<tr>
<td>COUN 820</td>
<td>Counselor Education Teaching and Practice</td>
<td>3</td>
</tr>
<tr>
<td>COUN 835</td>
<td>Advanced Counseling Research and Program Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>COUN 842</td>
<td>Advanced Counseling Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>COUN 844</td>
<td>Advanced Group Counseling</td>
<td>3</td>
</tr>
<tr>
<td>COUN 846</td>
<td>Advanced Counseling Supervision</td>
<td>3</td>
</tr>
<tr>
<td>COUN 848</td>
<td>Multicultural Perspectives in Counselor Education, Supervision, and Research</td>
<td>3</td>
</tr>
<tr>
<td>COUN One of the following: COUN 864, COUN 865, COUN 866, or COUN 867</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>COUN 868</td>
<td>Internship in Counseling</td>
<td>6</td>
</tr>
</tbody>
</table>
Department of Educational Foundations and Leadership

120 Education Building
757-683-3287

Jay Scribner, Chair

The Department of Educational Foundations and Leadership offers graduate programs in community college leadership (Ph.D.), educational leadership (M.S.Ed., Ed.S., Ph.D.), and higher education (M.S.Ed., Ed.S., Ph.D.).

Due to changing University requirements, national accreditation standards, and Commonwealth licensure regulations, the programs in the Darden College of Education 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 website at http://education.odu.edu/.

Individual programs are described on the following pages.

Community College Leadership

• Doctor of Philosophy in Community College Leadership

Educational Leadership

• Master of Science in Education – Administration and Supervision ETMS (Education and Training Management Sub-Specialty Program)-Military Only
• Master of Science in Education – Administration and Supervision with K-12 licensure
• K-12 Licensure only
• Education Specialist – Educational Leadership
• Education Specialist – Educational Leadership with K-12 licensure
• Doctor of Philosophy in Education – Educational Leadership Emphasis

Higher Education

• Master of Science in Education – Higher Education
• Student Affairs Administration
• General Administration
• International Higher Education Leadership
• Education Specialist
• Doctor of Philosophy in Education – Higher Education Emphasis

Doctor of Philosophy – Community College Leadership

120 Education Building
757-683-4375

Mitchell R. Williams, Interim Graduate Program Director

To meet the executive leadership workforce needs of the nation’s community colleges, Old Dominion University has developed a Doctor of Philosophy degree in Community College Leadership. The innovative quality of this program supports the University’s commitment to technology-delivered learning by implementing leadership graduate courses at each of the 23 VCCS community colleges and elsewhere in the United States through a variety of distance learning modalities including video conferencing, video streaming, asynchronous courses and other emerging technological approaches as they are available and practical. The program is designed for working adults, and it utilizes synchronous and asynchronous course delivery to allow students to meet their personal and professional needs while pursuing a doctoral degree.

Some of the unique community college leadership issues that are addressed in this program are: the diversity of the student body, the role of the community college in higher education, community college finances, politics and policy development, and workforce preparation and the importance of workforce preparation provided by Community Colleges.

Admission

Criteria for admission to the Ph.D. in Community College Leadership are as follows:

1. A completed master’s degree in an appropriate discipline from an accredited university. Degrees that are equivalent to a master’s degree such as L.L.B., J.D., and D.D.S. are also acceptable;
2. A minimum GPA of 3.5 (on a 4.0 scale) overall for the master’s degree and in the major area of study in the master’s degree;
3. A minimum of 1000 overall total score on the GRE with a minimum of 300 on both the verbal and quantitative sections of the GRE.

Prospective students must score a minimum of 4.5 on the analytical writing portion of the GRE. These scores are minimums, so other portions of the total scores have a better chance of being accepted. Applicants should request to have their official GRE scores sent directly from the Educational Testing Service to Old Dominion University. Scores must have been earned in the last five years. In the event an applicant completes the GRE less than six weeks prior to the application deadline, the applicant should submit a letter that lists the unofficial GRE verbal and quantitative scores.

4. Applicants whose native language is not English must submit a current score for the Test of English as a Foreign Language (TOEFL) of at least 600;
5. Applicants must submit a 1500 word statement of their academic and professional goals with an emphasis on how the Ph.D. degree in community college leadership will contribute to the achievement of the stated goals;
6. Three letters of reference from sources capable of commenting on the applicant’s readiness for advanced graduate study are required. At least one of these letters must be from a senior-level administrator in a community college;
7. An interview with the Community College Leadership Program Admissions Committee may be required.

Prior course work is assumed in statistics, student development, workforce development, and leadership theory. If this assumption is not met, then additional course work may be added to the candidate’s graduate program of study. Please see prerequisites and additions at the bottom of the curriculum description for specifics.

Continuance Requirements

At the end of each semester – fall, spring, and summer – the graduate program director reviews records of students who do not maintain a 3.00 cumulative grade point average (GPA). Graduate students, whether degree or non-degree seeking, who do not have a cumulative GPA of at least 3.00 will be placed on probation. Students who receive a grade of F in any course in the program of study or receive two C’s or F grade in more than one class will be dismissed from the program by the Graduate Program Director. Students who are dissatisfied with their grades may follow the Grade Appeal Procedure found in the ODU Graduate Catalog. In the event a grade is appealed and changed to a B- or higher after a student has been dismissed from the program, the student will be reinstated.
The Ph.D. program in community college leadership is comprised of courses totaling a minimum of 48 academic credit hours beyond the master’s degree. The curriculum includes four parts: a content concentration totaling 18 credit hours, a research component including 15 credit hours, six credit hours of electives, and the dissertation which will include a minimum of nine credit hours depending on the length of time necessary for completion.

Students entering the program may also need to complete one introductory statistics course if they have not had such a course or cannot demonstrate competency at a satisfactory level. Entering students who have not served in a senior administrative or other leadership position in a community college for a minimum of three years, will need to complete two three credit hour internships (as part of their elective requirements. Students who enter the Ph.D. program with a master’s degree in an academic field that is unrelated to higher education administration and/or who have not completed courses to develop competency in specified areas may need to complete specific courses in lieu of electives.

Under normal circumstances, admissions will be offered for the summer semester to build efficient cohort groups for this type of advanced study. To enhance the experience of the students and to increase the efficiency by which courses are offered, a cohort of up to 15 students will be admitted each year.

To build a cohesive cohort group, a series of intensive courses will be offered on the Old Dominion University campus each summer. Attendance is required for all newly admitted students. Residency at a second intensive on campus seminar the following summer is expected.

Applicants must submit completed applications and all related material no later than February 1 of each year, and students will be admitted for study beginning in May of the same year.

Program Completion and Exit

To complete the program students must fully comply with the following curriculum.

Prerequisites

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 611 or FOUN 612</td>
<td>Introduction to Research Methods in Education or Applied Research Methods in Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Community College Core (minimum 18 credits) *

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCL 820</td>
<td>Community College Leadership</td>
<td>3</td>
</tr>
<tr>
<td>CCL 824</td>
<td>Community College Finance</td>
<td>3</td>
</tr>
<tr>
<td>CCL 826</td>
<td>Community College Curriculum and Program Development</td>
<td>3</td>
</tr>
<tr>
<td>CCL 830</td>
<td>Community College Politics and Policy Development</td>
<td>3</td>
</tr>
<tr>
<td>HIED 866</td>
<td>The Modern Community College</td>
<td>3</td>
</tr>
<tr>
<td>SEPS 865</td>
<td>Trends and Issues of Economic and Workforce Development</td>
<td>3</td>
</tr>
</tbody>
</table>

Research and Statistics (minimum 12 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 722</td>
<td>Introduction to Applied Statistics and Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 813</td>
<td>Advanced Program Evaluation in Education</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 822</td>
<td>Applied Linear Models in Educational Research</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 812</td>
<td>Advanced Research Design and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 814</td>
<td>Qualitative Research Design in Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives (minimum 6 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUN 807</td>
<td>Adult and College Student Development</td>
<td>3</td>
</tr>
<tr>
<td>HIED 808</td>
<td>Contemporary Issues in Higher Education</td>
<td>3</td>
</tr>
<tr>
<td>HIED 812</td>
<td>Strategic Planning and Institutional Effectiveness</td>
<td>3</td>
</tr>
<tr>
<td>HIED 837</td>
<td>Academic Issues In Higher Education</td>
<td>3</td>
</tr>
<tr>
<td>HIED 845</td>
<td>Today’s College Student and Diversity</td>
<td>3</td>
</tr>
<tr>
<td>HIED 852</td>
<td>The Law of Higher Education</td>
<td>3</td>
</tr>
<tr>
<td>HIED 856</td>
<td>Higher Education Finance</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIED 862</td>
<td>Development and Fund Raising</td>
<td>3</td>
</tr>
<tr>
<td>HIED 864</td>
<td>College and the University Presidency</td>
<td>3</td>
</tr>
<tr>
<td>HIED 865</td>
<td>Adult and Continuing Education</td>
<td>3</td>
</tr>
<tr>
<td>HIED 892</td>
<td>Higher Education and Society</td>
<td>3</td>
</tr>
<tr>
<td>HIED 893</td>
<td>The History of Higher Education in the United States</td>
<td>3</td>
</tr>
<tr>
<td>HIED 894</td>
<td>Organization and Administration of Higher Education in the United States</td>
<td>3</td>
</tr>
<tr>
<td>HIED 895</td>
<td>Topics in Higher Education Administration</td>
<td>1-6</td>
</tr>
<tr>
<td>SEPS 861</td>
<td>Foundations of Adult Education and Training</td>
<td>3</td>
</tr>
<tr>
<td>SEPS 862</td>
<td>Administration and Management of Education and Training Programs</td>
<td>3</td>
</tr>
</tbody>
</table>

Dissertation Seminar

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 881</td>
<td>Dissertation Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Dissertation (minimum 9 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCL 899</td>
<td>Dissertation</td>
<td>1-12</td>
</tr>
</tbody>
</table>

Experiential Requirements **

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCL 868</td>
<td>Internship in Community College Leadership</td>
<td>3</td>
</tr>
</tbody>
</table>

* These six courses (18 credits) are required for all students who did not have them as part of a master’s degree program. If some or all of these courses were taken as part the student’s master’s program, the student may select alternate courses from the Electives List in consultation with the GPD.

** One 3 credit hour internship is required for all doctoral students. Two internships are required of students who have not completed a minimum of three years of administrative experience in a Community College. It is expected that each intern will work with an administrator at the dean level or higher.

Educational Leadership

120 Education Building
757-683-5163
http://education.odu.edu/elc/academics/educational/ed_leadership_phd.shtml

Jay Scribner, Graduate Program Director

The purpose of graduate programs in educational leadership is to prepare individuals to assume leadership responsibilities in education, training, and other human service organizations. Educational leadership offers the M.S.Ed. and the Ed.S. degrees for candidates seeking PK-12 administration and supervision licensure. Educational leadership also offers the Ed.S. degree without initial licensure and the Ph.D. in educational leadership. The programs prepare leaders who are visionary, who have depth of knowledge, and who can be effective and responsive organizational leaders. The programs develop graduates who can apply research-based knowledge, skills, and dispositions that translate into effective practice through innovative program instruction and authentic field-based experiences. The emphasis area in educational administration and supervision is approved by the state of Virginia and are fully accredited by the National Council for Accreditation of Teacher Education.

The administration and supervision emphasis area is based on the standards of the National Council for Accreditation of Teacher Education and approved by the Commonwealth of Virginia. Through this program participants will develop and demonstrate competence in the following areas.

1. Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by facilitating the development, articulation, implementation, and stewardship of a school or district vision of learning supported by the school community.
2. Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by providing best practice to student learning, and designing comprehensive professional growth plans for staff.

3. Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by managing the organization, operations, and resources in a way that promotes a safe, efficient, and effective learning environment.

4. Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by collaborating with families and other community members, responding to diverse community interests and needs, and mobilizing community resources.

5. Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by acting with integrity, fairly, and in an ethical manner.

6. Candidates who complete the program are educational leaders who have the knowledge and ability to promote the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context.

7. Internship. The internship provides significant opportunities for candidates to synthesize and apply the knowledge and practice and develop the skills identified in Standards 1-6 through substantial, sustained, standards-based work in real settings, planned and guided cooperatively by the institution and school district personnel for graduate credit.

Master of Science in Education - Administration and Supervision emphasis

120 Education Building
757-683-5163
http://education.odu.edu/elc/academics/educational/ed_leadership_phd.shtml
Jay Scribner, Graduate Program Director

Admission

To gain admission, applicants must:

1. meet all University admissions requirements;
2. have an undergraduate grade point average of 2.80 overall and 3.00 in the major;
3. provide two letters of recommendation, including one from an administrator who will serve as the student’s sponsor/mentor; and,
4. complete a one-page essay explaining why he/she should be admitted into the program.

In addition, all students who wish to enter the administration and supervision program with Commonwealth of Virginia accreditation must satisfactorily complete an administrative skills portfolio assessment process. ELS 600 must be the first course in which students enroll. Non-degree students may not take more than two ELS courses prior to admission. Performance in classes as a non-degree student will not guarantee admission into the program.

Continuance

Students must meet all University and program requirements including the internship requirements and portfolio and maintain a 3.00 grade average. Students who receive an F grade may be dismissed from the program. Those seeking the Administration and Supervision PreK-12 endorsement on their Commonwealth of Virginia Postgraduate Professional license beginning July 1, 2005 must take and pass the School Leaders Licensure Assessment (SLLA, #1010).

Exit

Students must successfully complete:

1. the School Leaders Licensure Assessment (SLLA);
2. the required course of study;
3. three self assessments, one at the start of the program, one after the first internship, and one upon completion of all coursework;
4. Two internships of 320 hours and 5 placements per VDOE administrative licensure regulations; and,
5. have a minimum 3.00 grade point average in order to graduate.

Program Requirements

For the Master of Science in Education with an emphasis in administration and supervision, a student must have completed an approved 36-hour minimum graduate program including two internships and a culminating written comprehensive examination. Approved internship experiences are required by the Commonwealth of Virginia.

Administration and Supervision Preparation for Public School Pre K-12 Licensure

Requirements for this emphasis area are as follows.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELS 600</td>
<td>Principal Orientation and Instruction Leadership</td>
<td>3</td>
</tr>
<tr>
<td>ELS 610</td>
<td>School Community Relations and Politics</td>
<td>3</td>
</tr>
<tr>
<td>ELS 621</td>
<td>Curriculum Development and Assessment</td>
<td>3</td>
</tr>
<tr>
<td>ELS 753</td>
<td>Public School Finance</td>
<td>3</td>
</tr>
<tr>
<td>ELS 754</td>
<td>Human Resource Development and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>ELS 787</td>
<td>Pupil Personnel Services for Diverse Populations</td>
<td>3</td>
</tr>
<tr>
<td>ELS 657</td>
<td>Public School Law</td>
<td>3</td>
</tr>
<tr>
<td>ELS 626</td>
<td>Instructional Supervision, Staff Development,</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>and Assessment</td>
<td></td>
</tr>
<tr>
<td>ELS 668</td>
<td>Internship in Educational Leadership</td>
<td>3</td>
</tr>
<tr>
<td>ELS 669</td>
<td>Instructional Internship</td>
<td>3</td>
</tr>
</tbody>
</table>

* This course must be taken first and include the start of an Administration Portfolio Skills Assessment.

Education Specialist with Licensure Program

http://education.odu.edu/elc/academics/educational/ed_leadership_phd.shtml
Jay Scribner, Graduate Program Director

Students who have a master’s degree in another area and do not have a license in administration supervision PreK-12 may be accepted into the Ed.S. with Licensure Program. These students would complete the following 39 semester hours of coursework to lead to licensure as an administrator.

Curriculum

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELS 600</td>
<td>Principal Orientation and Instruction Leadership</td>
</tr>
<tr>
<td>ELS 610</td>
<td>School Community Relations and Politics</td>
</tr>
</tbody>
</table>

30
Students must:

Admission

1. meet all University requirements;
2. provide two letters of recommendation;
3. hold a master’s degree from an accredited institution (minimum 3.25 graduate grade point average on a 4.00 scale); and,
4. provide a one-page essay explaining why he/she should be admitted into the program.
5. Applicants whose admission credentials are slightly below the required minimum will be considered for provisional admission. Performance in classes as a non-degree student will not be taken into consideration in the admission process.

Continuance

Students must meet all University requirements and maintain a 3.00 or higher grade point average.

Exit

Students must successfully complete:
1. a written comprehensive examination;
2. the required course of study; and,
3. have a 3.00 grade point average or above.

Education Specialist Program Requirements

The Ed.S. requires the completion of a minimum of 30 approved semester credit hours consisting of at least 18 hours at the 800 level.

Course Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELS 853</td>
<td>Public School Finance</td>
<td>3</td>
</tr>
<tr>
<td>ELS 871</td>
<td>Educational Systems Planning and Futures</td>
<td>3</td>
</tr>
<tr>
<td>ELS 873</td>
<td>Advanced School Law</td>
<td>3</td>
</tr>
<tr>
<td>ELS 876</td>
<td>Leadership for Social Justice</td>
<td>3</td>
</tr>
<tr>
<td>ELS 878</td>
<td>Leadership for Teaching and Learning</td>
<td>3</td>
</tr>
<tr>
<td>ELS 879</td>
<td>Field Research in School Administration and Supervision</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 722</td>
<td>Introduction to Applied Statistics and Data Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

Select three Electives from the following: 9

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELS 811</td>
<td>Leadership Theory for Educational Improvement</td>
</tr>
<tr>
<td>ELS 864</td>
<td>History and Philosophy of American Public School Reform</td>
</tr>
<tr>
<td>ELS 873</td>
<td>Advanced School Law</td>
</tr>
<tr>
<td>ELS 880</td>
<td>Multicultural Curriculum Leadership and Globalization</td>
</tr>
<tr>
<td>ELS 883</td>
<td>Contemporary Issues in Education</td>
</tr>
</tbody>
</table>

Total Hours 30

Doctor of Philosophy in Education–Educational Leadership Emphasis

Jay Scribner, Graduate Program Director

http://education.odu.edu/elc/academics/educational/ed_leadership_phd.shtml

Program Requirements

The Ph.D. program in educational leadership consists of a minimum of 48 academic credit hours beyond the master’s degree and a minimum of 12 credits for the dissertation. The curriculum includes four parts: an introductory course (3 credits), elective (3 credits), the research core (15 credits), the ELS concentration specific courses (24 hours), and the capstone course (3 credits). The dissertation will include a minimum of 12 credit hours. Students entering the program may also need to complete one or more introductory statistics course if they have not had such a course or cannot demonstrate competency at a satisfactory level. Students who come into the Ph.D. program with a master’s degree in an academic field that is unrelated to educational leadership and/or who have not completed courses to develop competency in specified areas may need to complete other courses in lieu of electives.

Admission is on a rolling basis. Students can commence their programs of study during the semester immediately following admission.
Program Completion and Exit

In order to complete the program students must fully comply with the curriculum below and achieve a GPA of 3.00 or higher.

- Educational Leadership Curriculum - 48 credits
- Dissertation - 12 credits minimum

Prerequisites

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELS 660</td>
<td>Program Evaluation, Research and Planning</td>
<td>3</td>
</tr>
<tr>
<td>or FOUN 611</td>
<td>Introduction to Research Methods in Education</td>
<td></td>
</tr>
<tr>
<td>or FOUN 612</td>
<td>Applied Research Methods in Education</td>
<td></td>
</tr>
<tr>
<td>FOUN 722</td>
<td>Introduction to Applied Statistics and Data Analysis (or equivalent)</td>
<td>3</td>
</tr>
</tbody>
</table>

Research Core

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELS 831</td>
<td>Accountability Systems in Public Education</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 822</td>
<td>Applied Linear Models in Educational Research</td>
<td>3</td>
</tr>
<tr>
<td>or FOUN 823</td>
<td>Analysis of Variance Applied to Educational Research</td>
<td></td>
</tr>
<tr>
<td>FOUN 812</td>
<td>Advanced Research Design and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 814</td>
<td>Qualitative Research Design in Education</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 813</td>
<td>Advanced Program Evaluation in Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Educational Leadership and Services Concentration Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELS 811</td>
<td>Leadership Theory for Educational Improvement</td>
<td>3</td>
</tr>
<tr>
<td>ELS 815</td>
<td>Leadership for Equity and Inclusive Education</td>
<td>3</td>
</tr>
<tr>
<td>ELS 821</td>
<td>Policy and Politics in Educational Leadership</td>
<td>3</td>
</tr>
<tr>
<td>ELS 835</td>
<td>Organizational Theory and Behavior in Education</td>
<td>3</td>
</tr>
<tr>
<td>ELS 876</td>
<td>Leadership for Social Justice</td>
<td>3</td>
</tr>
<tr>
<td>ELS 878</td>
<td>Leadership for Teaching and Learning</td>
<td>3</td>
</tr>
</tbody>
</table>

Select three Electives from the following:*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELS 864</td>
<td>History and Philosophy of American Public School Reform</td>
<td></td>
</tr>
<tr>
<td>ELS 871</td>
<td>Educational Systems Planning and Futures</td>
<td></td>
</tr>
<tr>
<td>ELS 874</td>
<td>Advanced School Finance, and Operations</td>
<td></td>
</tr>
<tr>
<td>ELS 880</td>
<td>Multicultural Curriculum Leadership and Globalization</td>
<td></td>
</tr>
<tr>
<td>ELS 883</td>
<td>Contemporary Issues in Education</td>
<td></td>
</tr>
</tbody>
</table>

Capstone Course

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 881</td>
<td>Dissertation Seminar</td>
<td>3</td>
</tr>
</tbody>
</table>

Dissertation (minimum 12 hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELS 899</td>
<td>Dissertation</td>
<td>1-12</td>
</tr>
</tbody>
</table>

* With advisor approval, two of these courses may be substituted with courses outside of the educational leadership program to allow students to form cognate areas.

Continuance Requirements

At the end of each semester – fall, spring, and summer – the graduate program director reviews records of students who do not maintain a 3.00 cumulative grade point average (GPA). Graduate students, whether degree or non-degree seeking, who do not have a cumulative GPA of at least 3.00 will be placed on probation. In addition, students must be continuously enrolled in the cohort.

Higher Education

The department offers, emphasis areas in higher education in the M.S.Ed. and Ed.S. degrees as well as the Ph.D. in higher education.

Master of Science in Education - Higher Education Emphasis

120 Education Building

Admission

Prospective students seeking admission to the master’s degree program in higher education must:

1. meet all University admission requirements as listed in the Old Dominion University Catalog;
2. have earned an undergraduate grade point average of 2.80 overall and 3.00 in the major;
3. provide two letters of recommendation from an administrator or faculty member at the student’s undergraduate institution (one letter should come from a person who has supervised the student in a student leadership position or who can comment on the student’s potential for work in a higher education setting, the other may come from another person who can comment on the student’s academic ability);
4. provide a one page essay of at least 500 words describing goals to be achieved as a result of completion of a master’s degree in higher education; and
5. have an acceptable score on the Graduate Record Examination (GRE) or Miller Analogies Test (MAT) for admission.

Continuance

Regularly accepted students and those who become "regular" students must:

1. meet all University and program requirements;
2. maintain a 3.00 grade point average; and
3. complete internship requirements in a timely manner;

Exit

In order to graduate from the program, students must successfully complete:

1. the required course of study for a total of at least 42 credit hours of coursework;
2. a written comprehensive examination.

Program Requirements

In order to complete the course of study for the degree of Master of in Higher Education, a student must fulfill the requirements noted above. This course of study includes satisfactory completion of 27 hours of required courses, 9 hours of cognate courses and 6 hours of internship credit.

Curriculum

Higher Education - Student Affairs Administration

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 611</td>
<td>Introduction to Research Methods in Education</td>
<td>3</td>
</tr>
<tr>
<td>COUN 707</td>
<td>Adult and College Student Development</td>
<td>3</td>
</tr>
<tr>
<td>HIED 708</td>
<td>Contemporary Issues in Higher Education</td>
<td>3</td>
</tr>
<tr>
<td>HIED 710</td>
<td>Introduction to Student Affairs Administration</td>
<td>3</td>
</tr>
<tr>
<td>HIED 733</td>
<td>Professional Helping Skills in Higher Education</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>HIED 745</td>
<td>Today’s College Student and Diversity</td>
<td>3</td>
</tr>
<tr>
<td>HIED 752</td>
<td>The Law of Higher Education</td>
<td>3</td>
</tr>
<tr>
<td>HIED 757</td>
<td>The Multicultural University</td>
<td>3</td>
</tr>
<tr>
<td>HIED 761</td>
<td>Higher Education Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>

**Select three from the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUN 648</td>
<td>Foundations of Career Development</td>
<td></td>
</tr>
<tr>
<td>COUN 655</td>
<td>Social and Cultural Issues in Counseling</td>
<td></td>
</tr>
<tr>
<td>FOUN 722</td>
<td>Introduction to Applied Statistics and Data Analysis</td>
<td></td>
</tr>
<tr>
<td>HIED 720</td>
<td>The Private College and University</td>
<td></td>
</tr>
<tr>
<td>HIED 743</td>
<td>Introduction to International Higher Education Administration</td>
<td></td>
</tr>
<tr>
<td>HIED 744</td>
<td>Comparative Higher Education Systems</td>
<td></td>
</tr>
<tr>
<td>HIED 756</td>
<td>Higher Education Finance</td>
<td></td>
</tr>
<tr>
<td>HIED 757</td>
<td>The Multicultural University</td>
<td></td>
</tr>
<tr>
<td>HIED 758</td>
<td>Higher Education Leadership</td>
<td></td>
</tr>
<tr>
<td>HIED 759</td>
<td>Higher Education Curriculum</td>
<td></td>
</tr>
<tr>
<td>HIED 762</td>
<td>Development and Fund Raising</td>
<td></td>
</tr>
<tr>
<td>HIED 764</td>
<td>College and the University Presidency</td>
<td></td>
</tr>
<tr>
<td>HIED 794</td>
<td>Topics in Higher Education Administration</td>
<td></td>
</tr>
<tr>
<td>FOUN 813</td>
<td>Advanced Program Evaluation in Education</td>
<td></td>
</tr>
<tr>
<td>CCL 820</td>
<td>Community College Leadership</td>
<td></td>
</tr>
<tr>
<td>CCL 824</td>
<td>Community College Finance</td>
<td></td>
</tr>
<tr>
<td>CCL 826</td>
<td>Community College Curriculum and Program</td>
<td></td>
</tr>
</tbody>
</table>

**Internships**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIED 668</td>
<td>Internship in Higher Education Administration (One)</td>
<td></td>
</tr>
<tr>
<td>HIED 668</td>
<td>Internship in Higher Education Administration (Two)</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 722</td>
<td>Introduction to Applied Statistics and Data Analysis</td>
<td></td>
</tr>
<tr>
<td>HIED 720</td>
<td>The Private College and University</td>
<td></td>
</tr>
<tr>
<td>HIED 733</td>
<td>Professional Helping Skills in Higher Education</td>
<td></td>
</tr>
<tr>
<td>HIED 743</td>
<td>Introduction to International Higher Education Administration</td>
<td></td>
</tr>
<tr>
<td>HIED 744</td>
<td>Comparative Higher Education Systems</td>
<td></td>
</tr>
<tr>
<td>HIED 745</td>
<td>Today’s College Student and Diversity</td>
<td></td>
</tr>
<tr>
<td>HIED 758</td>
<td>Higher Education Leadership</td>
<td></td>
</tr>
<tr>
<td>HIED 759</td>
<td>Higher Education Curriculum</td>
<td></td>
</tr>
<tr>
<td>HIED 762</td>
<td>Development and Fund Raising</td>
<td></td>
</tr>
<tr>
<td>HIED 764</td>
<td>College and the University Presidency</td>
<td></td>
</tr>
<tr>
<td>HIED 766</td>
<td>The Modern Community College</td>
<td></td>
</tr>
<tr>
<td>HIED 795</td>
<td>Topics in Higher Education Administration</td>
<td></td>
</tr>
<tr>
<td>CCL 820</td>
<td>Community College Leadership</td>
<td></td>
</tr>
<tr>
<td>CCL 824</td>
<td>Community College Finance</td>
<td></td>
</tr>
<tr>
<td>CCL 826</td>
<td>Community College Curriculum and Program</td>
<td></td>
</tr>
</tbody>
</table>

**Higher Education - International Higher Education Leadership**

**Required**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIED 794</td>
<td>The History of Higher Education in the United States</td>
<td></td>
</tr>
<tr>
<td>HIED 770</td>
<td>Organization and Administration of Higher Education in the United States</td>
<td></td>
</tr>
<tr>
<td>HIED 795</td>
<td>External and Internal Relations for Higher Education</td>
<td></td>
</tr>
<tr>
<td>FOUN 813</td>
<td>Topics in Higher Education Administration</td>
<td></td>
</tr>
<tr>
<td>CCL 820</td>
<td>Community College Leadership</td>
<td></td>
</tr>
<tr>
<td>CCL 824</td>
<td>Community College Finance</td>
<td></td>
</tr>
<tr>
<td>CCL 826</td>
<td>Community College Curriculum and Program</td>
<td></td>
</tr>
</tbody>
</table>

**Internships**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIED 668</td>
<td>Internship in Higher Education Administration (One)</td>
<td></td>
</tr>
<tr>
<td>HIED 668</td>
<td>Internship in Higher Education Administration (Two)</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIED 752</td>
<td>The Law of Higher Education</td>
<td></td>
</tr>
<tr>
<td>HIED 761</td>
<td>Higher Education Capstone</td>
<td></td>
</tr>
</tbody>
</table>

**Cognate**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUN 633</td>
<td>Counseling and Psychotherapy Techniques</td>
<td></td>
</tr>
<tr>
<td>COUN 655</td>
<td>Social and Cultural Issues in Counseling</td>
<td></td>
</tr>
<tr>
<td>FOUN 722</td>
<td>Introduction to Applied Statistics and Data Analysis</td>
<td></td>
</tr>
<tr>
<td>HIST 633</td>
<td>Studies in International History</td>
<td></td>
</tr>
<tr>
<td>PSYC 653</td>
<td>Personality Psychology: Theory and Research</td>
<td></td>
</tr>
<tr>
<td>IS 705</td>
<td>The Euro-Atlantic Community</td>
<td></td>
</tr>
<tr>
<td>IS 713</td>
<td>Global Political Economy</td>
<td></td>
</tr>
<tr>
<td>IS 741</td>
<td>Globalization and Social Change in the World System</td>
<td></td>
</tr>
<tr>
<td>ECON 650</td>
<td>International Economics</td>
<td></td>
</tr>
</tbody>
</table>
Education Specialist – Emphasis in Higher Education

Dennis E. Gregory, Program Director

The Education Specialist program is designed to provide further opportunities for holders of master’s degrees in higher education and related disciplines to develop expertise at a higher professional level. Emphasis is on continued development for leadership in policy formulation, planning, and executive action related to educational and training institutions and human service organizations. Individuals who aspire to advance in higher education administration will find in this program a meaningful base for building toward their professional objectives.

Admission

Students must:
1. meet all University requirements;
2. provide two letters of recommendation;
3. hold a master’s degree from an accredited institution (minimum 3.25 graduate grade point average on a 4.00 scale);
4. provide a 1500 word essay explaining why he/she should be admitted into the program; and
5. have an acceptable score on the general aptitude section of the Graduate Record Examination.

Applicants whose admission credentials are slightly below the required minimum will be considered for provisional admission. Performance in classes as a non-degree student will not be taken into consideration in the admission process.

Continuance

Students must meet all University requirements and maintain a 3.00 or higher grade point average.

Exit

Students must successfully complete:
1. a written comprehensive examination;
2. the required course of study; and
3. have a 3.00 grade point average or above.

Program Requirements

The Education Specialist in higher education requires the completion of a minimum of 30 approved semester credit hours beyond the master’s degree. Because of the wide variation of backgrounds among students seeking this degree, the curricular requirements will be determined based upon the applicant’s background.

Required courses, if they have not been taken at the 700 level within a master’s degree program include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>COUN 807</td>
<td>Adult and College Student Development</td>
<td>3</td>
</tr>
<tr>
<td>HIED 808</td>
<td>Contemporary Issues in Higher Education</td>
<td>3</td>
</tr>
<tr>
<td>HIED 852</td>
<td>The Law of Higher Education</td>
<td>3</td>
</tr>
<tr>
<td>HIED 894</td>
<td>Organization and Administration of Higher Education in the United States</td>
<td>3</td>
</tr>
<tr>
<td>HIED 870</td>
<td>External and Internal Relations for Higher Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 15

Education Specialist in Higher Education

Higher Education Core 18

Select six from the following: *

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIED 808</td>
<td>Contemporary Issues in Higher Education</td>
</tr>
<tr>
<td>HIED 810</td>
<td>Introduction to Student Affairs Administration</td>
</tr>
<tr>
<td>HIED 820</td>
<td>The Private College and University</td>
</tr>
<tr>
<td>HIED 833</td>
<td>Professional Helping Skills in Higher Education</td>
</tr>
<tr>
<td>HIED 843</td>
<td>Introduction to International Higher Education Administration</td>
</tr>
<tr>
<td>HIED 844</td>
<td>Comparative Higher Education Systems</td>
</tr>
<tr>
<td>HIED 845</td>
<td>Today’s College Student and Diversity</td>
</tr>
<tr>
<td>HIED 852</td>
<td>The Law of Higher Education</td>
</tr>
<tr>
<td>HIED 856</td>
<td>Higher Education Finance</td>
</tr>
<tr>
<td>HIED 857</td>
<td>The Multicultural University</td>
</tr>
<tr>
<td>HIED 858</td>
<td>Higher Education Leadership</td>
</tr>
<tr>
<td>HIED 859</td>
<td>Higher Education Curriculum</td>
</tr>
<tr>
<td>HIED 864</td>
<td>College and the University Presidency</td>
</tr>
<tr>
<td>HIED 866</td>
<td>The Modern Community College</td>
</tr>
<tr>
<td>HIED 893</td>
<td>The History of Higher Education in the United States</td>
</tr>
<tr>
<td>HIED 894</td>
<td>Organization and Administration of Higher Education in the United States</td>
</tr>
<tr>
<td>HIED 895</td>
<td>Topics in Higher Education Administration</td>
</tr>
<tr>
<td>CCL 820</td>
<td>Community College Leadership</td>
</tr>
<tr>
<td>CCL 824</td>
<td>Community College Finance</td>
</tr>
<tr>
<td>CCL 826</td>
<td>Community College Curriculum and Program Development</td>
</tr>
</tbody>
</table>

Research Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 722</td>
<td>Introduction to Applied Statistics and Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 813</td>
<td>Advanced Program Evaluation in Education</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 812</td>
<td>Advanced Research Design and Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

Internship

HIED 868 Internship: Higher Education Administration 3

Total Hours 30

* Students will choose, with the assistance of their advisor, six courses, which do not repeat courses taken for the master’s degree.

Doctor of Philosophy in Education - Higher Education Emphasis

Dennis E. Gregory, Program Director

The Doctor of Philosophy is the degree most often desired for those who aspire to senior administrative and faculty roles in institutions of higher education. Possession of this degree also provides those who have earned it with entry into business, government, research and other leadership positions. The Ph.D. in higher education is intended to prepare individuals for administrative and faculty positions; and to provide these students with the skills to carry out scholarly research, lead organizations, and create new knowledge. The curriculum described below contains elements that will, if completed successfully, provide research expertise, administrative skills and experience, and the ability to serve the nation’s colleges and universities and contribute to higher education elsewhere in the world.

Admission

Criteria for admission to the Ph.D. in higher education are as follows:
1. A completed master’s degree in an appropriate discipline from a regionally accredited university. Degrees that are equivalent to a master’s degree such as L.L.B., J.D., and D.D.S. are also acceptable;
2. A preferred minimum GPA of 3.5 (on a 4.0 scale) overall for the master’s degree and in the major area of study in the master’s degree;
3. A minimum of 1000/297 overall total score on the GRE and a preferred score of 500/153 or above on the verbal and 500/144 on the quantitative sections of the GRE. Prospective students must score a minimum of 4.5 on the analytical writing portion of the GRE. GRE scores expire after five years; however, candidates who have completed the exam prior to five years before the application deadline may submit those scores for consideration if the scores meet the minimum expectations and they are provided from an official source such as a transcript or form provided by the Educational Testing Service. Old Dominion University reserves the right to determine what an “official source” is. While these scores are minimums, other portions of the total application package will be strongly considered to balance lower scores;

4. Applicants whose native language is not English must submit a current score for the Test of English as a Foreign Language (TOEFL) of at least 600;

5. Applicants must submit a 1500 word statement of their academic and professional goals with an emphasis on how the Ph.D. degree in higher education will contribute to the achievement of the stated goals;

6. Three letters of reference from sources capable of commenting on the applicant’s readiness for advanced graduate study. At least one of these letters must be from a senior-level administrator in a college or university;

7. An interview with the Higher Education Program Committee. This committee will also review applications for admission; and,

Prior course work is assumed in statistics, student development, and leadership theory. If this assumption is not met, then additional course work will be added to the candidate’s graduate program of study. Please see prerequisites and additions at the bottom of the curriculum description for specifics.

Continuance
Students must meet all University requirements and maintain a 3.00 or higher grade point average. Students must be continuously enrolled in at least two courses each semester until all courses prior to the dissertation are completed. After completion of all such coursework, students must be enrolled in either a dissertation credit course or Higher Education 999 until graduation. Please see the Ph.D. in Education Handbook for more details.

Program Requirements
The Ph.D. program in higher education consists of courses totaling a minimum of 60 academic credit hours beyond the master’s degree. The curriculum includes four parts: a content concentration totaling 33 credit hours (including the higher education core – 21 credits and a cognate – 12 credits), a research component including 12 credit hours, and the dissertation seminar for three hours and the dissertation which will include a minimum of 12 credit hours. The dissertation will often include more than 12 credit hours depending on the length of time necessary for completion. Students entering the program may also need to complete one introductory statistics course and one research methods course if they have not had such courses or cannot demonstrate competency at a satisfactory level. If students have not yet served in an administrative or other leadership position in a college or university for a minimum of three years, completion of six credit hours of internship () is required. Students who come into the Ph.D. program with a master’s degree in an academic field that is unrelated to higher education administration and/or who have not completed courses to develop competency in specified areas may need to complete these courses in lieu of electives.

Under normal circumstances, admissions will be offered once a year in order to build efficient cohort groups for this type of advanced study. In order to enhance the experience of the students and to increase the efficiency by which courses are offered, a cohort of 5-10 students will be admitted each year. This limited number of students is necessary to assure that there is an adequate number of full-time faculty members to serve the students through advising and other duties, particularly when the cohorts reach the dissertation stage of the program.

To build a cohesive cohort group, a series of intensive courses will be offered on the Old Dominion University campus each summer. It will be expected that all newly admitted students will come to campus for one of these seminars during the summer after they are admitted to the program and complete two courses together as a group. These courses will be selected from within the “content concentration” or “research” requirements. A third course will be available for regular study during the summer so that students may comply with one of the residency requirements. Residency at a second intensive seminar the following summer is recommended but not required.

A minimum of two semesters of full-time study is required of students in the program to meet program residency requirements. One of the semesters of full-time study (defined as completion of nine credit hours) must be accomplished by the completion of the intensive seminar noted above. The second semester of residency can be accomplished in several ways. Students may complete nine credit hours during Fall or Spring or three hours in the summer or may attend a second summer residency. Courses taken via TELETECHNET or other distance education methodologies are considered “resident” courses, so that taking three TELETECHNET courses during a semester may complete the second residency requirement.

Applicants must submit completed applications and all related materials no later than February 1 of each year, and students will be admitted for study beginning in June of the same year.

Exit
In order to complete the program students must fully comply with the curriculum below and with all requirements noted elsewhere in the University catalog for graduate students and with requirements listed in the Ph.D. in Education Handbook. It is the responsibility of the student to obtain these materials and comply with required portions.

Curriculum

<table>
<thead>
<tr>
<th>Prerequisites</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 611</td>
<td>Introduction to Research Methods in Education</td>
</tr>
<tr>
<td>FOUN 722</td>
<td>Introduction to Applied Statistics and Data Analysis</td>
</tr>
</tbody>
</table>

**Content Concentration**

<table>
<thead>
<tr>
<th>Higher Education Core (21 credits minimum)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HIED 808</td>
<td>Contemporary Issues in Higher Education</td>
</tr>
<tr>
<td>HIED 852</td>
<td>The Law of Higher Education</td>
</tr>
<tr>
<td>HIED 856</td>
<td>Higher Education Finance</td>
</tr>
<tr>
<td>HIED 857</td>
<td>The Multicultural University</td>
</tr>
<tr>
<td>HIED 870</td>
<td>External and Internal Relations for Higher Education</td>
</tr>
<tr>
<td>HIED 893</td>
<td>The History of Higher Education in the United States</td>
</tr>
<tr>
<td>HIED 894</td>
<td>Organization and Administration of Higher Education in the United States</td>
</tr>
<tr>
<td>COUN 807</td>
<td>Adult and College Student Development</td>
</tr>
</tbody>
</table>

**Cognate (12 credits minimum)**

Select one cognate option from the following:

**Option A, Higher Education Policy and Administration:**

| HIED 812 | Strategic Planning and Institutional Effectiveness | 3 |
| HIED 820 | The Private College and University | 3 |
| HIED 859 | Higher Education Curriculum | 3 |
| HIED 862 | Development and Fund Raising | 3 |
| HIED 864 | College and the University Presidency | 3 |

**Option B, Student Affairs:**

<p>| HIED 810 | Introduction to Student Affairs Administration | 3 |
| HIED 830 | Seminar in Student Affairs Administration | 3 |
| HIED 831 | Group Dynamics in Higher Education | 3 |
| HIED 833 | Professional Helping Skills in Higher Education | 3 |</p>
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIED 845</td>
<td>Today’s College Student and Diversity</td>
<td>3</td>
</tr>
<tr>
<td><strong>Option C, Community Colleges:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIED 866</td>
<td>The Modern Community College</td>
<td>3</td>
</tr>
<tr>
<td>CCL 820</td>
<td>Community College Leadership</td>
<td>3</td>
</tr>
<tr>
<td>CCL 824</td>
<td>Community College Finance</td>
<td>3</td>
</tr>
<tr>
<td>CCL 830</td>
<td>Community College Politics and Policy Development</td>
<td>3</td>
</tr>
<tr>
<td><strong>Option D, Athletic Administration:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMGT 638</td>
<td>Fiscal Planning and Management in Sport and Recreation</td>
<td>3</td>
</tr>
<tr>
<td>SMGT 646</td>
<td>Sport Marketing</td>
<td>3</td>
</tr>
<tr>
<td>SMGT 650</td>
<td>Ethics in Sport Management</td>
<td>3</td>
</tr>
<tr>
<td>SMGT 652</td>
<td>Sport Facility Management</td>
<td>3</td>
</tr>
<tr>
<td>SMGT 653</td>
<td>Sport Sponsorship/Event Planning</td>
<td>3</td>
</tr>
<tr>
<td>SMGT 660</td>
<td>Legal Aspects of Sport</td>
<td>3</td>
</tr>
<tr>
<td>SMGT 675</td>
<td>Management and Leadership in Sport</td>
<td>3</td>
</tr>
<tr>
<td><strong>Option E, International Higher Education Administration:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIED 843</td>
<td>Introduction to International Higher Education Administration</td>
<td>3</td>
</tr>
<tr>
<td>HIED 844</td>
<td>Comparative Higher Education Systems</td>
<td>3</td>
</tr>
<tr>
<td>Two classes at the 800 level from the International Studies Department</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Research and Statistics:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOUN 822</td>
<td>Applied Linear Models in Educational Research</td>
<td>3</td>
</tr>
<tr>
<td>or FOUN 823</td>
<td>Analysis of Variance Applied to Educational Research</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 812</td>
<td>Advanced Research Design and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 814</td>
<td>Qualitative Research Design in Education</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 813</td>
<td>Advanced Program Evaluation in Education</td>
<td>3</td>
</tr>
<tr>
<td><strong>Dissertation Seminar:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOUN 881</td>
<td>Dissertation Seminar</td>
<td>3</td>
</tr>
<tr>
<td><strong>Dissertation (12 credits minimum):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIED 899</td>
<td>Dissertation</td>
<td>1-12</td>
</tr>
</tbody>
</table>

* These seven courses (21 credits) are required for all students who did not have them as part of a master’s degree program. If some or all of these courses were taken as part of the student’s master’s program, they and his or her advisor may choose alternate courses from those listed.

** The graduate program director may allow other cognate areas to be developed and implemented by students and advisors upon request if a particular justification is made in writing.

*** Some courses may be waived based on previous study.

**Additions**

HIED 868 Internship in Higher Education Administration (6 credits) is required for all doctoral students who have not served in a full-time administrative position for at least three years prior to admission. Those students interested in community colleges may substitute CCL 868 – Internship in Community College Administration. It is expected that each intern will work with an administrator at the dean level or higher.

**Special Courses**

These courses may be used for a variety of specialized topical seminars and may fill requirements in one or more of the cognate areas noted above.

HIED 895 Topics in Higher Education Administration 1-6

---

**Department of Human Movement Sciences**

2007 Student Recreation Center
757 683-4995

---

**Master of Science in Education – Physical Education**

The department offers a varied graduate program that includes three separate tracks and seven emphasis areas. The three tracks are as follows:

1. thesis research (30 credit hours minimum, including a six-credit-hour thesis);
2. research problem (33 credit hours minimum, including a three-credit-hour research problem);
3. non-research (36 credit hours minimum).

The sport management, exercise science and wellness, and curriculum and instruction emphasis areas contain a minimum of 36 credit hours to graduate. The athletic training emphasis area contains a minimum of 39 credit hours to graduate and the athletic training with initial Virginia Licensure in physical education and health education could contain up to 73 credit hours to graduate in order to fulfill both area requirements. The curriculum and instruction emphasis area includes a program for currently licensed teachers as well as a program that leads to initial PK-12 health/physical education teacher licensure in the Commonwealth of Virginia.

**Athletic Training**

2003A Student Recreation Center
757-683-3516

Bonnie Van Lunen, Graduate Program Director

This emphasis is designed to prepare athletic trainers for advanced study in the areas of research, clinical application, and education. The associated course work will involve exploration of biomechanical concepts, advanced clinical practice techniques, and preparation of the entry level educator.

**Admission and Entrance Requirements**

Students must have:

1. a bachelor’s degree from an accredited institution with a cumulative undergraduate GPA of 3.0 and a GPA of 3.00 in the undergraduate major courses;
2. the Board of Certification credential for certification as an Athletic Trainer, OR eligibility to take the Board of Certification examination; and
3. a score of at least 900 between quantitative and verbal on the Graduate Record Examination (GRE) for admission to regular status.

Students who have either a low GPA or a low GRE score may be considered for admission to provisional status. GRE scores are required for consideration of admittance. Acceptance into the graduate school does
not imply automatic acceptance into the athletic training emphasis area. All applicants must complete separate application materials for the Office of Graduate Admissions and for the graduate athletic training education program. The graduate athletic training education program application materials can be found on the web page. The application deadline is February 1, however applications will be reviewed as soon as they are complete. Interviews are required and scheduled through invitation from the program director.

Continuance and Exit Requirements
Students must meet all requirements for continuance as outlined in the graduate continuance policy for the University. Students completing the program of study must:

1. have an overall grade point average of 3.00;
2. have a GPA of 3.00 in the major;
3. demonstrate writing proficiency;
4. satisfy all course competencies;
5. pass a comprehensive examination;
6. complete a research project or thesis;
7. have an exit interview with the program director; and
8. file the necessary paperwork for graduation

Curriculum

Core courses
HMS 628 The Spine: Evaluation and Rehabilitation 3
HMS 756 Education in Athletic Training 4
HMS 657 Lower Extremity Injury Management Strategies 3
HMS 691 Gross Anatomy for Sports Medicine Clinicians 4
HMS 711 Analysis of Human Motion 3

Research Core
FOUN 722 Introduction to Applied Statistics and Data Analysis 6
FOUN 612 Applied Research Methods in Education

Requirements for different tracks are as follows: 16

Thesis Track
Includes 6 credit hours for Thesis and 10 credit hours for electives.
HMS 698 Thesis
HMS 699 Thesis

Electives

Research-Problem Track
Includes 3 credit hours for HMS 636 and 13 credit hours for electives.
HMS 636 Research Problems in Health, Physical Education, Recreation and Sports

Electives

Total Hours 39

Admission and Entrance Requirements
Students applying for admission with regular status must have:

1. a bachelor’s degree from an accredited institution with a cumulative undergraduate GPA of 3.0 and a GPA of 3.00 in the undergraduate major courses;
2. the Board of Certification credential for certification as an Athletic Trainer, OR eligibility to take the Board of Certification examination;
3. a score of at least 900 between quantitative and verbal on the Graduate Record Examination (GRE) for admission to regular status; and
4. a composite score of 532 on the PRAXIS I (PPST in reading, writing, and mathematics) or State Board approved equivalent SAT or ACT for admission to the program and acceptance into teacher education.

Students who have either a low GPA or a low GRE score may be considered for admission to provisional status. GRE scores are required for consideration of admittance. Acceptance into the graduate school does not imply automatic acceptance into this emphasis area. All applicants must complete separate application materials for the Office of Graduate Admissions and for the graduate athletic training education program. The graduate athletic training education program application materials can be found on our web page. The application deadline is February 1st; however, applications will be reviewed as soon as they are complete. Interviews are required and scheduled through invitation from the program director.

Continuance and Exit Requirements
Students must meet all requirements for continuance as outlined in the graduate continuance policy for the University. Students completing the program of study must

1. have an overall grade point average of 3.00;
2. have a GPA of 3.00 in the major;
3. demonstrate writing proficiency;
4. satisfy all course competencies;
5. pass a comprehensive examination;
6. complete a research project or thesis;
7. have an exit interview with the program director; and
8. file the necessary paperwork for graduation

Curriculum

Research Core
FOUN 722 Introduction to Applied Statistics and Data Analysis 6
FOUN 612 Applied Research Methods in Education

Core courses
HMS 601 Adapted Physical Education Design and Supervision 24
HMS 606 Planning and Administration of an Effective Health and Physical Education Program
HMS 657 Lower Extremity Injury Management Strategies
HMS 691 Gross Anatomy for Sports Medicine Clinicians
HMS 711 Analysis of Human Motion
HMS 720 Curriculum Development in Physical Education
HMS 739 Current Research in Motor Development
HMS 745 Assessment and Evaluation in Physical Education

Research-Problem Track
HMS 636 Research Problems in Health, Physical Education, Recreation and Sports
HMS 667 Internship in Health, Physical Education, Recreation and Sports
HPE 587 Teacher Candidate Seminar

Athletic Training with Initial Virginia Licensure in Physical Education and Health Education Emphasis

2003A Student Recreation Center
757-683-3516

This emphasis is designed to prepare athletic trainers for advanced study in the areas of research, clinical application, and education. The associated course work will involve exploration of biomechanical concepts, advanced clinical practice techniques, and preparation of the educator for teaching licensure (PreK-12) within the state of Virginia for physical education and health education.
Select from the following electives:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 618</td>
<td>Current Research in Athletic Training</td>
</tr>
<tr>
<td>HMS 623</td>
<td>Athletic Training Practicum I</td>
</tr>
<tr>
<td>HMS 628</td>
<td>The Spine: Evaluation and Rehabilitation</td>
</tr>
<tr>
<td>HMS 633</td>
<td>Athletic Training Practicum II</td>
</tr>
<tr>
<td>HMS 643</td>
<td>Athletic Training Practicum III</td>
</tr>
<tr>
<td>HMS 653</td>
<td>Athletic Training Practicum IV</td>
</tr>
<tr>
<td>HE 581</td>
<td>Teaching Sexuality Education in Schools</td>
</tr>
<tr>
<td>HMS 605</td>
<td>Principles of Movement Analysis in Team Sports</td>
</tr>
<tr>
<td>HMS 607</td>
<td>Principles of Movement Analysis in Individual</td>
</tr>
<tr>
<td>HMS 609</td>
<td>Principles of Movement Analysis in Dance and</td>
</tr>
<tr>
<td>HMS 680</td>
<td>Problems in Health Education</td>
</tr>
<tr>
<td>HMS 740</td>
<td>Principles and Concepts of Motor Learning</td>
</tr>
<tr>
<td>TLED 608</td>
<td>Foundations of Education and Instructional</td>
</tr>
<tr>
<td>READ 680</td>
<td>Reading to Learn Across the Curriculum</td>
</tr>
</tbody>
</table>

Total Hours: 73

A passing score on the PRAXIS II test of Content Knowledge in Physical Education and Health (Form 0856) must be on file in the Teacher Education Services office before the teacher candidate internship can begin. Passing scores on the Virginia Communication and Literacy Assessment will be required by the Virginia Department of Education for licensure.

**Physical Education Curriculum and Instruction Emphasis**

2010 Student Recreation Center

Admission and Entrance Requirements

Students applying for admission with regular status must have:

1. a bachelor’s degree from an accredited institution with a cumulative undergraduate grade point average (GPA) of 2.80 and a GPA of 3.00 in the undergraduate major courses;
2. a score of at least 900 in the quantitative and verbal portions of the Graduate Record Examination (GRE) - GRE scores are required for consideration of admission for all candidates. In some circumstances, students who have either a low GPA or a low GRE score may be considered for admission with provisional status; and
3. demonstrated computer literacy.

**Continuance and Exit Requirements**

Students must meet all requirements for continuance as outlined in the graduate continuance policy for the University. Students completing the program of study must:

1. achieve an overall GPA of 3.00 and a GPA of 3.00 in the major courses;
2. demonstrate writing proficiency;
3. satisfy all course competencies;
4. pass a comprehensive examination when required;
5. complete an internship, research project, or thesis as a culminating experience;
6. hold an exit interview with the program coordinator; and
7. file the necessary paperwork for graduation.

---

**Curriculum**

**Research Core**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 722</td>
<td>Introduction to Applied Statistics and Data</td>
</tr>
<tr>
<td>FOUN 612</td>
<td>Analysis</td>
</tr>
</tbody>
</table>

**Core Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 601</td>
<td>Adapted Physical Education and Design</td>
</tr>
<tr>
<td>HMS 606</td>
<td>Planning and Administration of an Effective</td>
</tr>
<tr>
<td>HMS 720</td>
<td>Health and Physical Education Program</td>
</tr>
<tr>
<td>HMS 739</td>
<td>Current Research in Motor Development</td>
</tr>
<tr>
<td>HMS 740</td>
<td>Principles and Concepts of Motor Learning</td>
</tr>
<tr>
<td>HMS 745</td>
<td>Assessment and Evaluation in Physical Education</td>
</tr>
</tbody>
</table>

**Thesis Track**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 698</td>
<td>Thesis</td>
</tr>
<tr>
<td>HMS 699</td>
<td>Thesis</td>
</tr>
</tbody>
</table>

**Electives**

**Research-Problem Track**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 636</td>
<td>Research Problems in Health, Physical Education,</td>
</tr>
<tr>
<td>TLED 608</td>
<td>Recreation and Sports</td>
</tr>
</tbody>
</table>

All students must complete nine hours of electives chosen from the following courses or substituted from relevant courses in ECI, ELS, or ESSE, with permission of the advisor.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 680</td>
<td>Problems in Health Education</td>
</tr>
<tr>
<td>HE 581</td>
<td>Teaching Sexuality Education in Schools</td>
</tr>
<tr>
<td>HMS 605</td>
<td>Principles of Movement Analysis in Team Sports</td>
</tr>
<tr>
<td>HMS 607</td>
<td>Principles of Movement Analysis in Individual</td>
</tr>
<tr>
<td>HMS 609</td>
<td>Principles of Movement Analysis in Dance and</td>
</tr>
<tr>
<td>TLED 608</td>
<td>Rhythmic Activities for Physical Education</td>
</tr>
<tr>
<td>READ 680</td>
<td>Reading to Learn Across the Curriculum</td>
</tr>
</tbody>
</table>

Total Hours: 51

**Physical Education Emphasis in Coaching Education**

This emphasis will offer additional theories and knowledge in the coaching profession providing advanced skills to those individuals pursuing a coaching career. The courses selected for the Coaching Education emphasis area will meet accreditation standards, certify students as athletic coaches, and provide valuable knowledge and skills.

2006 Student Recreation Center

Admission and Entrance Requirements

1. Students applying for admission with regular status must have:
2. a bachelor’s degree from an accredited institution with a cumulative undergraduate grade point average (GPA) of 2.80 and a GPA of 3.00 in the undergraduate major courses;
3. a score of at least 900 in the quantitative and verbal portions of the Graduate Record Examination (GRE) - GRE scores are required for consideration of admission for all candidates; (In some circumstances, students who have either a low GPA or a low GRE score may be considered for admission with provisional status)

4. demonstrated computer literacy.

Continuance and Exit Requirements
Students must meet all requirements for continuance as outlined in the graduate continuance policy for the University. Students completing the program of study must:

1. achieve an overall GPA of 3.00 and a GPA of 3.00 in the major courses;
2. demonstrate writing proficiency;
3. satisfy all course competencies;
4. pass a comprehensive examination when required;
5. complete an internship, research project, or thesis as a culminating experience;
6. hold an exit interview with the program coordinator; and
7. file the necessary paperwork for graduation and teacher licensure.

Course List

<table>
<thead>
<tr>
<th>Research Core</th>
<th>Core Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 612</td>
<td>HMS 718</td>
</tr>
<tr>
<td>FOUN 722</td>
<td>HMS 719</td>
</tr>
<tr>
<td></td>
<td>HMS 740</td>
</tr>
<tr>
<td></td>
<td>HMS 721</td>
</tr>
<tr>
<td></td>
<td>HMS 745</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Internship 3-6 Credits*</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 667 Internship in Health, Physical Education, Recreation and Sports</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives 6-9 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 739 Current Research in Motor Development</td>
</tr>
<tr>
<td>EXSC 509 Physiology of Exercise</td>
</tr>
<tr>
<td>EXSC 508 Nutrition for Fitness and Sport</td>
</tr>
<tr>
<td>HMS 605 Principles of Movement Analysis in Team Sports for Physical Education</td>
</tr>
<tr>
<td>HMS 711 Analysis of Human Motion</td>
</tr>
<tr>
<td>HMS 607 Principles of Movement Analysis in Individual Sports for Physical Education</td>
</tr>
<tr>
<td>HMS 606 Planning and Administration of an Effective Health and Physical Education Program</td>
</tr>
<tr>
<td>HMS 720 Curriculum Development in Physical Education</td>
</tr>
</tbody>
</table>

*The hours for the internship and electives are variable depending on the student’s interest for elective options and availability of internship opportunities.

Prerequisites

| BIOL 105N | Biology for Nonscience Majors I | 4 |
| or BIOL 115N | General Biology I |
| BIOL 250 | Human Anatomy and Physiology I |
| EXSC 322 | Anatomical Kinesiology |
| EXSC 409 | Physiology of Exercise |

Physical Education Curriculum and Instruction with Initial Virginia Licensure in Physical Education and Health Education

2030 Student Recreation Center
757-683-3355

Admission and Entrance Requirements
Students applying for admission with regular status must have:

1. a bachelor’s degree from an accredited institution with a cumulative undergraduate grade point average (GPA) of 2.80 and a GPA of 3.00 in the undergraduate major courses;
2. a score of at least 900 in the quantitative and verbal portions of the Graduate Record Examination (GRE) - GRE scores are required for consideration of admission for all candidates;
3. a composite score of 532 on the PRAXIS I (PPST in reading, writing, and mathematics) or State Board approved equivalent SAT or ACT score for admission to the program and acceptance into teacher education; and
4. demonstrated computer literacy. (In some circumstances, students who have either a low GPA or a low GRE score may be considered for admission with provisional status)

Continuance and Exit Requirements
Students must meet all requirements for continuance as outlined in the graduate continuance policy for the University. Students completing the program of study must:

1. achieve an overall GPA of 3.00 and a GPA of 3.00 in the major courses;
2. demonstrate writing proficiency;
3. satisfy all course competencies;
4. pass a comprehensive examination when required;
5. complete an internship, research project, or thesis as a culminating experience;
6. hold an exit interview with the program coordinator; and
7. file the necessary paperwork for graduation and teacher licensure.

Curriculum
Specific requirements for the program are as follows (36 total credits with additional credits up to 54 as needed to satisfy Virginia licensure requirements):

<table>
<thead>
<tr>
<th>Prerequisites</th>
<th>Required Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 105N</td>
<td>Biology for Nonscience Majors I</td>
</tr>
<tr>
<td>or BIOL 115N</td>
<td>General Biology I</td>
</tr>
<tr>
<td>BIOL 250</td>
<td>Human Anatomy and Physiology I</td>
</tr>
<tr>
<td>EXSC 322</td>
<td>Anatomical Kinesiology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Prerequisites</th>
<th>Required Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 739</td>
<td>Current Research in Motor Development</td>
</tr>
<tr>
<td>or HMS 740</td>
<td>Principles and Concepts of Motor Learning</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Curriculum and Instruction</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 720</td>
<td>Curriculum Development in Physical Education</td>
</tr>
<tr>
<td>PE 504</td>
<td>Adapted Physical Education</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Foundations in Education</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLED 608</td>
<td>Foundations of Education and Instructional Assessment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reading in the Content Area</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>READ 680</td>
<td>Reading to Learn Across the Curriculum</td>
</tr>
</tbody>
</table>

| Supervised Classroom Experiences | 7 |
Program of study must:

Students completing the program of study must:
1. have an overall grade point average of 3.00;
2. have a grade point average of 3.00 in the major;
3. demonstrate writing proficiency;
4. satisfy all course competencies;
5. pass a comprehensive examination;
6. complete an internship or research project/thesis;
7. have an exit interview with the program director; and
8. file the necessary paperwork for graduation.

Curriculum

Core Courses
- EXSC 517 Biomechanics
- EXSC 528 Exercise Prescription for Chronic Disease
- HMS 630 Exercise Physiology
- HMS 642 Clinical Exercise Testing and Prescription
- HMS 661 Seminar in Nutrition for Sports and Health

Research Core
- FOUN 722 Introduction to Applied Statistics and Data Analysis
- FOUN 612 Applied Research Methods in Education

Requirements for different tracks are as follows

Thesis Track
- Includes 6 credit hours for Thesis and 8 credit hours for electives.
- HMS 698 Thesis
- HMS 699 Thesis

Electives

Research-Problem Track
- Includes 3 credit hours for HMS 636 and 11 credit hours for electives
- HMS 636 Research Problems in Health, Physical Education, Recreation and Sports

Electives

Non-Research Track
- Includes 6 credit hours for ESPR 667 and 8 credit hours of HMS electives
- HMS 667 Internship in Health, Physical Education, Recreation and Sports

Total Hours 36

Supportive electives may be chosen from a restricted list of courses in health, physical education and recreation, sports management, biology, or other areas of relevant study. The student will also select either a research or internship option.

Sport Management Emphasis

Admission and Entrance Requirements

Students applying for admission with regular status must have:
1. a bachelor’s degree from an accredited institution with a cumulative undergraduate GPA of 2.8 and a GPA of 3.00 in the undergraduate major courses; and
2. have a score of at least 900 between quantitative and verbal on the Graduate Record Examination (GRE).

Continuance and Exit Requirements

Students must meet all requirements for continuance as outlined in the graduate continuance policy for the University. Students completing the program of study must:
1. have an overall grade point average of 3.00;
2. have a grade point average of 3.00 in the major;
Students who have either a low GPA or a low GRE score may be considered for admission to provisional status. GRE scores are required for consideration of admittance. Additionally, students must be computer literate.

Continuance and Exit Requirements

Students must meet all requirements for continuance as outlined in the graduate continuance policy for the University. Students completing the program of study must:

1. have an overall grade point average of 3.00;
2. a grade point average of 3.00 in the major;
3. demonstrate writing proficiency;
4. satisfy all course competencies;
5. pass a comprehensive examination;
6. complete an internship or research project/thesis;
7. have an exit interview with the program director; and
8. file the necessary paperwork for graduation.

Curriculum

<table>
<thead>
<tr>
<th>Research Core</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 611 Introduction to Research Methods in Education</td>
<td></td>
</tr>
<tr>
<td>FOUN 722 Introduction to Applied Statistics and Data Analysis</td>
<td></td>
</tr>
</tbody>
</table>

Requirements for the different tracks are as follows 6

**Thesis Track**

<table>
<thead>
<tr>
<th>Course</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 698 Thesis</td>
<td></td>
</tr>
<tr>
<td>HMS 699 Thesis</td>
<td></td>
</tr>
</tbody>
</table>

**Research-Problem Track**

<table>
<thead>
<tr>
<th>Course</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 636 Research Problems in Health, Physical Education, Recreation and Sports</td>
<td></td>
</tr>
</tbody>
</table>

**Non-Research Track Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SMGT 664 Field Experience in Sport Management</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 36

Doctor of Philosophy in Education – Human Movement Science Emphasis

2003A Student Recreation Center
757-683-3516

Bonnie L. Van Lunen, Graduate Program Director

The Department of Human Movement Sciences offers a Ph.D. in human movement science, with emphases in curriculum and instruction, and applied kinesiology concepts. The degree is intended to prepare individuals for faculty research and administrative positions within departments that offer programs such as athletic training, health and physical education, exercise science, curriculum and instruction, physical therapy, and biomechanics.

Admission and Entrance Requirements

Criteria for admission into the Ph.D. in Education concentration human movement science are as follows:

1. a completed application form (contact the Office of Graduate Admissions for application materials);
2. official transcripts of all undergraduate and graduate courses and degrees completed. To be considered for the program, applicants must have completed bachelor’s and master’s degrees in an appropriate discipline from accredited colleges or universities;
3. official report scores from the Graduate Record Examination (verbal, quantitative, and analytical scores) taken within the last five years;
4. submission of additional materials as outlined in the Graduate Student Handbook for the concentration (found on web page);
5. completion of prerequisite or equivalent coursework – Applied Research Methods (FOUN 612) and Introduction to Applied Statistics and Data Analysis (FOUN 722).

A screening committee will review the submitted application materials and determine eligibility for the program. An interview with the screening committee will be required of all candidates. Admission is competitive and the number of openings is limited.

Continuance and Exit Requirements

Students must meet all requirements for continuance as outlined in the graduate continuance policy for the University. Students completing the program of study must:

1. have an overall grade point average of 3.00;
2. satisfy all course competencies;
3. pass comprehensive examinations;
4. meet all benchmarks set forth by the director;
5. complete a dissertation;
6. have an exit interview with the program director; and
7. file the necessary paperwork for graduation.

Curriculum

Requirements for the concentration are as follows (minimum of 60 credits):

**Degree Prerequisite** *

<table>
<thead>
<tr>
<th>Course</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 612 Applied Research Methods in Education</td>
<td></td>
</tr>
<tr>
<td>FOUN 722 Introduction to Applied Statistics and Data Analysis</td>
<td></td>
</tr>
</tbody>
</table>

**Introductory Core**

<table>
<thead>
<tr>
<th>Course</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 815 Introduction to Doctoral Study Seminar</td>
<td></td>
</tr>
</tbody>
</table>

**Research Core**

<table>
<thead>
<tr>
<th>Course</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 822 Applied Linear Models in Educational Research</td>
<td></td>
</tr>
<tr>
<td>or FOUN 823 Analysis of Variance Applied to Educational Research</td>
<td></td>
</tr>
<tr>
<td>FOUN 812 Advanced Research Design and Analysis</td>
<td></td>
</tr>
<tr>
<td>FOUN 814 Qualitative Research Design in Education</td>
<td></td>
</tr>
</tbody>
</table>

Select two from the following:**

- FOUN 815 Advanced Qualitative Research
- FOUN 816 Single Subject Research Designs
- CHP 646 Epidemiology
- FOUN 813 Advanced Program Evaluation in Education
- FOUN 824 Design and Analysis for Causal Inference in Educational Contexts
- FOUN 825 Applied Multilevel Modeling in Educational Research
Department of Science, Technology, Engineering, and Mathematics (STEM) Education and Professional Studies

228 Education Building
757-683-4305

Philip A. Reed, Chair

The Department of Science, Technology, Engineering and Mathematics (STEM) Education and Professional Studies (STEMPS) is an academic leader in graduate studies related to education specialists, including career and technical education, instructional design and technology, marketing education, science education, mathematics education, technology education, STEM education, community college teaching, and business and industry training. It offers the M.S., M.S.Ed, and the Ph.D. in Education with programs in occupational and technical studies (OTS) and instructional design and technology (IDT). The Ed.S. is offered in conjunction with the educational leadership program. The department also offers licensure and teaching endorsement programs. Due to changing University requirements, national accreditation standards, and Commonwealth licensure regulations, the programs in the Darden College of Education 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 website at http://education.odu.edu/.

Individual programs are described on the following pages.

**Master of Science, Occupational and Technical Studies Program, with concentrations in:**

- Career and Technical Education
- Business and Industry Training
- Community College Teaching
- STEM Education

**Master of Science in Education for Licensed Teachers - Elementary/Middle School – Science**

**Endorsement Program in Industrial Cooperative Training**

**Licensure Program in Marketing Teacher Education**

**Licensure Program in Technology Education through M.S. Degree Education Specialist**

**Doctor of Philosophy in Education-Occupational and Technical Studies Concentration**

**Instructional Design and Technology Programs**

- Master of Science in Education - Elementary/Middle School – Instructional Design and Technology emphasis
- Master of Science in Education - Secondary – Instructional Design and Technology emphasis
- Doctor of Philosophy in Education- Instructional Design and Technology
- Certificate in Modeling and Simulation-Based Instruction

**Master of Science-Occupational and Technical Studies**

John M. Ritz, Graduate Program Director

This is an advanced master’s degree and requires prior academic work associated with this area of study. The M.S. occupational and technical studies program has four concentrations - career and technical education, business and industry training, community college teaching, and STEM education. These studies are designed to help teachers and trainers upgrade their knowledge and skills and prepare for leadership roles in education and training. These programs are all delivered at the Norfolk campus and through the University’s distance learning system.

**Admission**

Students are admitted to the program on a continuing basis. Applications can be obtained from the Admissions Office, distance learning sites, the department and online. Students are admitted for fall, spring, and summer on a rolling basis. Graduate students can complete up to 12 graduate hours with a non-degree application. All applicants to the Master of Science degree in occupational and technical studies must meet University, college, and department requirements. In addition, all applicants must:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 826</td>
<td>Applied Structural Equation Modeling in Educational Research</td>
</tr>
<tr>
<td>CHP 773</td>
<td>Developing Grants and Contracts in Health Professions</td>
</tr>
<tr>
<td>HLSC 846</td>
<td>Epidemiology-Advanced</td>
</tr>
<tr>
<td>HLSC 815</td>
<td>Decision Analysis in Health Care</td>
</tr>
<tr>
<td><strong>Human Movement Science concentration (24 credits, 15 required credits + choice of cognate area)</strong></td>
<td></td>
</tr>
<tr>
<td>HMS 811</td>
<td>Analysis of Human Motion</td>
</tr>
<tr>
<td>HMS 816</td>
<td>Research Experience I</td>
</tr>
<tr>
<td>HMS 817</td>
<td>Research Experience II</td>
</tr>
<tr>
<td>Select two from the following:</td>
<td></td>
</tr>
<tr>
<td>HMS 840</td>
<td>Principles and Concepts of Motor Learning</td>
</tr>
<tr>
<td>HMS 839</td>
<td>Current Research in Motor Development</td>
</tr>
<tr>
<td>HMS 855</td>
<td>Neuroanatomical Basis of Human Movement</td>
</tr>
<tr>
<td><strong>Curriculum and Instruction Emphasis *** 9</strong></td>
<td></td>
</tr>
<tr>
<td>HIED 808</td>
<td>Contemporary Issues in Higher Education</td>
</tr>
<tr>
<td>HIED 837</td>
<td>Academic Issues In Higher Education</td>
</tr>
<tr>
<td>HMS 856</td>
<td>Education in Athletic Training</td>
</tr>
<tr>
<td>HMS 859</td>
<td>Higher Education Curriculum</td>
</tr>
<tr>
<td>HMS 820</td>
<td>Curriculum Development in Physical Education</td>
</tr>
<tr>
<td>HMS 845</td>
<td>Assessment and Evaluation in Physical Education</td>
</tr>
<tr>
<td><strong>Applied Kinesiology Concepts Emphasis **** 9</strong></td>
<td></td>
</tr>
<tr>
<td>MAE 842</td>
<td>Computational Methods in Multibody Dynamics</td>
</tr>
<tr>
<td>MAE 843</td>
<td>Kinematic Synthesis of Mechanisms</td>
</tr>
<tr>
<td>MAE 851</td>
<td>Fatigue and Fracture</td>
</tr>
<tr>
<td>PSYC 831</td>
<td>Human Cognition</td>
</tr>
<tr>
<td>PSYC 871</td>
<td>Ergonomics</td>
</tr>
<tr>
<td>HMS 825</td>
<td>Clinical Biomechanics for Rehabilitation Professionals</td>
</tr>
<tr>
<td><strong>Dissertation Capstone Courses 15</strong></td>
<td></td>
</tr>
<tr>
<td>FOUN 881</td>
<td>Dissertation Seminar</td>
</tr>
<tr>
<td>HMS 899</td>
<td>Dissertation (12 minimum)</td>
</tr>
<tr>
<td><strong>Total Hours 75</strong></td>
<td></td>
</tr>
</tbody>
</table>

+ A master’s degree in an appropriate field related to this concentration is required for regular admission to the Ph.D. in human movement science.
* Students who do not have equivalent coursework or appropriate educational experiences must complete these prerequisite courses.
** Substitute other courses by permission of advisor.
*** HPE Teacher Prep only: Elective from stats, HMS 845, additional course.
**** Substitutions can be made with approval from the graduate program director.
1. hold an undergraduate degree in a related field or have work experience in an occupational/technical area,
2. have an overall grade point average of 2.80 with a 3.00 in major courses,
3. complete the Graduate Record Examination (GRE) with a score in the 45th percentile (verbal and quantitative sections combined) or the Miller Analogy Test with a 45th percentile in the intended major, and
4. submit two letters of recommendation.

**Continuance**

Students must:
1. complete the Graduate Writing Proficiency Examination administered by the department prior to completing nine credit hours and
2. maintain a minimum grade point average of 3.00.

**Exit**

Students in the career and technical education, business and industry training, and STEM education concentrations must complete 33 semester hours and students in the community college teaching concentration must complete 39 semester hours, as distributed in the M.S. curriculum. In addition, all students must:
1. achieve an overall grade point average of 3.00;
2. complete all competencies listed on course syllabi;
3. pass the written comprehensive examination;
4. successfully complete a problems paper or thesis; and

**Curriculum (33-39)**

**Common Core** 9

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEPS 785</td>
<td>Curriculum Development in Occupational Education and Training</td>
</tr>
<tr>
<td>SEPS 788</td>
<td>Instructional Strategies for Innovation in Training and Occupational Education</td>
</tr>
<tr>
<td>SEPS 789</td>
<td>Instructional Technology in Education and Training</td>
</tr>
</tbody>
</table>

**Concentration Specific Courses** 6

Select one specialization from the following:

**Career and Technical Education Teaching**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEPS 760</td>
<td>Trends and Issues in Occupational Education</td>
</tr>
<tr>
<td>SEPS 762</td>
<td>Administration and Management of Education and Training Programs</td>
</tr>
</tbody>
</table>

**Business and Industry Training**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEPS 761</td>
<td>Foundations of Adult Education and Training</td>
</tr>
<tr>
<td>SEPS 762</td>
<td>Administration and Management of Education and Training Programs</td>
</tr>
</tbody>
</table>

**Community College Teaching**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEPS 760</td>
<td>Trends and Issues in Occupational Education</td>
</tr>
<tr>
<td>SEPS 761</td>
<td>Foundations of Adult Education and Training</td>
</tr>
</tbody>
</table>

**STEM Education**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEM 720</td>
<td>STEM Educational Foundations</td>
</tr>
<tr>
<td>STEM 721</td>
<td>Science, Technology, Engineering, and Mathematics Connection and Integration</td>
</tr>
</tbody>
</table>

**Research Core** 6-9

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEPS 635</td>
<td>Research Methods in Occupational and Technical Studies</td>
</tr>
<tr>
<td>SEPS 636</td>
<td>Problems in Occupational and Technical Studies</td>
</tr>
</tbody>
</table>

**Professional Technical Specialty** 12-18

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career and Technical Education (12 credits) *</td>
<td></td>
</tr>
<tr>
<td>Business and Industry Training (12 credits) *</td>
<td></td>
</tr>
<tr>
<td>Community College Teaching (18 credits) **</td>
<td></td>
</tr>
</tbody>
</table>

**Total Hours** 33-42

**Footnotes**

* Credits approved by advisor.
** Credits in teaching specialty.

**Master of Science in Education with Initial State Licensure 6-12**

There are a number of individuals who have earned B.S. or B.A. degrees who now want to obtain a master’s degree leading to licensure as a secondary school teacher. In the program, students complete (or have completed) a minimum of 32 credits of undergraduate courses in one endorsement area (mathematics, social studies, English, earth science, chemistry, biology, or physics) and an additional 31-34 credits of education courses at the graduate level.

The graduate education component provides preparation in social and cultural foundations of education, adolescent development, classroom management, reading in the content area, microcomputers and curriculum, instructional strategies for secondary school, special needs students, research in curriculum and instruction, and a 14-week internship/student teaching experience. Courses include:

- **SPED 506** Students with Diverse Learning Needs in the General Education Classroom 3
- **SPED 313** Fundamentals of Human Growth and Development: Birth through Adolescence 3
- **TLED 530** PK-12 Instructional Technology 3
- **TLED 608** Foundations of Education and Instructional Assessment 3
- **TLED 640** The Management of Learning and Instruction 3
- **TLED 669** Internship/Student Teaching and Seminar 3-9
- **FOUN 611** Introduction to Research Methods in Education 3
- **READ 680** Reading to Learn Across the Curriculum 3

**Instructional Strategies Course** 3

Must choose 1 of the following:

- **TLED 551** Developing Instructional Strategies for Teaching in the Middle/High School: English
- **STEM 553** Developing Instructional Strategies for Teaching in the Middle/High School: Mathematics
- **STEM 554** Developing Instructional Strategies for Teaching in the Middle/High School: Science
- **TLED 555** Developing Instructional Strategies for Teaching in the Middle/High School: Social Studies

**Total Hours** 27-33

For the subject specialty, academic course requirements must be met in one of the following endorsement areas:

- Mathematics
- Social Studies
- English
- English as a second language
- Earth Science
- Chemistry
- Biology
- Physics
This degree is offered in conjunction with the Office of Teacher Education Services and the Department of Teaching and Learning.

Admission, Continuance, and Exit Requirements

Admission

Students must:
1. hold a bachelor’s degree from a regionally accredited college/university;
2. achieve passing scores (as established by the Commonwealth of Virginia) on the Praxis I Academic Skills Assessment or Board-approved SAT/ACT scores;
3. have a cumulative grade point average of 2.80;
4. take and receive satisfactory scores on either the Graduate Record Examination (score of 900 combined on verbal and quantitative for regular admission) or Miller Analogies Test (minimum score of 45 or 399 for regular admission);
5. have an interview with the graduate program director; and
6. submit an application for graduate studies.

Performance in classes taken as a non-degree student will not be taken into consideration in the admission process. No courses in the academic major or professional education in which the student has made below a C- will be accepted for licensure in the Darden College of Education.

Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate program director for secondary education.

Continuance

Students must:
1. maintain a grade point average of 3.00;
2. maintain a grade point average of 3.00 in the major;
3. receive a B or better in practicum to participate in teacher internship; and
4. pass Praxis II and the Virginia Communication and Literacy Assessment (VCLA) prior to the teacher internship. Passing scores must be attached to the teacher internship application.

Exit

Students must:
1. have a 3.00 grade point average;
2. have completed all course requirements;
3. have completed a professional learning portfolio; and
4. submit an application for graduation.

Curriculum

A minimum of 33 semester credits are required. The courses for completion of the degree program are listed below:

<table>
<thead>
<tr>
<th>Education Content</th>
<th>Mathematics Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEM 651</td>
<td>MAPD 601</td>
</tr>
<tr>
<td>STEM 660</td>
<td>STEM 660</td>
</tr>
<tr>
<td>STEM 661</td>
<td>MAPD 602</td>
</tr>
<tr>
<td>STEM 662</td>
<td>STEM 603</td>
</tr>
<tr>
<td>STEM 668</td>
<td>STEM 604</td>
</tr>
<tr>
<td></td>
<td>STEM 605</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
</tr>
</tbody>
</table>

Admission

Candidates must:
1. Have 3 years of successful classroom experience in teaching mathematics;
2. Hold a bachelor’s degree from a regionally accredited college/university;
3. Hold the Virginia Collegiate Professional License or an equivalent license from another state;
4. Have an undergraduate grade point average of 2.80 and an average of 3.00 in the major;
5. Achieve a satisfactory score (as established by the Department of Educational Curriculum and Instruction) on the Graduate Record Examination or the Miller Analogies Test; and
6. Submit an application for graduate studies.

Performance in classes taken as a non-degree student will not be taken into consideration in the admission process. Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate director for the program.

Continuance

Candidates must maintain a grade point average of 3.00.

Exit

Candidates must:
1. Have a 3.00 grade point average;
2. Have completed all course requirements;
3. Have completed a professional learning portfolio; and
4. Submit an application for graduation.

Master of Science in Education with the Mathematics Specialist (PK-8) Endorsement

Melva Grant, Coordinator

This graduate program leads to a Master’s of Science in Education degree with the Mathematics Specialist (PK-8) endorsement. This program is offered in partnership with the Department of Mathematics and Statistics in the College of Sciences.
Endorsement Program in Industrial Cooperative Training

John M. Ritz, Coordinator

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

Students may enroll in this teaching endorsement program as a non-degree student. If an M.S. degree is sought, some graduate level courses may be applied toward professional technical studies in this component of the degree. Admission must be sought into the M.S. program in occupational and technical studies with a concentration in career and technical education teaching. Graduate students can complete up to 12 graduate hours with a non-degree application. Students should contact the program coordinator to discuss admissions options. 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.

Continuance and Exit

Students must:

1. complete the following courses:

   Course List
   STEM 305 Curricular and Instructional Systems Development 3
   or SEPS 200/500
   SEPS 401/501 Foundations of Career and Technical Education 3
   STEM 306 Methods of Technology Education 3
   or SEPS 402/502
   Instructional Methods in Career and Technical Studies 3
   SEPS 503 Methods in 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

   Total Hours 18

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.

Twelve hours of 500 level courses may be applied toward the Master of Science in occupational and technical studies, career and technical education teaching concentration.

Licensure Program in Marketing Teacher Education

Michael F. Kosloski, Coordinator

The licensure program in marketing teacher education is designed to prepare a person who has a 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

Students can complete this licensure program through an undergraduate degree program, second undergraduate degree, graduate non-degree seeking level, or through the M.S. program. Students should meet with the program coordinator.

Licensure/Endorsement Programs

Mathematics Specialist (PK-8) Endorsement

Melva Grant, Coordinator

This endorsement program leads to a Mathematics Specialist (PK-8) endorsement for individuals with a current Virginia license and a master’s degree related to teaching elementary or middle school mathematics. This program is offered in partnership with the Department of Mathematics and Statistics in the College of Sciences.

Admission

Candidates must:

- Have 3 years of successful classroom experience in teaching mathematics;
- Hold a bachelor’s degree from a regionally accredited college/university;
- Hold the Virginia Collegiate Professional License or an equivalent license from another state.
- Have an undergraduate grade point average of 2.80 and an average of 3.00 in the major;
- Achieve a satisfactory score (as established by the Department of Educational Curriculum and Instruction) on the Graduate Record Examination or the Miller Analogies Test; and
- Submit an application for graduate studies.

Performance in classes taken as a non-degree student will not be taken into consideration in the admission process. Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate director for the program.

Continuance

Candidates must maintain a grade point average of 3.00.

Exit

Candidates must:

- Have a 3.00 grade point average;
- Have completed all course requirements;
- Have completed a professional learning portfolio; and
- Submit an application for graduation.

Curriculum

A minimum of 21 semester credits are required. The courses for completion of the endorsement program are:

- **MAPD 601**: Number and Operations for PK-8 Mathematics Specialists 3
- **MAPD 602**: Geometry and Measurement for PK-8 Mathematics Specialists 3
- **MAPD 603**: Rational Numbers and Proportional Reasoning for PK-8 Mathematics Specialists 3
- **MAPD 604**: Probability and Statistics for PK-8 Mathematics Specialists 3
- **MAPD 605**: Algebra and Functions for PK-8 Mathematics Specialists 3
- **STEM 661**: Mathematics Specialists as Teacher Leaders 3
- **STEM 668**: Internship for Mathematics Specialist 3

Total Hours 21
continuer to discuss these options. Graduate students can complete up to 12 graduate hours with a non-degree application. Prior to entering this program students must hold a baccalaureate degree. 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 have a passing PRAXIS I Math test score of 178 and a composite Virginia Communication and Literacy Assessment (VCLA) score of 470 or SAT mathematics test score of 530 and a composite VCLA score of 470 or ACT mathematics test score of 22 and a composite VCLA score of 470; students must be admitted into the approved marketing education or technology education teacher preparation program prior to enrolling in any instructional strategies practicum education courses.

Continuation and 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
   - or READ 680 Reading to Learn Across the Curriculum 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 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;
3. document at least 4000 clock hours of marketing-related work experience completed within the past five years or complete:
4. earn credit in marketing related courses to include the marketing process, economics, merchandising, advertising, personal selling, marketing math, communication, ethics, training, international marketing, and marketing technology,
5. complete a university graduate student assessment if enrolled in the M.S. degree program.

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.

Licensure Program in Technology Education through M.S. Degree
John M. Ritz, Graduate Program Director
The licensure program in technology education is designed to prepare a person who has a baccalaureate degree and industrial/military related technical experience to be a technology education teacher. Participants who successfully complete this program will qualify to apply for a Virginia teaching license to teach technology education and also receive a Master of Science degree.

Admission Information
To earn the M.S. with Virginia licensure to teach technology education, candidates have to be accepted into the M.S. concentration in career and technical education teaching. Graduate students can complete up to 12 graduate hours with a non-degree application. Student must meet with the graduate program director to have military and other technical content courses reviewed to determine their applicability toward licensure requirements. Prior to entering this program students must hold a baccalaureate degree with a major related to technology/engineering or have completed military schools equating to a minimum of 18 credits in industrial technology areas as evaluated by the American Council on Education (ACE Guide). 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 graduate program director. Finally students must have a passing PRAXIS I Math test score of 178 and a composite Virginia Communication and Literacy Assessment (VCLA) score of 470 or SAT mathematics test score of 530 and a composite VCLA score of 470 or ACT mathematics test score of 22 and a composite VCLA score of 470; students must be admitted into the approved marketing education or technology education teacher preparation program prior to enrolling in any instructional strategies practicum education courses.

Continuation and Exit
Students must:

1. complete the following courses:
   - SPED 313 Fundamentals of Human Growth and Development: Birth through Adolescence 3
   - TLED 608 Foundations of Education and Instructional Assessment 3
   - READ 680 Reading to Learn Across the Curriculum 3
   - TLED 616 Design for Effective Instruction 3
   - SEPS 508 Advanced Classroom Issues and Practices in Career and Technical Education 3
   - SEPS 586 Middle School Student Teaching for Technical Education 6
   - SEPS 596 Topics in Career and Technical Education 1-3
   - SEPS 636 Problems in Occupational and Technical Studies 3
   - SEPS 788 Instructional Strategies for Innovation in Training and Occupational Education 3
   - SEPS 789 Instructional Technology in Education and Training 3
   - FOUN 612 Applied Research Methods in Education 3
   - STEM 112 Communication Design 3
   - STEM 231 Materials and Processes Technology 3
   - STEM 320 Manufacturing and Construction Technology 3
   - STEM 350 Communication Technology Processes 3
   - STEM 351 Communication Technology 3
   - STEM 730 Introduction to Technology 3
   Total Hours 52-54

2. earn a 2.75 cumulative grade point average on undergraduate level courses and a 3.00 cumulative grade point average at the graduate level,
3. earn passing scores on PRAXIS II and Virginia Communication and Literacy Assessment Test before the teacher internship; and
4. complete the graduate student University assessment.

Completing this licensure program and other departmental requirements will allow the candidate to earn the Master of Science in occupational and technical studies, career and technical education teaching concentration.

Education and Training Emphasis in Modeling & Simulation Certificate
The College of Education offers a certificate in M&S through the Instructional Design and Technology program, a graduate-level program that is part of the STEM Education and Professional Studies Department. Simulation and gaming are used extensively as teaching tools and training environments in a variety of education and training applications. The
certificate provides the student with a fundamental understanding of modeling and simulation techniques coupled with targeted coursework in the design and use of simulation and gaming technologies for instructional settings. This certificate was the first of its kind in the U.S. and is a natural concentration area in ID&T given the widespread use of simulation and gaming as instructional tools in Pre-K-12 education, colleges, universities, and corporate and military training programs. This certificate is one of several such certificate programs offered as part of the M&S strategic plan of VMASC and ODU.

The Modeling and Simulation Certificate Program consists of a minimum of four, three credit graduate courses. Courses include:

**Core Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSIM 611</td>
<td>Modeling and Simulation Fundamentals I</td>
<td>3-6</td>
</tr>
<tr>
<td>MSIM 612</td>
<td>Modeling and Simulation Fundamentals II</td>
<td></td>
</tr>
</tbody>
</table>

**Related Elective Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDT 755/855</td>
<td>Theory and Design of Instructional Simulation</td>
<td>6-9</td>
</tr>
<tr>
<td>IDT 756/856</td>
<td>Instructional Gaming: Theories and Practice</td>
<td></td>
</tr>
<tr>
<td>SEPS 750/850</td>
<td>Trends and Issues in Training: Modeling and Simulation</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours: 12

- Students with sufficient background in computer science or engineering may opt to take MSIM 601 instead of the two course sequence of MSIM 611 and MSIM 612
- Students opting to take MSIM 601 must take another elective to fulfill the 12 hours required. This elective, and all electives, must be approved by the Darden College of Education Modeling and Simulation advisor.

For more information about the Master of Science in Engineering modeling and simulation concentration, refer to the Catalog section for the Batten College of Engineering and Technology (http://catalog.odu.edu/graduate/battencollegeofengineering/).

**Education Specialist-Occupational and Technical Studies**

John M. Ritz, Graduate Program Director

The Department of STEM Education and Professional Studies jointly offers the education specialist (Ed.S.) with the Department of Educational Foundations and Leadership. The program offers a cohesive sequence of academic studies designed to help graduates deal effectively with administrative problems encountered in urban schools and agencies. Principalship can be planned into the educational specialist degree.

**Admission**

To be admitted to the Ed.S. program, an applicant must:

1. Hold a master’s degree in career and technical education or related field;
2. Have a successful experience as an administrator or teacher;
3. Hold a teaching license or equivalent; and
4. Have taken ELS 600 or its equivalent as a prerequisite.

Students seeking this degree need to apply through the Ed.S. program in the Department of Educational Leadership and Counseling.

**Entrance**

Students must:

1. meet all University requirements,
2. provide two letters of recommendation;
3. hold a master’s degree from an accredited institution (minimum 3.25 graduate grade point average),
4. provide a one-page essay explaining why he/she should be admitted to the program; and
5. have an acceptable score on the GRE or Miller Analogies Test.

**Continuance**

Students must meet all University requirements and maintain a 3.00 or higher grade point average.

**Exit**

Students must successfully complete:

1. a written comprehensive examination,
2. the required course of study,
3. have a 3.00 grade point average or above, and
4. complete a university graduate student assessment.

**Curriculum (33 credits)**

Requirements for the Ed.S. with a specialty in occupational and technical studies include 30-33 semester hours (18 hours must be completed in 800-level courses in ELS), as follows:

**Prerequisites**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELS 610</td>
<td>School Community Relations and Politics</td>
<td>3-12</td>
</tr>
<tr>
<td>ELS 621</td>
<td>Curriculum Development and Assessment</td>
<td></td>
</tr>
<tr>
<td>ELS 657</td>
<td>Public School Law</td>
<td></td>
</tr>
</tbody>
</table>

**Educational Leadership**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELS 853</td>
<td>Public School Finance</td>
<td></td>
</tr>
<tr>
<td>ELS 854</td>
<td>Human Resource Development and Evaluation</td>
<td></td>
</tr>
<tr>
<td>ELS 871</td>
<td>Educational Systems Planning and Futures</td>
<td></td>
</tr>
<tr>
<td>ELS 876</td>
<td>Leadership for Social Justice</td>
<td></td>
</tr>
<tr>
<td>ELS 878</td>
<td>Leadership for Teaching and Learning</td>
<td></td>
</tr>
<tr>
<td>ELS 879</td>
<td>Field Research in School Administration and Supervision</td>
<td></td>
</tr>
</tbody>
</table>

**Occupational and Technical Studies**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEPS 860</td>
<td>Trends and Issues in Occupational Education</td>
<td></td>
</tr>
<tr>
<td>SEPS 862</td>
<td>Administration and Management of Education and Training Programs</td>
<td></td>
</tr>
<tr>
<td>SEPS 885</td>
<td>Curriculum Development in Occupational Education and Training</td>
<td></td>
</tr>
<tr>
<td>SEPS 888</td>
<td>Instructional Strategies for Innovation in Training and Occupational Education</td>
<td></td>
</tr>
<tr>
<td>SEPS 889</td>
<td>Instructional Technology in Education and Training</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours: 18

**Doctor of Philosophy in Education – Occupational and Technical Studies Concentration**

John M. Ritz, Graduate Program Director

The Ph.D. in Education, occupational and technical studies concentration has three emphases: technology education, career and technical education, and human resources - training. The Ph.D. is delivered on campus and through the University’s distance learning system. It requires two summers where students enroll in nine credit hours for residency. All students must be on the Norfolk campus for two, two-week summer sessions. The focus of the degree is to prepare university faculty, directors/supervisors of career programs with the relevant knowledge and skills to lead and train professionals in various career and technical fields.
and technical education, and directors of training departments in business, industry, and government.

The curriculum associated with Old Dominion University’s Ph.D. in Education, occupational and technical studies concentration is intended to accomplish the following learning outcomes:

Every individual who completes this doctoral program, regardless of his/her concentration emphasis, will develop competencies for understanding and using research methods and statistics to make data-based decisions.

The concentration emphasis will offer courses that enable graduates to know and apply their knowledge in today’s complex educational, business, or industry environments and emerge as leaders in their chosen careers.

Admission

Students may enroll in this program full- or part-time. After admittance, students must be enrolled continuously. The program faculty reviews all applicants as their application packages are completed. The following weighted criteria are used for admittance:

1. graduate grade point average (15%);
2. undergraduate grade point average (15%);
3. Graduate Record Examination (30%) – minimum combined verbal and quantitative score at 50th percentile or higher;
4. essay, 1500 word, (10%); and
5. goodness of fit with program goals and supporting references (30%).

Graduate assistantships and fellowships are available. Contact the graduate program director for information.

Entrance

All applicants to the Doctor of Philosophy degree, concentration in occupational and technical studies must meet University, college and department requirements. In addition, all applicants must:

1. hold a master’s degree related to this field or have worked in occupations related to the degree’s outcomes;
2. complete the graduate application with necessary fee;
3. submit an essay statement of academic and professional goals with an emphasis on how the Ph.D. in Education concentration in occupational and technical studies will contribute to the achievement of career goals;
4. submit three letters of reference from sources capable of commenting on readiness for advanced graduate study;
5. submit a resume that shows your educational and professional background;
6. submit academic transcripts from all undergraduate and graduate institutions previously attended or currently being attended with a minimum 3.00 graduate grade point average;
7. submit scores from the Graduate Record Examination that have been earned within the past five years with a score at or above the 50th percentile on the verbal and quantitative components; and,
8. if the applicant’s primary language is not English, submit a current score for the Test of English as a Foreign Language (TOEFL) that meets the University’s current standard.

Applications for admission are on a rolling basis. Graduate assistantships are awarded in February annually.

Continuance

Students must:

1. have their Ph.D. program approved;
2. meet residency requirements;
3. successfully complete annual progress reviews;
4. meet continuous enrollment requirements;
5. meet faculty and University program expectations;
6. complete the departmental Graduate Writing Proficiency Examination prior to the completion of nine credit hours; and
7. meet professional development and career preparation expectations.

Exit

Students must:

1. complete a minimum of 60 credit hours beyond the master’s degree;
2. complete all competencies listed on course syllabi;
3. achieve an overall grade point average of 3.00;
4. pass the written comprehensive examination,
5. select a dissertation committee;
6. prepare and defend a dissertation prospectus;
7. successfully complete a dissertation with an oral defense; and
8. complete the graduate student University assessment.

Prerequisites

A master’s degree in an appropriate field related to this concentration is required for admission to the Ph.D. program. Students who do not have equivalent coursework or appropriate educational experiences must complete the following prerequisite courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 612</td>
<td>Applied Research Methods in Education</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 722</td>
<td>Introduction to Applied Statistics and Data</td>
<td>3</td>
</tr>
<tr>
<td>SEPS 785</td>
<td>Curriculum Development in Occupational Education and Training</td>
<td>3</td>
</tr>
<tr>
<td>SEPS 788</td>
<td>Instructional Strategies for Innovation in Training and Occupational Education</td>
<td>3</td>
</tr>
<tr>
<td>SEPS 789</td>
<td>Instructional Technology in Education and Training</td>
<td>3</td>
</tr>
</tbody>
</table>

Curriculum (60 credits minimum)

Students in the occupational and technical studies concentration complete core courses in research, the occupational and technical studies concentration, and an emphasis in either career and technical education, human resources development, or technology education along with 6 credit hours of electives.

Research Core

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 812</td>
<td>Advanced Research Design and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 813</td>
<td>Advanced Program Evaluation in Education</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 814</td>
<td>Qualitative Research Design in Education</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 822</td>
<td>Applied Linear Models in Educational Research</td>
<td>3</td>
</tr>
</tbody>
</table>

Concentration

Must be taken with one emphasis area

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEPS 860</td>
<td>Trends and Issues in Occupational Education</td>
<td>3</td>
</tr>
<tr>
<td>SEPS 862</td>
<td>Administration and Management of Education and Training Programs</td>
<td>3</td>
</tr>
<tr>
<td>SEPS 865</td>
<td>Trends and Issues of Economic and Workforce Development</td>
<td>3</td>
</tr>
<tr>
<td>SEPS 885</td>
<td>Curriculum Development in Occupational Education and Training</td>
<td>3</td>
</tr>
<tr>
<td>SEPS 889</td>
<td>Instructional Technology in Education and Training</td>
<td>3</td>
</tr>
</tbody>
</table>

Technology Education Emphasis

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEM 830</td>
<td>Introduction to Technology</td>
<td>3</td>
</tr>
<tr>
<td>STEM 831</td>
<td>Technical Systems</td>
<td>3</td>
</tr>
<tr>
<td>STEM 832</td>
<td>Program Development for Technology Education</td>
<td>3</td>
</tr>
</tbody>
</table>
Students must:

1. hold a bachelor’s degree from a regionally accredited college/ university;
2. have a cumulative undergraduate grade point average of 2.80;
3. take and receive satisfactory scores on either the Graduate Record Examination (score of 900 combined on verbal and quantitative with a minimum of 400 verbal for regular admission) or Miller Analogies Test (minimum score of 45 or 399 for regular admission); and
4. have an interview with the graduate program director or his/her designee.

Performance in classes taken as a non-degree graduate student will not be taken into consideration in the admission process. No courses in the undergraduate academic major or professional education in which the student has made below a C- will be accepted for licensure in the Darden College of Education.

Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate program director for elementary/middle education.

Continuance

Students must:

1. maintain a grade point average of 3.00;
2. maintain a grade point average of 3.00 in the major

Exit

Students must:

1. have a 3.00 grade point average;
2. pass a written comprehensive examination;
3. have an exit interview;
4. have completed all course requirements; and
5. submit an application for graduation;

All ID&T students are expected to have regular and reliable access to a multimedia computer (headphones, microphone, and web cam) and a high speed Internet connection.

Program Requirements

Paper Option: Area I (24 credits); Area II (6 credits); 30 credits total.
Seminar Option: Area I (30 credits); Area II (6 credits); 36 credits total.

Core Courses 24-30

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLED 430/530</td>
<td></td>
</tr>
<tr>
<td>IDT 715</td>
<td></td>
</tr>
<tr>
<td>TLCI 731</td>
<td></td>
</tr>
<tr>
<td>IDT 749</td>
<td></td>
</tr>
<tr>
<td>TLED 665</td>
<td></td>
</tr>
<tr>
<td>IDT 761</td>
<td></td>
</tr>
<tr>
<td>IDT 746</td>
<td></td>
</tr>
<tr>
<td>IDT 775</td>
<td></td>
</tr>
<tr>
<td>FOUN 840</td>
<td></td>
</tr>
</tbody>
</table>

Support Courses

Graduate electives approved by the Graduate Program Director may be substituted for technology courses when those courses complement personal and professional goals.

Research Courses 6-12

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 612</td>
<td></td>
</tr>
<tr>
<td>SEPS 636</td>
<td></td>
</tr>
<tr>
<td>Seminar Option (13 credits; 37 credits required for graduation)</td>
<td></td>
</tr>
<tr>
<td>FOUN 612</td>
<td></td>
</tr>
<tr>
<td>IDT 773</td>
<td></td>
</tr>
</tbody>
</table>

Electives

Master of Science in Education - Secondary – Instructional Design and Technology Concentration

The Master of Science in Education – Secondary - instructional design and technology concentration is designed to meet the needs of professionals interested or involved in the design, development and delivery of instruction. The courses are appropriate for a variety of venues, including preK-12, higher education, military, and business. In this specialization, student’s select 24 to 30 credits in instructional design and technology plus the problems paper or seminar research option. Working with an advisor, students select courses that complement their backgrounds and professional goals.
Admission

Students must:
1. hold a bachelor’s degree from a regionally accredited college/university;
2. have a cumulative undergraduate grade point average of 2.80;
3. take and receive satisfactory scores on either the Graduate Record Examination (score of 900 combined on verbal and quantitative with a minimum of 400 verbal for regular admission) or Miller Analogies Test (minimum score of 45 or 399 for regular admission); and
4. have an interview with the graduate program director or his/her designee.

Performance in classes taken as a non-degree graduate student will not be taken into consideration in the admission process.

Continuance

Students must:
1. maintain a grade point average of 3.00;
2. maintain a grade point average of 3.00 in the major

Exit

Students must:
1. have a 3.00 grade point average;
2. pass a written comprehensive examination;
3. have an exit interview;
4. have completed all course requirements; and
5. submit an application for graduation;

Program Requirements

All courses in the core and elective blocks plus and are offered in distributed format, via VTEL, Virtual Classroom, or asynchronously. All ID&T students are expected to have regular and reliable access to a multimedia computer (headphones, microphone, and web cam) and a high speed Internet connection.

Doctor of Philosophy in Education – Instructional Design and Technology Concentration

The Doctor of Philosophy in Education Instructional Design and Technology (ID&T) concentration prepares individuals to conduct research and assume leadership roles in the field of instructional technology. Students will master a number of ID&T skills, ranging from instructional problem identification, task and audience analysis, strategy design, assessment, evaluation, and implementation that they can use in settings including traditional classrooms and distance education. Courses explore theories and research that provide a foundation for the field. Students are also expected to participate in and conduct research studies as part of their program. Completing the Ph.D. in ID&T will prepare students to take jobs as practitioners in business, military, government, health care, and educational settings. They are also prepared to take positions as faculty members in higher education and as researchers for private organizations.

Admission

For admission to this program, individuals should have completed master’s degree in an appropriate discipline from a regionally accredited university. Degrees that are equivalent to a master’s degree such as L.L.B., J.D., and D.D.S. are also acceptable. Prospective students should also have prior course work in statistics and instructional technology. If this requirement is not met, then additional course work may be added to the candidate’s graduate program of study at the discretion of the advisor and GPD. Please see prerequisites on the curriculum description for specifics.

Admission to the instructional design and technology Ph.D. program is competitive. A number of criteria are considered including graduate and undergraduate GPAs, GRE scores, writing ability, a personal interview, and the match between student interests and faculty expertise. Meeting the minimum requirements established by the department does not ensure admission to the program. A minimum undergraduate GPA of 2.8 and a minimum graduate GPA of 3.25 are recommended.

Application requirements for the Ph.D. in instructional design and technology are as follows:
1. a completed application which is available online or from the Office of Graduate Admissions.
2. Official transcripts of all undergraduate and graduate courses and degrees completed.
3. Official report scores from the Graduate Record Examination (verbal, quantitative, and analytical) taken within the last five years. GRE scores expire after five years; however, candidates who have completed the exam prior to five years before the application deadline may submit those scores for consideration if they are provided from an official source such as a transcript or form provided by the Educational Testing Service. Old Dominion University reserves the right to determine what is an “official source.”
4. Applicants whose native language is not English (or who do not have a B.S. or M.S. degree from an accredited institution in a country where English is the native language) must submit a current score for the Test of English as a Foreign Language (TOEFL) of at least 600 (written) or 250 (computer based).
5. Applicants must submit a 1500 word statement of their academic and professional goals with an emphasis on how the Ph.D. degree in instructional design and technology will contribute to the achievement of the stated goals.
6. Three letters of reference from sources capable of commenting on the applicant’s readiness for advanced graduate study. It is recommended that at least two of the letters come from university faculty members. Other letters may come from work supervisors or managers.
7. An interview with the instructional design and technology program faculty. This committee will also review applications for admission.

Program Requirements

The Ph.D. program in Education with a concentration in instructional design and technology is comprised of courses totaling a minimum of 60 academic credit hours beyond the master’s degree. The curriculum includes an introductory core of six credit hours, an instructional design and technology core with a minimum of 24 credit hours, a research core of 15 credit hours, the three credit dissertation seminar and the dissertation, which will include a minimum of 12 credit hours. The dissertation will often include more than 12 credit hours depending on the length of time necessary for completion. Students entering the program may also need to complete introductory statistics courses and an instructional technology foundations course if they have not had equivalent courses or cannot demonstrate competency at a satisfactory level. Students who enter the Ph.D. program with a master’s degree in an academic field that is unrelated to instructional design and technology and/or who have not completed courses to develop competency in specified areas may need to complete these courses in addition to the required courses. All courses are offered through distance learning.

All IDT students are expected to have regular and reliable access to a multimedia computer (headphones, microphone, and web cam) and a high speed Internet connection.

Under normal circumstances, admissions will be offered at least three times a year for the fall, spring, and summer semesters. Acceptance is competitive to assure that there is an adequate number of full-time faculty to serve the students through advising, mentoring, and other duties, particularly when individuals reach the dissertation stage of the program.
Students interested in attending full-time and applying for financial aid should submit their applications by February 1 prior to the fall semester they wish to start.

Applicants must submit completed applications and all related material no later than the following dates:
- July 1st for the Fall Semester*
- November 1st for the Spring Semester
- March 1st for the Summer Semester

**Program Completion and Exit**
To complete the program students must fully comply with the curriculum below and all requirements noted elsewhere in the University catalog for graduate students and within the Ph.D. in Education Handbook. It is the responsibility of the student to obtain these materials and complete required portions.

**Curriculum**
Prerequisites: All students admitted into the Ph.D. program in instructional design and technology must complete the following prerequisite courses unless they have previously completed equivalent graduate level coursework or have appropriate educational experience.

<table>
<thead>
<tr>
<th>Prerequisites</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 722</td>
<td>Introduction to Applied Statistics and Data Analysis</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>IDT 617</td>
<td>Foundations of Instructional Technology</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**ID&T Core Courses (21 hours)**
- IDT 801 Instructional Design and Technology Seminar 3
- IDT 849 Instructional Systems Design 3
- IDT 810 Trends and Issues in Instructional Design and Technology 3
- IDT 760/860 Cognition and Instructional Design 3
- IDT 773/873 Advanced Instructional Design Techniques 3
- IDT 751/851 Computer-Based Multi-Media Design 3
- IDT 730/830 Principals and Practice of Human Performance Technology 3

**Research Core (15 hours)**
- FOUN 823 Analysis of Variance Applied to Educational Research 3
- FOUN 812 Advanced Research Design and Analysis 3
- FOUN 814 Qualitative Research Design in Education 3
- IDT 725/825 Human Performance Assessment 3
- IDT 879 Research Residency in Instructional Design and Technology 3

**Instructional Design Concentration**
Choose from the following:

**Design & Theory**
- IDT 748/848 Instructional Technology Product Evaluation
- IDT 761/861 Applied Instructional Design
- IDT 763 Instructional Design Theory (IDT 863)
- IDT 746/846 Foundations of Distance Education
- IDT 764/864 Theories and Research
- IDT 742/842 Task Analysis Methods

**Technology**
- IDT 715/815 Management of Technology Resources in the Classroom
- TCLI 735/835 Connecting Research In Early Developmental Practice in Early Childhood Education
- IDT 752/852 Diffusion and Adoption of Instructional Technology Innovations
- IDT 756/856 Instructional Gaming: Theories and Practice

**Electives**

**Capstone Courses (15 hours)**
- FOUN 881 Dissertation Seminar *** 3
- SEPS 899 Dissertation in Occupational Education 1-12

| Total Hours | 55-66 |

**Additional courses or substitutions may be used as approved by student’s advisory committee.**

**Department of Teaching & Learning**

145 Education Building
757-683-3283, 757 683-3284
Charlene Fleener, Chair
The Department of Teaching and Learning offers programs leading to the Master of Science in Education Degree with majors in Early Childhood, Elementary, Reading, and Secondary Education, and the Doctor of Philosophy in Education Degree with concentrations in Early Childhood, Literacy Leadership, and Curriculum and Instruction. Programs leading to the Master of Science in Education Degree include the 5-year undergraduate/graduate program leading to the Bachelor of Science in Interdisciplinary Studies through the College of Arts and Letters with continuation into the Masters of Science in Education Degree with initial teacher licensure in Early Childhood or Elementary Education. State-approved teacher preparation programs at the graduate level are also available for individuals with non-teaching bachelors degrees interested in licensure at the Elementary, Middle, or Secondary school grade levels. Additionally, the Department of Teaching & Learning offers programs leading to state licensure in Library Science, and programs for licensed teachers in Reading including the Reading Specialist endorsement, and the Field-Based Masters Program.

**Early Childhood Education**
- Master of Science in Education-Research Emphasis (non-licensure)
- Master of Science in Education, with Initial Licensure (PreK-3) Continuation of undergraduate Interdisciplinary Studies – Teacher Preparation Concentration (IDS Fifth Year program)
- Doctor of Philosophy in Education – Early Childhood Emphasis

**Elementary and Middle School Programs**
- Master of Science in Education, Elementary Education, Initial Licensure (PreK-6) [Continuation of undergraduate Interdisciplinary Studies – Teacher Preparation Concentration (IDS Fifth Year program)]
- Master of Science in Education, Elementary Education, Initial Licensure (PreK-6)
• Master of Science in Education, Elementary/Middle Education, Initial Licensure Middle School (Grades 6-8)
• Master of Science in Education, Elementary/Middle Education, Licensed Teachers

Secondary Education Programs
• Master of Science in Education with Initial Licensure (6-12) Secondary Education
• Master of Science in Education for Licensed Teacher - Secondary Education

Field-Based Master's Programs
• Master of Science in Education, Elementary Education, Licensed Teachers
• Master of Science in Education, Secondary Education Licensed Teachers

Library Science – School Librarianship
• Library Science Endorsement for licensed teachers (non-degree)
• Master of Science in Education, Elementary or Secondary Education (Endorsement for licensed teacher)
• Master of Science in Education, Elementary or Secondary Education (Initial Licensure for non-teachers)

Military Career Transition Program
• Master of Science in Education with Initial Licensure Elementary Education (PreK-6)
• Master of Science in Education with Initial Licensure Elementary/Middle Education (Grades 6-8)
• Master of Science in Education with Initial Licensure Secondary Education (6-12)

Reading Education
• Reading Specialist K-12 Endorsement for licensed teachers (non-degree)
• Master of Science in Education – Reading plus Reading Specialist Endorsement (for licensed teachers)
• Doctor of Philosophy in Education - Literacy Leadership Emphasis

Doctor of Philosophy in Education - Curriculum and Instruction Emphasis

Admission
Admission to the graduate program in early childhood education is granted by the graduate program director in conjunction with early childhood faculty. The following requirements are necessary for admission to the program. Students must:
1. hold a baccalaureate degree from a regionally accredited institution;
2. have an undergraduate GPA of 3.0 or better;
3. submit satisfactory scores on the Graduate Record Examination (GRE) or a Miller Analogies Test (MAT); and,
4. submit a 400-500 word goal statement indicating personal goals and motivation for pursuing the early childhood education program

Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to the conditions specified by the graduate program director.

Continuance
Students must:
1. maintain a grade point average of 3.00 overall, and
2. successfully complete all competencies relative to the program of study.

Exit
Students must:
1. have a grade point average of 3.00 overall and a grade of B- or better in all course work;
2. satisfactorily complete all program requirements, including the comprehensive examination;
3. complete a Graduate Student Assessment;
4. complete the Post Task Rating Form online at http://education.odu.edu/esse/; and
5. submit a written research project according to the program guidelines prior to the awarding of the Master of Science in Education degree.

Program Requirements
The master’s degree requires a minimum of 30 credits of graduate study.

Curriculum

<table>
<thead>
<tr>
<th>Research Core Courses</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 612</td>
<td>Applied Research Methods in Education</td>
</tr>
<tr>
<td>FOUN 722</td>
<td>Introduction to Applied Statistics and Data Analysis</td>
</tr>
<tr>
<td>FOUN 641</td>
<td>Assessment and Evaluation of Student Learning</td>
</tr>
<tr>
<td>TLCI 735</td>
<td>Connecting Research In Early Developmental Practice in Early Childhood Education</td>
</tr>
<tr>
<td>TLED 636</td>
<td>Problems in Education</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 700</td>
<td>Social/Emotional Aspects of Child Development</td>
</tr>
<tr>
<td>TLCI 736</td>
<td>Working with At-Risk Children and Families: An Ecological Approach</td>
</tr>
<tr>
<td>TLED 688</td>
<td>Practicum in Early Childhood</td>
</tr>
<tr>
<td>TLED 695</td>
<td>Topics in Education</td>
</tr>
</tbody>
</table>

Total Hours 30

Master of Science in Education-Early Childhood -Research Emphasis Prek-3
145 Education Building
757-683-3284
Andrea DeBruin-Parecki, Program Director

A master’s degree in early childhood education with a research emphasis will provide educators with an advanced professional degree and qualifications beyond licensure. Course work for the degree includes a focus on scholarly research, statistical analysis, and writing for professional journals. This emphasis also will serve as the prerequisite course work to the PhD in education with a concentration in early childhood, thereby facilitating entry into the PhD program.
Fifth Year Master of Science in Education, Initial Licensure Early Childhood (PreK-3)

145 Education Building
757-683-3284

Charlene Fleener, Graduate Program Director

This program is designed for prospective teachers who have completed the undergraduate program in teacher education primary/elementary offered by the Department of Interdisciplinary Studies in the College of Arts and Letters.

Admission

All students must apply for and be admitted into the approved M.S. Ed with initial licensure program for Early Childhood Education (grades PreK-3). The Bachelor of Science Degree in Interdisciplinary Studies with a concentration in teacher education, primary/elementary from the College of Arts and Letters at Old Dominion University is required. Students must meet the required criteria for admission by passing the Virginia Board of Education prescribed assessments and earn the minimum required Grade point averages (GPA).

Virginia Board of Education prescribed assessments are outlined in the Teacher Education Services and Advising section of this catalog.

To review more information on the Virginia Board of Education prescribed assessments visit the Teacher Education Services website, www.odu.edu/tes.

A cumulative undergraduate GPA of 2.80 is required for admission. No courses in the academic major or professional education in which the student has made below a C will be accepted for admission in the Darden College of Education. Satisfactory scores must be submitted on either the Graduate Record Examination or Miller Analogies Test. An application for graduate studies, two letters of reference, a 400-500 word goal statement indicating personal goals and motivation for pursuing early childhood education, and official transcripts must be submitted by the appropriate deadline for admission. Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate program director for early childhood education.

Continuance

Students must maintain a cumulative GPA of 3.00 and a minimum of 3.00 GPA in the major. A grade of “B” or higher is required in all practicum coursework. Students must take and pass all Virginia Board of Education prescribed assessments including the State-approved reading assessment, the Virginia Communication and Literacy Assessment (VCLA), and the PRAXIS II examination appropriate for the early childhood endorsement (test code 0014) prior to or while enrolled in the Seminar in Teacher Education (TLED 583) course. All course work in the program must be completed with at least a 3.00 graduate GPA, a grade of B in the advanced graduate practicum and all assessments must be passed prior to attending the Teacher Candidate Internship Orientation session. A criminal background check must be completed prior to placement in a field experience required for practicum courses and for the teacher candidate internship. For more information please review the policy in the Teacher Education Services website: http://www.odu.edu/tes

To review more information on the Virginia Board of Education prescribed assessments visit the Teacher Education Services website, www.odu.edu/tes.

Graduation

Requirements for graduation include passage of the written Comprehensive exam, completion of the Responsible Conduct of Research modules, completion of the Graduate Assessment, a minimum cumulative 3.00 GPA, successful completion of the Teacher Candidate Internship, an exit interview, and submit an application for graduation. No courses in the academic major or professional education in which the student earned below a C will be accepted toward licensure requirements in the Darden College of Education.

Curriculum

<table>
<thead>
<tr>
<th>Prerequisite *</th>
<th>TLED 474/574 Foundations and Contemporary Issues in Early Childhood Education (if not completed in BS program)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Required Courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>READ 683 Diagnostic Teaching of Reading in the Classroom</td>
<td>3</td>
</tr>
<tr>
<td>SPED 500 Foundations of Special Education: Legal Aspects and Characteristics</td>
<td>3</td>
</tr>
<tr>
<td>TLED 592 Integrating Mathematics and Science Across the Curriculum, PK-3</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 641 Assessment and Evaluation of Student Learning</td>
<td>3</td>
</tr>
<tr>
<td>TLED 677 Advanced Child Development Theory and Research</td>
<td>3</td>
</tr>
<tr>
<td>TLED 690 The Child and the Family</td>
<td>3</td>
</tr>
<tr>
<td>TLED 679 Advanced Classroom Management and Practicum in PreK-6</td>
<td>3</td>
</tr>
<tr>
<td>TLED 583 Seminar in Teacher Education</td>
<td>1</td>
</tr>
<tr>
<td>TLED 668 Internship/Student Teaching and Seminar</td>
<td>9</td>
</tr>
<tr>
<td>Total Hours</td>
<td>34</td>
</tr>
</tbody>
</table>

* If not completed in the BS IDS Teacher Preparation Concentration program.

Due to changing University requirements, national standards, and the Virginia Board of Education licensure regulations, the programs in the Darden College of Education 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 Teacher Education Services website: www.odu.edu/tes.

Early Childhood Education Post-baccalaureate Endorsement Program

145 Education Building
757-683-3284

Charlene Fleener, Graduate Program Director

This program is available only to students who already possess an undergraduate degree from Old Dominion University in Interdisciplinary Studies (IDS) Teacher Preparation concentration and who want to obtain a Virginia teaching license with an endorsement in preschool through grade three.

Admission

All students must apply for and be admitted into the approved post-baccalaureate endorsement program for Early Childhood Education (grades PreK-3). A bachelor’s degree from Old Dominion University in Interdisciplinary Studies (IDS) Teacher Preparation concentration is required to be considered for admission in this program. Students must meet the required criteria for admission by passing the Virginia Board of Education prescribed assessments and earn the minimum required Grade point averages (GPA) below:

Virginia Board of Education prescribed entry assessments are outlined in the Teacher Education Services and Advising section of the catalog.

Virginia Board of Education prescribed assessments:

- A passing PRAXIS I composite score of 532 or
- Qualifying SAT or ACT test scores or

Due to changing University requirements, national standards, and the Virginia Board of Education licensure regulations, the programs in the Darden College of Education 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 Teacher Education Services website: www.odu.edu/tes.

OLD DOMINION UNIVERSITY 135
To review more information on the Virginia Board of Education prescribed assessments visit the Teacher Education Services website, www.odu.edu/tes.

A cumulative undergraduate GPA of 2.80 is required for admission. No courses in the academic major or professional education in which the student has made below a C- will be accepted for admission in the Darden College of Education. An application for non-degree admission must be submitted by the appropriate deadline for admission.

Continuance

Students must maintain GOOD ACADEMIC standing as noted on the academic transcript. A grade of “B” or higher is required in all practicum coursework. Students must take and pass all Virginia Board of Education prescribed assessments including the Reading for Virginia Educators (RVE), the Virginia Communication and Literacy Assessment (VCLA), and the PRAXIS II code 0014 paper delivered or 5014 computer delivered prior to or while enrolled in the Seminar in Teacher Education (TLED 583) course. All assessments must be passed prior to the Teacher Candidate Internship Orientation session. A criminal background check must be completed prior to placement in a field experience required for practicum courses and for the teacher candidate internship. For more information please review the policy in the Teacher Education Services website: http://www.odu.edu/tes

To review more information on the Virginia Board of Education prescribed professional assessments visit the Teacher Education Services website, www.odu.edu/tes.

Completion

Requirements for completion are GOOD ACADEMIC standing, successful completion of the Teacher Candidate Internship, complete all course requirements and submit an application for Virginia licensure. No courses in the academic major or professional education in which the student earned a grade of “C” or better will be accepted toward licensure requirements in the Darden College of Education.

Program Requirements

Students seeking initial licensure for grades PreK-3 must meet the academic content knowledge requirements with a minimum grade of C. Transcripts will be evaluated by the teacher education advisor to determine whether these academic requirements have been met by previous course work at the undergraduate level. Subject area specific course work that was not met in previous course work must be completed prior to Teacher Candidate Internship (student teaching) orientation session.

Curriculum

**Prerequisite Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLED 301</td>
<td>Foundations and Introduction to Assessment of Education</td>
</tr>
<tr>
<td>TLED 430/530</td>
<td>PK-12 Instructional Technology</td>
</tr>
<tr>
<td>SPED 313</td>
<td>Fundamentals of Human Growth and Development: Birth through Adolescence</td>
</tr>
<tr>
<td>TLED 468/568</td>
<td>Language Acquisition and Reading for Students with Diverse Learning Needs</td>
</tr>
</tbody>
</table>

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 406/506</td>
<td>Students with Diverse Learning Needs in the General Education Classroom</td>
</tr>
<tr>
<td>TLED 474/574</td>
<td>Foundations and Contemporary Issues in Early Childhood Education</td>
</tr>
<tr>
<td>TLED 592</td>
<td>Integrating Mathematics and Science Across the Curriculum, PK-3</td>
</tr>
<tr>
<td>TLED 593</td>
<td>Integrating Children’s Literature, Language Arts and Social Studies Across the ECE Curriculum</td>
</tr>
<tr>
<td>TLED 690</td>
<td>The Child and the Family</td>
</tr>
<tr>
<td>TLED 679</td>
<td>Advanced Classroom Management and Practicum in PreK-6</td>
</tr>
<tr>
<td>READ 683</td>
<td>Diagnostic Teaching of Reading in the Classroom</td>
</tr>
<tr>
<td>TLED 583</td>
<td>Seminar in Teacher Education</td>
</tr>
<tr>
<td>TLED 669</td>
<td>Internship/Student Teaching and Seminar</td>
</tr>
</tbody>
</table>

Total Hours: 40

In order for a student to move from the Post-baccalaureate Endorsement program into the master’s program in early childhood, graduate admission must be granted prior to completing 12 semester hours of graduate work. If accepted into the program, only up to 12 semester hours would be counted toward the graduate degree.

Due to changing University requirements, national standards, and the Virginia Board of Education licensure regulations, the programs in the Darden College of Education 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 Teacher Education Services website: www.odu.edu/tes.

**Doctor of Philosophy in Education - Early Childhood Education Emphasis within the Curriculum and Instruction Program**

145 Education Building

757-683-3284

Andrea DeBruin-Parecki, Advisor

The Doctor of Philosophy in Curriculum and Instruction at the Darden College of Education of Old Dominion University, with concentrations in Curriculum and Instruction, Early Childhood Education, and Literacy Leadership provides the opportunity for students to become scholarly leaders to serve our nation’s schools, colleges, universities and related agencies such as business, government, and research institutions to contribute to global education. The curricula is solidly grounded in interpreting and producing research, use of technology to enhance the teaching/learning process, equity, and leadership, which are woven into common core courses and concentration-specific courses.

**Early Childhood Education Emphasis:**

The PhD in Education with a concentration in Early Childhood Education program, through its integral partnership with the Old Dominion University Child Study and Development Centers, focuses on the multidisciplinary study of the cognitive, language, and healthy social/emotional development of young children from birth to age nine. The program prepares students to become faculty in colleges and universities and senior administrators in institutions and agencies. Personalized mentorship and professional training is provided for those who desire careers in academic research, child advocacy, program design and evaluation, and higher education, including teacher preparation, policy, and administrative leadership.

See the PhD in Curriculum and Instruction for complete program information (https://nextcatalog.odu.edu/graduate/dardencollegeofeducation/teachinglearning/#generaldescriptionoftheph.d.ineducationcurriculumandinstruction).
Master of Science in Education – Elementary/Middle School
145 Education Building
757-683-3284
Guang-Lea Lee, Graduate Program Director

General Description of PreK-6 and Middle School Programs
Within the Master of Science in Education degree program in elementary education, there are a number of programs for both licensed teachers as well as those seeking initial licensure in PreK-6 and middle school 6-8.

Fifth Year Master of Science in Education for Initial Licensure Elementary PreK-6 (Continuation of undergraduate Interdisciplinary Studies – Teacher Preparation Concentration from ODU)
This program is designed for prospective teachers who have completed the undergraduate program in primary/elementary teacher preparation concentration offered by the Department of Interdisciplinary Studies in the College of Arts and Letters.

Admission
All students must apply for and be admitted into the approved M.S. Ed with initial licensure program for Elementary Education (grades PreK-6). The Bachelor of Science Degree in interdisciplinary studies with a teacher preparation concentration, primary/elementary from the College of Arts and Letters at Old Dominion University is required. Students must meet the required criteria for admission by passing the Virginia Board of Education prescribed assessments and earn the minimum required Grade point averages (GPA).

Virginia Board of Education prescribed assessments are outlined in the Teacher Education Services and Advising section of this catalog. Virginia Board of Education prescribed assessments:
• A passing PRAXIS I composite score of 532 or
• Qualifying SAT or ACT test scores or
• PRAXIS I Math test score of 178 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
• SAT Mathematics test score of 530 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
• ACT Mathematics test score of 22 and a composite Virginia Communication and Literacy (VCLA) score of 470

To review more information on the Virginia Board of Education prescribed assessments visit the Teacher Education Services website, www.odu.edu/tes.

A cumulative undergraduate GPA of 2.80 is required for admission. No courses in the academic major or professional education in which the student has made below a C will be accepted toward licensure requirements in the Darden College of Education.

Continuance
Students must maintain a cumulative GPA of 3.00. A grade of “B” or higher is required in all practicum coursework. Students must take and pass all Virginia Board of Education prescribed assessments including the Reading for Virginia Educators (RVE), the Virginia Communication and Literacy Assessment (VCLA), and the PRAXIS II. Students must take and pass all Virginia Board of Education prescribed assessments including the Reading for Virginia Educators (RVE), the Virginia Communication and Literacy Assessment (VCLA), and the PRAXIS II code 0014 paper delivered or 5014 computer delivered prior to or while enrolled in the Seminar in Teacher Education (TLED 583 (https://nextcatalog.odu.edu/graduate/dardencollegeofeducation/teacherlicensing/#)) course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session. A criminal background check must be completed prior to placement in a field experience required for practicum courses and for the teacher candidate internship. For more information please review the policy in the Teacher Education Services website: http://www.odu.edu/tes.

To review more information on the Virginia Board of Education prescribed professional assessments visit the Teacher Education Services website, www.odu.edu/tes.

Graduation
Requirements for graduation include passage of the written Comprehensive exam, completion of the Graduate Assessment, a minimum cumulative 3.00 GPA, successful completion of the Teacher Candidate Internship, an exit interview, complete all course requirements and submit an application for graduation. No courses in the academic major or professional education in which the student earned below a C- will be accepted toward licensure requirements in the Darden College of Education.

Program Requirements
Graduate Professional Education Courses
Graduate Semester I
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 500</td>
<td>Foundations of Special Education: Legal Aspects and Characteristics</td>
</tr>
<tr>
<td>LIBS 642</td>
<td>Children’s Literature Across the Curriculum, PK-8</td>
</tr>
<tr>
<td>TLED 690</td>
<td>The Child and the Family</td>
</tr>
<tr>
<td>TLED 677</td>
<td>Advanced Child Development Theory and Research</td>
</tr>
</tbody>
</table>

Graduate Semester II
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLED 679</td>
<td>Advanced Classroom Management and Practicum in PreK-6</td>
</tr>
<tr>
<td>FOUN 641</td>
<td>Assessment and Evaluation of Student Learning</td>
</tr>
<tr>
<td>READ 680</td>
<td>Reading to Learn Across the Curriculum</td>
</tr>
<tr>
<td>TLED 583</td>
<td>Seminar in Teacher Education</td>
</tr>
</tbody>
</table>

Graduate Semester III
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLED 668</td>
<td>Internship/Student Teaching and Seminar</td>
</tr>
</tbody>
</table>

Total Hours
31
* Prerequisite: TLED 479/TLED 579

Due to changing University requirements, national standards, and the Virginia Board of Education licensure regulations, the programs in the Darden College of Education 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 Teacher Education Services website: www.odu.edu/tes.

Master of Science in Education with Initial Licensure - PreK-6
145 Education Building
757-683-3284
Guang-Lea Lee, Graduate Program Director

This licensure/master’s program in elementary school education (PreK-6) is designed for individuals with a non-teaching B.S. or B. A. degree who want...
to obtain licensure as a teacher in preschool through grade six and earn a master’s degree at the same time.

Admission

All students must apply and be admitted into the approved M.S. Ed with initial licensure program for Elementary Education (grades PreK-6). A bachelor’s degree from a regionally accredited college/university is required in the liberal arts and sciences (or equivalent) including specific course work meets Virginia’s stated coursework competencies for elementary education (PreK-6) subject area preparation. Students must meet the required criteria for admission by passing the Virginia Board of Education prescribed assessments and earn the minimum required Grade point averages (GPA).

Virginia Board of Education prescribed assessments are outlined in the Teacher Education Services and Advising section of this catalog. Virginia Board of Education prescribed assessments:

- A passing PRAXIS I composite score of 532 or
- Qualifying SAT or ACT test scores or
- PRAXIS I Math test score of 178 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
- SAT Mathematics test score of 530 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
- ACT Mathematics test score of 22 and a composite Virginia Communication and Literacy (VCLA) score of 470

To review more information on the Virginia Board of Education prescribed assessments visit the Teacher Education Services website, www.odu.edu/tes.

A cumulative undergraduate GPA of 2.80 is required for admission. No courses in the academic major or professional education in which the student has made below a C- will be accepted for admission in the Darden College of Education. Satisfactory scores must be submitted on either the Graduate Record Examination or Miller Analogies Test. An application for graduate studies, and official transcripts must be submitted by the appropriate deadline for admission. Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate program director for elementary/middle education.

Continuance

Students must maintain a cumulative GPA of 3.00. A grade of “B” or higher is required in all practicum coursework. Students must take and pass all Virginia Board of Education prescribed assessments including the Virginia Board of Education approved reading assessment. Reading for Virginia Educators (RVE), the Virginia Communication and Literacy Assessment (VCLA), and the PRAXIS II examination appropriate for the elementary education (PreK-6) endorsement prior to or while enrolled in the Seminar in Teacher Education (TLED 583) course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session. A criminal background check must be completed prior to placement in a field experience required for practicum courses and for the teacher candidate internship. More information is found on the Teacher Education Services website: http://www.odu.edu/tes.

To review more information on the Virginia Board of Education prescribed professional assessments visit the Teacher Education Services website, www.odu.edu/tes.

Graduation

Requirements for graduation include passage of the written Comprehensive exam, completion of the Graduate Assessment, a minimum cumulative 3.00 GPA, successful completion of the Teacher Candidate Internship, an exit interview, completion of all course requirements and submit an application for graduation. No courses in the academic major or professional education in which the student earned below a C- will be accepted toward licensure requirements in the Darden College of Education.

Program Requirements

Students seeking initial licensure plus a master’s degree in elementary education (grades PreK-6) must meet the academic concentration requirements with a minimum grade of C-. Transcripts will be evaluated by the education advisor to determine whether these academic requirements have been met by previous course work. Subject area specific course work that was not met in previous course work must be completed prior to Teacher Candidate Internship (student teaching) orientation session.

Curriculum

Prerequisite Undergraduate Professional Education Classes

| TLED 301 | Foundations and Introduction to Assessment of Education |
| TLED 430/530 | PK-12 Instructional Technology |
| SPED 313 | Fundamentals of Human Growth and Development: Birth through Adolescence |
| SPED 406/506 | Students with Diverse Learning Needs in the General Education Classroom |
| TLED 468/568 | Language Acquisition and Reading for Students with Diverse Learning Needs |

Graduate Professional Education Courses

| TLED 532 | Developing Instructional Strategies PreK-6: Language Arts |
| STEM 533 | Developing Instructional Strategies PreK-6: Mathematics |
| LIBS 642 | Children’s Literature Across the Curriculum, PK-8 |
| READ 680 | Reading to Learn Across the Curriculum |
| STEM 534 | Developing Instructional Strategies PreK-6: Science |
| TLED 535 | Developing Instructional Strategies PreK-6: Social Studies |
| TLED 579 | Classroom Management and Practice PreK-3; PreK-6 |
| TLED 690 | The Child and the Family |
| FOUN 641 | Assessment and Evaluation of Student Learning |
| TLED 677 | Advanced Child Development Theory and Research |
| TLED 679 | Advanced Classroom Management and Practicum in PreK-6 |
| TLED 583 | Seminar in Teacher Education |
| TLED 668 | Internship/Student Teaching and Seminar |

Total Hours: 58

Due to changing University requirements, national standards, and the Virginia Board of Education licensure regulations, the programs in the Darden College of Education 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 Teacher Education Services website: www.odu.edu/tes.

Elementary Education (PreK-6) Post-Baccalaureate Endorsement Program

145 Education Building
757-683-3284
Guang-Lea Lee, Graduate Program Director

Many students who already possess an undergraduate degree enter Old Dominion University for the sole purpose of meeting Virginia’s teaching licensure standards. When these students apply for admission into an approved teacher education program, they are considered to be post-
baccalaureate endorsement program candidates and must meet the college’s policy for admitting students into an approved teacher education program. Admission to Old Dominion University does not guarantee admission into the post-baccalaureate endorsement teacher preparation programs in the Darden College of Education. The PreK-6 “post-baccalaureate endorsement” option is available for those students who wish to pursue licensure and do not meet the master’s degree admission requirements or who do not wish to pursue the master’s degree.

This licensure program in elementary education (PreK-6) is designed for individuals with a non-teaching B.S. or B.A. degree who want to obtain licensure to teach in grade preK through grade six.

Admission

All students must apply for and be admitted into the approved post-baccalaureate endorsement program for Elementary Education (grades PreK-6). A bachelor’s degree from a regionally accredited college/university is required in the liberal arts and sciences (or equivalent) including specific course work to meet Virginia’s stated coursework competencies for elementary education (PreK-6) subject area preparation. Students must meet the required criteria for admission by passing the Virginia Board of Education prescribed assessments and earn the minimum required Grade point averages (GPA).

Virginia Board of Education prescribed entry assessments are outlined in the Teacher Education Services and Advising section of the catalog.

Virginia Board of Education prescribed assessments:
- A passing PRAXIS I composite score of 532 or
- Qualifying SAT or ACT test scores or
- PRAXIS I Math test score of 178 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
- SAT Mathematics test score of 530 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
- ACT Mathematics test score of 22 and a composite Virginia Communication and Literacy (VCLA) score of 470

To review more information on the Virginia Board of Education prescribed assessments visit the Teacher Education Services website, www.odu.edu/tes.

A cumulative undergraduate GPA of 2.80 is required for admission. No courses in the academic major or professional education in which the student has made below a C- will be accepted for admission in the Darden College of Education. An application for non-degree admission must be submitted by the appropriate deadline for admission. Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate program director for elementary/middle education.

Continuance

Students must maintain a cumulative GPA of 3.00. A grade of “B” or higher is required in all practicum coursework. Students must take and pass all Virginia Board of Education prescribed assessments including the Virginia Board of Education approved reading assessment (VRA), the Virginia Communication and Literacy Assessment (VCLA), and the PRAXIS II examination appropriate for the early childhood endorsement prior to or while enrolled in the Seminar in Teacher Education (TLED 301) course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session. A criminal background check must be completed prior to placement in a field experience required for practicum courses and for the teacher candidate internship. For more information please review the policy in the Teacher Education Services website: http://www.odu.edu/tes

To review more information on the Virginia Board of Education prescribed professional assessments visit the Teacher Education Services website, www.odu.edu/tes.

Completion

Requirements for completion are a minimum cumulative 3.00 GPA, successful completion of the Teacher Candidate Internship, complete all course requirements and submit an application for Virginia licensure. No courses in the academic major or professional education in which the student earned below a C- will be accepted toward licensure requirements in the Darden College of Education.

Program Requirements

Students seeking initial licensure for grades PreK-6 must meet the academic concentration requirements with a minimum grade of C-. Transcripts will be evaluated by the education advisor to determine whether these academic requirements have been met by previous course work. Subject area specific course work that was not met in previous course work must be completed prior to Teacher Candidate Internship (student teaching) orientation session.

Curriculum

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLED 301</td>
<td>Foundations and Introduction to Assessment of Education</td>
</tr>
<tr>
<td>TLED 430/530</td>
<td>PK-12 Instructional Technology</td>
</tr>
<tr>
<td>SPED 313</td>
<td>Fundamentals of Human Growth and Development: Birth through Adolescence</td>
</tr>
<tr>
<td>TLED 468/568</td>
<td>Language Acquisition and Reading for Students with Diverse Learning Needs</td>
</tr>
</tbody>
</table>

Graduate Professional Education Courses 28

| STEM 432/532         | Developing Instructional Strategies PreK-6: Language Arts |
| STEM 433/533         | Developing Instructional Strategies PreK-6: Mathematics |
| READ 680             | Reading to Learn Across the Curriculum |
| TLED 434/534         | Developing Instructional Strategies PreK-6: Science |
| TLED 435/535         | Developing Instructional Strategies PreK-6: Social Studies |
| TLED 679             | Advanced Classroom Management and Practicum in PreK-6 |
| TLED 583             | Seminar in Teacher Education |
| TLED 669             | Internship/Student Teaching and Seminar |

Total Hours 40

Due to changing University requirements, national standards, and the Virginia Board of Education licensure regulations, the programs in the Darden College of Education 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 Teacher Education Services website: www.odu.edu/tes.

Master of Science in Education with Initial Licensure – Middle School (Grades 6-8)

Charlene Fleener, Graduate Program Director

This licensure/master’s program in middle school education (grades 6-8) is designed for prospective teachers wanting to obtain initial middle school teaching licensure and a master’s degree at the same time. Available to students who have a non-teaching B.S. or B.A. degree, the program requires students to take courses that meet the Commonwealth of Virginia’s stated academic competency requirements and leads to two undergraduate endorsement areas selected from the following:
Mathematics * 21
English * 21
Science * 21
Social Studies * 21
Education Courses taken at the graduate level 33
* Minimum hours to satisfy requirement.

Admission

All students must apply for and be admitted into the approved M.S. Ed with initial licensure program for Middle School (grades 6-8). A bachelor’s degree from a regionally accredited college/university is required in the liberal arts and sciences (or equivalent) including 21 semester hours (which meet Virginia’s stated coursework competencies) in two content areas (English, mathematics, science, and history/social studies) which will be listed on the license. Students must meet the required criteria for admission by passing the Virginia Board of Education prescribed assessments and earn the minimum required Grade point averages (GPA).

Virginia Board of Education prescribed entry assessments are outlined in the Teacher Education Services and Advising section of this catalog.

- A passing PRAXIS I composite score of 532 or
- Qualifying SAT or ACT test scores or
- PRAXIS I Math test score of 178 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
- SAT Mathematics test score of 530 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
- ACT Mathematics test score of 22 and a composite Virginia Communication and Literacy (VCLA) score of 470

To review more information on the Virginia Board of Education prescribed assessments visit the Teacher Education Services website, www.odu.edu/tes.

A cumulative undergraduate GPA of 2.80 is required for admission. No courses in the academic major or professional education in which the student has made below a C- will be accepted for admission in the Darden College of Education. Satisfactory scores must be submitted on either the Graduate Record Examination or Miller Analogies Test. An application for graduate studies and official transcripts must be submitted by the appropriate deadline for admission. Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate program director for elementary/middle education.

Continuance

Students must maintain a cumulative GPA of 3.00 and a minimum of 3.00 GPA in the major. A grade of “B” or higher is required in all practicum coursework. Students must take and pass the Virginia Communication and Literacy Assessment (VCLA) and the PRAXIS II examination for the appropriate Middle School content area 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. A criminal background check must be completed prior to placement in a field experience required for practicum courses and for the teacher candidate internship. For more information please review the policy in the Teacher Education Services website: http://www.odu.edu/tes

Virginia Board of Education prescribed professional assessments:

- Virginia Communication and Literacy Assessment (VCLA) – a passing composite score of 470 is required on this reading and writing assessment
- PRAXIS II Middle School English/Language Arts (test code: 0049) – passing score is 164
- PRAXIS II Middle School Mathematics (test code: 0069) – passing score is 163
- PRAXIS II Middle School Science (test code: 0439) – passing score is 162
- PRAXIS II Middle School Social Studies (test code: 0089) – passing score is 160

To review more information on the Virginia Board of Education prescribed assessments visit the Teacher Education Services website, www.odu.edu/tes.

Graduation

Requirements for graduation include passage of the written Comprehensive exam, completion of the Graduate Assessment, a minimum cumulative 3.00 GPA, successful completion of the Teacher Candidate Internship, an exit interview, complete all course requirements and submit an application for graduation. No courses in the academic major or professional education in which the student earned below a C- will be accepted toward licensure requirements in the Darden College of Education.

Program Requirements

Students seeking initial licensure plus a master’s degree in middle school education (grades 6-8) must meet the academic concentration requirements in two of the following content areas with a minimum grade of C-.

Transcripts will be evaluated by the education advisor to determine whether these academic requirements have been met by previous course work. Experiential learning credit may be available for some non-academic work.

English: English content must include coursework in language (history, structure or grammar), literature, advanced composition, and interpersonal communication or speech; 21 credit hours.

Mathematics: Mathematics content must include coursework in algebra, geometry, probability and statistics, and applications of mathematics; 21 credit hours.

Science: Science content must include courses in each of the following: biology, chemistry, physics, and earth and space science (a laboratory course is required in two of the four science areas); 21 credit hours.

History/Social science: History/social science content must include courses in American History, world history, economics, geography, international affairs, and current events; 21 credit hours.

All students, regardless of which two content areas selected, are required to take a Government/Civics course

### Prerequisite Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLED 301</td>
<td>Foundations and Introduction to Assessment of Education</td>
<td>12</td>
</tr>
<tr>
<td>TLED 430/530</td>
<td>PK-12 Instructional Technology</td>
<td></td>
</tr>
<tr>
<td>SPED 313</td>
<td>Fundamentals of Human Growth and Development: Birth through Adolescence</td>
<td></td>
</tr>
<tr>
<td>TLED 468/568</td>
<td>Language Acquisition and Reading for Students with Diverse Learning Needs</td>
<td></td>
</tr>
</tbody>
</table>

### Graduate Professional Education Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 506</td>
<td>Students with Diverse Learning Needs in the General Education Classroom</td>
<td>32</td>
</tr>
<tr>
<td>TLED 583</td>
<td>Seminar in Teacher Education (co-requisite with one Instructional strategies)</td>
<td></td>
</tr>
<tr>
<td>TLED 615</td>
<td>Teaching in the Middle School</td>
<td></td>
</tr>
<tr>
<td>READ 680</td>
<td>Reading to Learn Across the Curriculum</td>
<td></td>
</tr>
</tbody>
</table>
in the Teacher Education Services and Advising section of this catalog. Virginia Board of Education prescribed entry assessments are outlined minimum required Grade point averages (GPA). passing the Virginia Board of Education prescribed assessments and earn the license. Students must meet the required criteria for admission by mathematics, science, and history/social studies) which will be listed on Virginia's stated coursework competencies) in two content areas (English, education (6-8) subject areas, including 21 semester hours (which meet Virginia's stated coursework competencies for middle school education) to meet Virginia's stated academic competency requirements and leads to two undergraduate endorsement areas selected from the following:

- Mathematics * 21
- English * 21
- Science * 21
- Social Studies * 21
- Education Courses taken at the graduate level 21-23

* Minimum hours to satisfy requirement.

Middle School (6-8) Post-Baccalaureate Endorsement

Charlene Fleener, Graduate Program Director

This Post-Baccalaureate Endorsement program in middle school education (grades 6-8) is designed for prospective teachers who want to obtain an initial middle school teaching licensure. Available to students who have a non-teaching B.S. or B.A. degree, the program requires students to take courses that meet the Commonwealth of Virginia’s stated academic competency requirements and leads to two undergraduate endorsement areas selected from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEM 553</td>
<td>Developing Instructional Strategies for Teaching in the Middle/High School: Social Studies</td>
</tr>
<tr>
<td>STEM 554</td>
<td>Developing Instructional Strategies for Teaching in the Middle/High School: Science</td>
</tr>
</tbody>
</table>

Total Hours 44

Due to changing University requirements, national standards, and the Virginia Board of Education licensure regulations, the programs in the Darden College of Education 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 Teacher Education Services website: www.odu.edu/tes.

Virginia Board of Education prescribed professional assessments:

- A passing PRAXIS I composite score of 532 or
- Qualifying SAT or ACT test scores or
- PRAXIS I Math test score of 178 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
- SAT Mathematics test score of 530 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
- ACT Mathematics test score of 22 and a composite Virginia Communication and Literacy (VCLA) score of 470

To review more information on the Virginia Board of Education prescribed assessments visit the Teacher Education Services website, www.odu.edu/tes.

A cumulative undergraduate GPA of 2.80 is required for admission. No courses in the academic major or professional education in which the student has made below a C- will be accepted for admission in the Darden College of Education. An application for non-degree admission must be submitted by the appropriate deadline for admission. Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate program director for elementary/middle education.

Continuance

Students must maintain a cumulative GPA of 3.00 and a minimum of 2.75 GPA in the major. A grade of “B” or higher is required in all practicum coursework. Students must take and pass the Virginia Communication and Literacy Assessment (VCLA) and the PRAXIS II examination for the appropriate Middle School content area 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. A criminal background check must be completed prior to placement in a field experience required for practicum courses and for the teacher candidate internship. For more information please review the policy in the Teacher Education Services website: http://www.odu.edu/tes

Virginia Board of Education prescribed professional assessments:

- Virginia Communication and Literacy Assessment (VCLA) – a passing composite score of 470 is required on this reading and writing assessment
- PRAXIS II Middle School English/Language Arts (test code: 0049) – passing score is 164
- PRAXIS II Middle School Mathematics (test code: 0069) – passing score is 163
- PRAXIS II Middle School Science (test code: 0439) – passing score is 162
- PRAXIS II Middle School Social Studies (test code: 0089) – passing score is 160

To review more information on the Virginia Board of Education prescribed assessments visit the Teacher Education Services website, www.odu.edu/tes.

Completion

Requirements for completion are a minimum cumulative 3.00 GPA, successful completion of the Teacher Candidate Internship, complete all course requirements and submit an application for Virginia licensure. No courses in the academic major or professional education in which the student earned below a C- will be accepted toward licensure requirements in the Darden College of Education.

Program Requirements

Students seeking initial licensure for grades 6 - 8 must meet the academic concentration requirements in two of the following content areas with a minimum grade of C-. Transcripts will be evaluated by the education advisor to determine whether these academic requirements have been met by previous course work. Subject area specific course work that was not met in previous course work must be completed prior to Teacher Candidate Internship (student teaching) orientation session.
English: English content must include coursework in language (history, structure or grammar), literature, advanced composition, and interpersonal communication or speech; 21 credit hours.

Mathematics: Mathematics content must include coursework in algebra, geometry, probability and statistics, and applications of mathematics; 21 credit hours.

Science: Science content must include courses in each of the following: biology, chemistry, physics, and earth and space science (a laboratory course is required in two of the four science areas); 21 credit hours.

History/Social science: History/social science content must include courses in American History, world history, economics, geography, international affairs, and current events; 21 credit hours.

All students, regardless of which two content areas selected, are required to take a Government/Civics course

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLED 301 Foundations and Introduction to Assessment of Education</td>
<td>3</td>
</tr>
<tr>
<td>TLED 430/530 PK-12 Instructional Technology</td>
<td>3</td>
</tr>
<tr>
<td>SPED 313 Fundamentals of Human Growth and Development: Birth through Adolescence</td>
<td>3</td>
</tr>
<tr>
<td>TLED 468/568 Language Acquisition and Reading for Students with Diverse Learning Needs</td>
<td>3</td>
</tr>
</tbody>
</table>

Graduate Professional Education Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>READ 680</td>
<td>Reading to Learn Across the Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>TLED 583</td>
<td>Seminar in Teacher Education</td>
<td>1</td>
</tr>
<tr>
<td>TLED 615</td>
<td>Teaching in the Middle School</td>
<td>4</td>
</tr>
<tr>
<td>Select two from the following:</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>TLED 551</td>
<td>Developing Instructional Strategies for Teaching in the Middle/High School: English</td>
<td></td>
</tr>
<tr>
<td>TLED 555</td>
<td>Developing Instructional Strategies for Teaching in the Middle/High School: Social Studies</td>
<td></td>
</tr>
<tr>
<td>STEM 553</td>
<td>Developing Instructional Strategies for Teaching in the Middle/High School: Mathematics</td>
<td></td>
</tr>
<tr>
<td>STEM 554</td>
<td>Developing Instructional Strategies for Teaching in the Middle/High School: Science</td>
<td></td>
</tr>
<tr>
<td>TLED 666</td>
<td>Internship/Student Teaching and Seminar</td>
<td>9</td>
</tr>
</tbody>
</table>

Total Hours 36

Due to changing University requirements, national standards, and the Virginia Board of Education licensure regulations, the programs in the Darden College of Education 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 Teacher Education Services website: www.odu.edu/tes.

Master of Science in Education for Licensed Teachers - Elementary/Middle School - General

145 Education Building
757-683-3294
Guang-Lea Lee, Graduate Program Director

The following program is for licensed teachers who wish to enter a degree program leading to the Master of Science in Education degree. Non-degree students intending to enter this graduate program must meet with the elementary/middle school graduate program director upon completion of no more than six graduate credits.

The graduate program associated with this major is intended to meet the needs of the individual student. Program options are designed to accomplish three primary goals:

1. to enhance classroom instruction by enriching the knowledge and skills of practicing teachers;
2. to train and encourage classroom teachers to conduct in-school research so that significant findings in the learning-teaching process can be applied to the classroom situation; and
3. to permit teachers to upgrade their teaching credentials to the Postgraduate Professional License level.

Curricula for the program include specific courses in teaching in most of the major content areas: mathematics, science, social studies, and language arts. Each individualized program has three component areas:

1. core,
2. support; and
3. research.

The research component may have up to three options (thesis, problem paper, or seminar) as indicated.

Admission

Students must:

1. hold a bachelor’s degree from a regionally accredited college/university;
2. hold at least the Virginia Collegiate Professional License or an equivalent license from another state for elementary or middle school education;
3. have a general undergraduate grade point average of at least 2.80;
4. take and receive satisfactory scores on either the Graduate Record Examination or Miller Analogies Test;
5. have an interview with the graduate program director; and
6. apply for admission to graduate school; and
7. send official copies of all transcripts to Graduate Admissions.

Performance in classes taken as a non-degree student will not be taken into consideration in the admission process. Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate program director for elementary/middle education.

Continuance

Students must:

1. maintain a grade point average of 3.00 and
2. maintain a grade point average of 3.00 in the major.

Exit

Students must:

1. have a 3.00 grade point average;
2. have a 3.00 grade point average in the major;
3. pass a written comprehensive examination;
4. have an exit interview;
5. have completed all course requirements; and
6. submit an application for graduation.

Program Requirements

Since students are expected to be dedicated to the goal of becoming master teachers, evidence that a student has reached this goal must be presented before graduation is certified. A minimum of 30 semester credits of course work is required for programs in elementary/middle school education. After admission to provisional or regular degree status, or before the completion of six credits as a non-degree student, the student must meet with the graduate program director who will assign a permanent advisor from the graduate
General Core 12
TLED 430/530 PK-12 Instructional Technology *
READ 683 Diagnostic Teaching of Reading in the Classroom

Instructional Strategies classes or other courses based on teaching specialties 6
Support beyond the core ** 12

Research courses (6 to 12 Credits) 7-13
Select one option from the following:

Option A, Thesis option ***
FOUN 612 Applied Research Methods in Education
TLED 698 Thesis
FOUN 722 Introduction to Applied Statistics and Data Analysis

Option B, Problem paper option ****
FOUN 612 Applied Research Methods in Education
TLED 636 Problems in Education

* Taken within five years or waived through examination.
** Classes to be selected in consultation with the student’s advisor or program director.
*** 9-12 credits; 33 credits required for graduation.
**** 6 credits; 30 credits required for graduation.
++ 6 credit hours of electives.

Master of Science in Education – Secondary
145 Education Building
757-683-3284
Robert Lucking, Graduate Program Director

General Description of Secondary Education
Within the Master of Science in Education-Secondary degree program, there are a number of programs for both licensed teachers as well as those seeking initial licensure in grades 6-12. In addition, at the undergraduate level, there are programs for initial licensure in grades 6-12.

Master of Science in Education with Initial State Licensure 6-12
This licensure/master’s program in secondary education (grades 6-12) is designed for individuals with a non-teaching B.S. or B. A. degree who want to obtain licensure as a teacher in grades 6 through 12 and earn a master’s degree at the same time.

Admission
All students must apply for and be admitted into the approved M.S. Ed with initial licensure program for Secondary Education (grades 6-12). A bachelor’s degree from a regionally accredited college/university is required in the liberal arts and sciences (or equivalent) including semester hours (which meet Virginia’s stated coursework competencies) in one of the following content areas: English, mathematics, earth science, chemistry, biology, or physics, and history/social studies, which will be listed on the license. Students must meet the required criteria for admission by passing the Virginia Board of Education prescribed assessments and earn the minimum required Grade point averages (GPA).

Virginia Board of Education prescribed entry assessments are outlined in the Teacher Education Services and Advising section of this catalog.

Virginia Board of Education prescribed assessments:
- A passing PRAXIS I composite score of 532 or
- Qualifying SAT or ACT test scores or
- PRAXIS I Math test score of 178 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
- SAT Mathematics test score of 530 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
- ACT Mathematics test score of 22 and a composite Virginia Communication and Literacy (VCLA) score of 470

To review more information on the Virginia Board of Education prescribed assessments visit the Teacher Education Services website, www.odu.edu/tes.

A cumulative undergraduate GPA of 2.80 is required for admission. No courses in the academic major or professional education in which the student has made below a C- will be accepted for admission in the Darden College of Education. Satisfactory scores must be submitted on either the Graduate Record Examination or Miller Analogies Test. An application for graduate studies and official transcripts must be submitted by the appropriate deadline for admission. Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate program director for secondary education.

Continuance
Students must maintain a cumulative GPA of 3.00. Students must take and pass the Virginia Communication and Literacy Assessment (VCLA) and the PRAXIS II examination for the appropriate specialty area 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. A criminal background check must be completed prior to placement in a field experience required for practicum courses and for the teacher candidate internship. For more information please review the policy in the Teacher Education Services website: http://www.odu.edu/tes

To review more information on the Virginia Board of Education prescribed professional assessments visit the Teacher Education Services and Advising catalog section or website, www.odu.edu/tes.

Graduation
Requirements for graduation include passage of the written Comprehensive exam, completion of the Graduate Assessment, a minimum cumulative 3.00 GPA, successful completion of the Teacher Candidate Internship, an exit interview, complete all course requirements and submit an application for graduation. No courses in the academic major or professional education in which the student earned below a C- will be accepted toward licensure requirements in the Darden College of Education.

Program Requirements
Students seeking initial licensure plus a master’s degree in secondary education (grades 6-12) must meet the academic concentration requirements in the content area with a minimum grade of C-. Transcripts will be evaluated by the education advisor to determine whether these academic requirements have been met by previous course work. Subject area specific course work (content) that was not met in previous course work must be completed prior to Teacher Candidate Internship (student teaching) orientation session. Experiential learning credit may be available for some non-academic work.
Students must:

Admission

designed as students’ needs indicate. Admission is listed in a separate section below. Other programs may be individually education, and library science/media. The program in school librarianship interest areas in instructional design and technology, general vocational The general secondary education major for licensed teachers includes no more than six graduate credits.

Due to changing University requirements, national standards, and the Virginia Board of Education licensure regulations, the programs in the Darden College of Education 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 Teacher Education Services website: www.odu.edu/tes.

**Master of Science in Education for Licensed Teachers – Secondary 6-12**

The graduate programs in secondary education are designed for licensed teachers to improve and update professional competency in teaching at the secondary level. Licensed teachers completing the program enhance their ability to teach effectively and to participate in educational research in their schools. Completion of requirements leads to upgrading of the teaching license to the Postgraduate Professional level. Library endorsement for licensed teachers may be obtained in this program (See separate listing.) Non-degree students intending to enter this graduate program must meet with the secondary education graduate program director upon completion of no more than six graduate credits.

**Program: General for Licensed Teachers**

The general secondary education major for licensed teachers includes interest areas in instructional design and technology, general vocational education, and library science/media. The program in school librarianship is listed in a separate section below. Other programs may be individually designed as students’ needs indicate.

**Admission**

Students must:

1. hold a bachelor’s degree from a regionally accredited college/ university;

2. hold the Virginia Collegiate Professional License or an equivalent license from another state preferably in secondary education;

3. have a cumulative grade point average of 2.80;

4. achieve a satisfactory score on the Graduate Record Examination or Miller Analogies Test;

5. have an interview with faculty in the program; and

6. submit an application for admission.

Performance in classes taken as a non-degree student will not be taken into consideration in the admission process. Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate program director for secondary education.

**Continuance**

Students must:

1. maintain a grade point average of 3.00 and

2. maintain a grade point average of 3.00 in the major.

**Exit**

Students must:

1. have a 3.00 grade point average;

2. have a 3.00 grade point average in the major;

3. pass a written comprehensive examination;

4. have an exit interview;

5. have completed all course requirements; and

6. apply for graduation.

**Program Requirements**

Students enrolled in secondary and general secondary programs are expected to be dedicated to the goal of becoming master classroom teachers or librarians; therefore, evidence that a student has reached this goal must be presented before graduation is certified. A minimum of 31 semester credits is required for completion of any program planned. If a graduate student elects to add other goals to the program, such as becoming a secondary education supervisor, then the program may require an additional nine to 12 credits beyond the 31-hour minimum.

**Emphasis Areas**

In the secondary school – general program, emphases are offered in biology, chemistry, English, mathematics, economics, history, and social studies education. For requirements in the music education interest area, refer to the Music section in the College of Arts and Letters. For library science/media refer to the separate section listed later in the department.

**Area I:** Core: 12 to 18 credits.

**Area II:** Support: 12 to 18 credits.

**Area III:** Research: 6 to 12 credits. The following two courses are required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 612</td>
<td>Applied Research Methods in Education</td>
<td>3</td>
</tr>
<tr>
<td>TLED 636</td>
<td>Problems in Education</td>
<td>3</td>
</tr>
</tbody>
</table>

After admission to provisional or regular degree status, each student is assigned a permanent advisor from the Darden College of Education’s graduate faculty. It is the student’s responsibility to confer with the assigned advisor. The advisor will be well acquainted with the emphasis area the student has chosen and will be responsible for helping the student develop a program of study that best meets the student’s needs. This proposed program of study becomes the student’s graduate program upon approval of the graduate program director, and can be changed only with the advice and consent of both the faculty advisor and the student. Because of the individualized nature of graduate programs in secondary education, good working relationships between faculty advisors and students are essential.
Graduate programs in the vocational secondary education major are administered by the Departments of Teaching & Learning and Science, Technology, Engineering, and Mathematics (STEM).

Secondary (6-12) Post-Baccalaureate Endorsement Program

This Post-Baccalaureate endorsement program in secondary education (grades 6-12) is designed for individuals with a non-teaching B.S. or B. A. degree who want to obtain licensure as a teacher in grades 6 through 12 in the following content areas: English, mathematics, earth science, chemistry, biology or physics, and history/social studies, which will be listed on the license.

All students must apply for and be admitted into the approved post-baccalaureate endorsement program for Secondary Education (grades 6-12). Students must meet the required criteria for admission by passing the Virginia Board of Education prescribed assessments and earn the minimum required Grade point averages (GPA).

Admission

Virginia Board of Education prescribed entry assessments are outlined in the Teacher Education Services and Advising section of this catalog.

Virginia Board of Education prescribed assessments:

• A passing PRAXIS I composite score of 532 or
• Qualifying SAT or ACT test scores or
• PRAXIS I Math test score of 178 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
• SAT Mathematics test score of 530 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
• ACT Mathematics test score of 22 and a composite Virginia Communication and Literacy (VCLA) score of 470

To review more information on the Virginia Board of Education prescribed assessments visit the Teacher Education Services website, www.odu.edu/tes.

A cumulative undergraduate GPA of 2.80 is required for admission. No courses in the academic major or professional education in which the student has made below a C- will be accepted for admission in the Darden College of Education. An application for non-degree admission must be submitted by the appropriate deadline for admission. Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate program director for secondary education.

Continuance

Students must maintain a cumulative GPA of 3.00. A grade of “B” or higher is required in all practicum coursework. Students must take and pass all Virginia Board of Education prescribed assessments including the Virginia Communication and Literacy Assessment (VCLA), and the PRAXIS II examination for the appropriate secondary endorsement prior to or while enrolled in the Seminar in Teacher Education (TLED 483) course. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation session.

To review more information on the Virginia Board of Education prescribed professional assessments visit the Teacher Education Services website, www.odu.edu/tes.

Completion

Requirements for completion are a minimum cumulative 3.00 GPA, successful completion of the Teacher Candidate Internship, complete all course requirements and submit an application for Virginia licensure. No courses in the academic major or professional education in which the student earned below a C- will be accepted toward licensure requirements in the Darden College of Education.

Program Requirements

Students seeking initial licensure for grades 6th - 12th must meet the academic concentration requirements with a minimum grade of C+, C or C- (dependent on content area requirements). Transcripts will be evaluated by the education advisor to determine whether these academic requirements have been met by previous course work. Subject area specific course work that was not met in previous course work must be completed prior to Teacher Candidate Internship (student teaching) orientation session.

Master of Science in Education- Teaching English as a Second Language

145 Education Building
757-683-3284
Robert Lucking, Graduate Program Director

The Masters of Science in Education-Secondary- Teaching English as a Second Language (TESOL – PK-12). A bachelor’s degree from a regionally accredited college/ university is required in the liberal arts and sciences (or equivalent). Students must meet the required criteria for admission by passing the Virginia Board of Education prescribed assessments and earn the minimum required Grade point averages (GPA).

Virginia Board of Education prescribed entry assessments are outlined in the Teacher Education Services and Advising section of this catalog.

Virginia Board of Education prescribed assessments:

• A passing PRAXIS I composite score of 532 or
• Qualifying SAT or ACT test scores or
• PRAXIS I Math test score of 178 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
• SAT Mathematics test score of 530 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
• ACT Mathematics test score of 22 and a composite Virginia Communication and Literacy (VCLA) score of 470

To review more information on the Virginia Board of Education prescribed assessments visit the Teacher Education Services website, www.odu.edu/tes.

A cumulative undergraduate GPA of 2.80 is required for admission. No courses in the academic major or professional education in which the student has made below a C- will be accepted for admission in the Darden College of Education. Satisfactory scores must be submitted on either the Graduate Record Examination or Miller Analogies Test. An application for graduate studies and official transcripts must be submitted by the appropriate deadline for admission. Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate program director for TESOL.

Continuance

Students must maintain a cumulative GPA of 3.00 and a minimum of 3.00 GPA in the major. A grade of “B” or higher is required in all practicum coursework. Students must take and pass the Virginia Communication and Literacy Assessment (VCLA) and the PRAXIS II examination for TESOL 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. A criminal background check must be completed prior to placement in a field experience required for practicum courses and for the teacher candidate internship. For more information please review the policy in the Teacher Education Services website: http://www.odu.edu/tes

**Virginia Board of Education prescribed professional assessments:**
- Virginia Communication and Literacy Assessment (VCLA) – a passing composite score of 470 is required on this reading and writing assessment
- Student must meet the PRAXIS II TESOL requirement, test code #0361
- To review more information on the Virginia Board of Education prescribed assessments visit the Teacher Education Services website, www.odu.edu/tes.

**Graduation**
Requirements for graduation include passage of the written Comprehensive exam, completion of the Graduate Assessment, a minimum cumulative 3.00 GPA, successful completion of the Teacher Candidate Internship, an exit interview, complete all course requirements and submit an application for graduation. No courses in the academic major or professional education in which the student earned below a C- will be accepted toward licensure requirements in the Darden College of Education.

**Program Requirements**
Students seeking initial licensure plus a master’s degree in TESOL (PK-12) must meet the academic content requirement in English and professional education courses with a minimum grade of C- in each course. Transcripts must meet the academic content requirement in English and professional education courses and for the teacher candidate internship. For more information please review the policy in the Teacher Education Services website: http://www.odu.edu/tes.

**Curriculum**

**Prerequisite Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 313</td>
<td>Fundamentals of Human Growth and Development: Birth through Adolescence</td>
</tr>
<tr>
<td>ENGL 440/540</td>
<td>General Linguistics (fall only)</td>
</tr>
</tbody>
</table>

Select one from the following:
- Foreign Language
- English for foreign speakers

**Academic Content courses in English**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 677</td>
<td>Language and Communication Across Cultures</td>
</tr>
<tr>
<td>ENGL 679</td>
<td>First and Second Language Acquisition</td>
</tr>
<tr>
<td>ENGL 670</td>
<td>Methods and Materials in TESOL (spring only)</td>
</tr>
</tbody>
</table>

Select one from the following:
- ENGL 542 English Grammar
- ENGL 550 American English
- ENGL 672 Syntax
- ENGL 678 Sociolinguistics

**Graduate Professional Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLED 608</td>
<td>Foundations of Education and Instructional Assessment</td>
</tr>
<tr>
<td>TLED 530</td>
<td>PK-12 Instructional Technology</td>
</tr>
<tr>
<td>TLED 640</td>
<td>The Management of Learning and Instruction</td>
</tr>
<tr>
<td>READ 683</td>
<td>Diagnostic Teaching of Reading in the Classroom</td>
</tr>
<tr>
<td>READ 686</td>
<td>Advanced Language Development and Reading</td>
</tr>
<tr>
<td>FOUN 641</td>
<td>Assessment and Evaluation of Student Learning</td>
</tr>
<tr>
<td>TLED 636</td>
<td>Problems in Education</td>
</tr>
</tbody>
</table>

**Total Hours**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLED 669</td>
<td>Internship/Student Teaching and Seminar (student teaching)</td>
</tr>
</tbody>
</table>

Due to changing University requirements, national standards, and the Virginia Board of Education licensure regulations, the programs in the Darden College of Education 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 Teacher Education Services website: www.odu.edu/tes.

**Teaching English as a Second Language (Pk-12)**

**Post-Baccalaureate Endorsement**
This Post-Baccalaureate endorsement program in Teaching English as a Second Language (PK-12) is designed for individuals with a non-teaching B.S. or B.A. degree who want to obtain licensure as a teacher in TESOL. All students must apply for and be admitted into the approved post-baccalaureate endorsement program for TESOL (PK-12). Students must meet the required criteria for admission by passing the Virginia Board of Education prescribed assessments and earn the minimum required Grade point averages (GPA).

**Admission**

**Virginia Board of Education prescribed entry assessments are outlined in the Teacher Education Services and Advising section of this catalog.**

**Virginia Board of Education prescribed assessments:**
- A passing PRAXIS I composite score of 532 or
- Qualifying SAT or ACT test scores or
- PRAXIS I Math test score of 178 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
- SAT Mathematics test score of 530 and a composite Virginia Communication and Literacy (VCLA) score of 470 or
- ACT Mathematics test score of 22 and a composite Virginia Communication and Literacy (VCLA) score of 470

To review more information on the Virginia Board of Education prescribed assessments visit the Teacher Education Services website, www.odu.edu/tes.

A cumulative undergraduate GPA of 2.80 is required for admission. No courses in the academic major or professional education in which the student has made below a C- will be accepted for admission in the Darden College of Education. An application for non-degree admission must be submitted by the appropriate deadline for admission. Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate program director for TESOL education.

**Continuance**

Students must maintain a cumulative GPA of 3.00. A grade of “B” or higher is required in all practicum coursework. Students must take and pass all Virginia Board of Education prescribed assessments including the Virginia Communication and Literacy Assessment (VCLA), and must meet PRAXIS II TESOL requirement, test code #0361. All assessments must be passed prior to the start of the Teacher Candidate Internship Orientation Session. A criminal background check must be completed prior to placement in a field experience required for practicum courses and for the teacher candidate internship. For more information please review the policy in the Teacher Education Services website: http://www.odu.edu/tes.

To review more information on the Virginia Board of Education prescribed professional assessments visit the Teacher Education Services website, www.odu.edu/tes.
Completion
Requirements for completion are a minimum cumulative 3.00 GPA, successful completion of the Teacher Candidate Internship, complete all course requirements and submit an application for Virginia licensure. No courses in the academic major or professional education in which the student earned below a C- will be accepted toward licensure requirements in the Darden College of Education.

Program Requirements
Students seeking initial licensure for TESOL PK-12 grades must meet the academic concentration requirements with a minimum grade of C-. Transcripts will be evaluated by the education advisor to determine whether these academic requirements have been met by previous course work. Subject area specific course work that was not met in previous course work must be completed prior to Teacher Candidate Internship (student teaching) orientation session.

Curriculum
Prerequisite Courses
SPED 313 Fundamentals of Human Growth and Development: Birth through Adolescence 3
ENGL 440/540 General Linguistics 3
Select one from the following:
Foreign Language
English for foreign speakers
Academic Content courses in English
ENGL 677 Language and Communication Across Cultures 3
ENGL 679 First and Second Language Acquisition 3
ENGL 670 Methods and Materials in TESOL 3
Select one from the following:
ENGL 542 English Grammar 3
ENGL 550 American English 3
ENGL 672 Syntax 3
ENGL 678 Sociolinguistics 3
Professional Education
TLED 301 Foundations and Introduction to Assessment of Education 3
TLED 430 PK-12 Instructional Technology 3
TLED 360 Classroom Management and Discipline 2
TLED 408 Reading and Writing in Content Areas 3
READ 683 Diagnostic Teaching of Reading in the Classroom 3
READ 686 Advanced Language Development and Reading 3
TLED 485 Teacher Candidate Internship 12
Total Hours 56

Due to changing University requirements, national standards, and the Virginia Board of Education licensure regulations, the programs in the Darden College of Education 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 Teacher Education Services website: www.odu.edu/tes.

Field-Based Graduate Programs
Master of Science in Education – Elementary
Master of Science in Education – Secondary
145 Education Building
757-683-3284
Robert Lucking, Graduate Program Director

General Description of Field-Based Master’s Programs
The Field-based Graduate Program in the Department of Teaching & Learning is a variation of the Teaching & Learning Department’s approved master’s degree programs and offers licensed teachers and other professional educators the opportunity to earn a master’s degree at one of several on-site school locations throughout the Commonwealth. Areas of specialization are in elementary/middle education or secondary education. Registration is restricted to licensed educators at the designated public or independent schools. Classes typically are held within the community, and research and instruction is focused on each school’s curriculum, student body, and instructional offerings. While the degree programs and requirements mirror on-campus programs, minor curricular variations may occur.

Library Science (School Librarianship K-12)
Master of Science in Education – Elementary
Master of Science in Education – Secondary
145 Educational Building
757-683-3284
Carol Doll, Graduate Program Director

General Description of the School Library Program
Contained within this program are the library science post-baccalaureate endorsement for licensed teachers (non-degree), a Master of Science in Education leading to endorsement in Library Science K-12 for licensed teachers, and a Master of Science in Education with initial licensure in library science K-12 for non-teachers.

Library Science Post-baccalaureate Endorsement K-12 for Licensed Teachers (non-degree)
This non-degree graduate endorsement program leads to licensure as a school librarian (K-12) for individuals who already have a current Virginia teaching license. Students applying to this program complete a post-baccalaureate application form.

Admission
Students must:
1. hold a bachelor’s degree from an accredited institution;
2. have at least a collegiate professional teaching certificate from the Commonwealth of Virginia,
3. have a cumulative GPA of 2.75 for all college credit courses taken in the baccalaureate degree program,
4. have an interview and recommendation by a departmental representative in library science or his/her designee, and
5. submit an application for licensure only studies.

No courses in the academic major or professional education in which the student has made below a C- will be accepted for licensure in the Darden College of Education. Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the program director for library science.

Continuance
Students must maintain a grade point average of 3.00. A criminal background check must be completed prior to placement in a field experience required for practicum courses. For more information please
review the policy in the Teacher Education Services website: http://www.odu.edu/tes

Exit
Students must:
1. have a 3.00 grade point average;
2. have an exit interview;
3. have completed all course requirements; and
4. have successfully completed a portfolio review.

Curriculum
Required courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIBS 602</td>
<td>Production of Instructional Materials</td>
<td>3</td>
</tr>
<tr>
<td>LIBS 605</td>
<td>Selection and Utilization of Non-Book Media</td>
<td>3</td>
</tr>
<tr>
<td>LIBS 675</td>
<td>Administration, Management, and Evaluation of Libraries</td>
<td>3</td>
</tr>
<tr>
<td>LIBS 676</td>
<td>Library Media Services and the Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>LIBS 677</td>
<td>Technical Services in Libraries</td>
<td>3</td>
</tr>
<tr>
<td>LIBS 678</td>
<td>Selection, Evaluation and Utilization of Materials NK-12</td>
<td>4</td>
</tr>
<tr>
<td>LIBS 679</td>
<td>Theory and Management of Reference and Information Retrieval</td>
<td>3</td>
</tr>
<tr>
<td>LIBS 669</td>
<td>Practicum in School Libraries</td>
<td>1-9</td>
</tr>
</tbody>
</table>

* Prerequisite: LIBS 642 or equivalent
** Taken after the completion of all library courses.

Master of Science in Education - Library Science K-12 Endorsement for licensed teachers
Carol Doll, Graduate Program Director

This program leads to a master’s degree plus licensure as a school librarian (K-12) for individuals who already have licensure as a teacher. Students applying to this program may apply for a degree in either elementary or secondary education and should designate the library science concentration on the application form.

Admission
Students must:
1. hold a bachelor’s degree from a regionally accredited college/university;
2. hold the Virginia Collegiate Professional License or an equivalent license from another state;
3. have a general undergraduate grade point average of at least 2.80;
4. take and receive satisfactory scores on either the Graduate Record Examination or Miller Analogies Test;
5. have an interview with the graduate program director; and
6. apply for admission to graduate school.

Performance in classes taken as a non-degree student will not be taken into consideration in the admission process. Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate program director for elementary/middle education or the graduate program director for secondary education.

Continuance
Students must:
1. maintain a grade point average of 3.00 and
2. maintain a grade point average of 3.00 in the major.

Exit
Students must:
1. have a 3.00 grade point average;
2. have a 3.00 grade point average in the major;
3. pass a written comprehensive examination;
4. have an exit interview;
5. have completed all course requirements; and
6. submit an application for graduation; and
7. have successfully completed a portfolio review.

Program Requirements
Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIBS 602</td>
<td>Production of Instructional Materials</td>
<td>3</td>
</tr>
<tr>
<td>LIBS 605</td>
<td>Selection and Utilization of Non-Book Media</td>
<td>3</td>
</tr>
<tr>
<td>LIBS 675</td>
<td>Administration, Management, and Evaluation of Libraries</td>
<td>3</td>
</tr>
<tr>
<td>LIBS 676</td>
<td>Library Media Services and the Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>LIBS 677</td>
<td>Technical Services in Libraries</td>
<td>3</td>
</tr>
<tr>
<td>LIBS 678</td>
<td>Selection, Evaluation and Utilization of Materials NK-12</td>
<td>4</td>
</tr>
<tr>
<td>LIBS 679</td>
<td>Theory and Management of Reference and Information Retrieval</td>
<td>3</td>
</tr>
<tr>
<td>LIBS 669</td>
<td>Practicum in School Libraries</td>
<td>1-9</td>
</tr>
</tbody>
</table>

** Prerequisite for the core may be counted as support courses if taken on the graduate level within six years of the date of graduation. These courses must be selected in consultation with the graduate program director or advisor.

Support Elective credits ** 3-9

Research Core 6-12

<table>
<thead>
<tr>
<th>Thesis option ***</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 612</td>
</tr>
<tr>
<td>TLED 698</td>
</tr>
<tr>
<td>FOUN 722</td>
</tr>
</tbody>
</table>

Problems paper option ****

| FOUN 612          | Applied Research Methods in Education             |
| TLED 636          | Problems in Education                            |

* Prerequisite: LIBS 642 or equivalent
** Prerequisite for the core may be counted as support courses if taken on the graduate level within six years of the date of graduation.
*** 9-12 credits; 37 credits required for graduation.
**** 6 credits; 34 credits required for graduation.

Master of Science in Education - Library Science K-12 Initial Licensure for non-teachers

145 Education Building
757-683-3284
Carol Doll, Graduate Program Director

This is an initial licensure program as a school library media specialist for people with a non-teaching B.S. or B.A. It is offered as part of the Master of Science in Education - elementary/middle education. In this program, students who do not have teacher licensure but who are seeking licensure as a school librarian (K-12) and a master’s degree in education will complete
professional studies courses in addition to a prescribed set of library media courses and a research core. The minimum number of graduate credits for the program is 63.

Admission

Students must:

1. hold a bachelor’s degree from a regionally accredited college/university;
2. achieve passing scores (as established by the Commonwealth of Virginia) on the Praxis I Academic Skills Assessment or Board-approved SAT/ACT scores;
3. have a cumulative grade point average of 2.80;
4. take and receive satisfactory scores on either the Graduate Record Examination or Miller Analogies Test;
5. have an interview with the graduate program director; and
6. submit an application for graduate studies.

Performance in classes taken as a non-degree student will not be taken into consideration in the admission process. No courses in the academic major or professional education in which the student has made below a C- will be accepted for licensure in the Darden College of Education.

Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate program director for school librarianship.

Continuance

Students must:

1. maintain a grade point average of 3.00;
2. maintain a grade point average of 3.00 in the major;
3. receive a B or better in practicum to participate in teacher internship;
4. have a criminal background check completed prior to placement in a field experience required for practicum courses and for the teacher candidate internship. For more information please review the policy in the Teacher Education Services website: http://www.odu.edu/tes

Exit

Students must:

1. have a 3.00 grade point average;
2. have an exit interview;
3. have completed all course requirements;
4. submit an application for graduation; and
5. pass the Virginia Communication and Literacy Assessment (VCLA) prior to licensure; and
6. have successfully completed a portfolio review.

No courses in the academic major or professional education in which the student has made below a C- will be accepted for licensure requirements in the Darden College of Education.

Program of Study

Prerequisites. Individuals entering this graduate program must already possess a bachelor’s degree and must pass the professional teacher’s assessment requirement (currently Praxis I or equivalent SAT or ACT score) prescribed by the Virginia Board of Education. No courses in the academic major or professional education in which the student has made below a C- will be accepted toward licensure requirements in the College of Education.

Professional Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLED 301</td>
<td>Foundations and Introduction to Assessment of Education</td>
<td>27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLED 430/530</td>
<td>PK-12 Instructional Technology</td>
<td></td>
</tr>
<tr>
<td>TLED 479/579</td>
<td>Classroom Management and Practice PreK-3; PreK-6</td>
<td></td>
</tr>
<tr>
<td>TLED 586</td>
<td>Student Teaching for Special Endorsement **</td>
<td></td>
</tr>
<tr>
<td>READ 680</td>
<td>Reading to Learn Across the Curriculum</td>
<td></td>
</tr>
<tr>
<td>SPED 313</td>
<td>Fundamentals of Human Growth and Development: Birth through Adolescence</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following instructional strategies courses:

| STEM 433/533 | Mathematics                                      |         |
| STEM 434/534 | Science                                          |         |
| TLED 435/535 | Social Studies                                    |         |

Library Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIBS 602</td>
<td>Production of Instructional Materials</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Technology prerequisite)</td>
<td></td>
</tr>
<tr>
<td>LIBS 605</td>
<td>Selection and Utilization of Non-Book Media</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Technology prerequisite)</td>
<td></td>
</tr>
<tr>
<td>LIBS 642</td>
<td>Children’s Literature Across the Curriculum, PK-8</td>
<td></td>
</tr>
<tr>
<td>LIBS 675</td>
<td>Administration, Management, and Evaluation of Libraries</td>
<td></td>
</tr>
<tr>
<td>LIBS 676</td>
<td>Library Media Services and the Curriculum</td>
<td></td>
</tr>
<tr>
<td>LIBS 677</td>
<td>Technical Services in Libraries</td>
<td></td>
</tr>
<tr>
<td>LIBS 678</td>
<td>Selection, Evaluation and Utilization of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Materials NK-12 ****</td>
<td></td>
</tr>
<tr>
<td>LIBS 679</td>
<td>Theory and Management of Reference and Information Retrieval</td>
<td></td>
</tr>
</tbody>
</table>

Research Problems paper

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 612</td>
<td>Applied Research Methods in Education</td>
<td></td>
</tr>
<tr>
<td>TLED 636</td>
<td>Problems in Education</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 58

* Some of these are undergraduate credits and/or may have been taken as an undergraduate.

** To be taken after the completion of all required professional education and library science courses.

*** Taken after at least 12 credits of professional education have been completed.

**** Prerequisite: LIBS 642 or equivalent

Military Career Transition Program

152 Education Building
757-683-3348 Arminda Israel, Graduate Program Coordinator

General Description of the Military Career Transition Program

Designed with the needs and interests of the military person and spouse in mind, the Military Career Transition Program (MCTP) is a graduate, off campus, evening, and weekend program for military and Department of Defense (DoD) personnel and their spouses. Upon completion of the Master of Science in Education and additional state licensure requirements, participants are eligible for licensure in the Commonwealth of Virginia. Licensure grade levels include elementary education (PreK-6), middle school (6-8), and secondary (6-12); endorsements are available in the areas of mathematics, sciences (Earth science, biology, chemistry, and physics), English, and history/social studies. Degree courses are offered via distance education (web based and TELETECHNET), and traditional classroom format at locations throughout Virginia and in Bangor/Everett and Bremerton, Washington. Site personnel are available at all locations to provide advisement. All MCTP students are required to meet with their site advisor prior to registration each semester. Old Dominion University is a
member of the Service Members Opportunity Colleges (SOC), recognizing the unique nature of the military lifestyle and committed to easing the transfer of relevant course credits, providing flexible academic residency requirements, and crediting learning from appropriate military training and experiences.

Admission

All students must apply for and be admitted into the approved M.S. Ed with initial licensure program for Elementary or Secondary Education. A bachelor’s degree from a regionally accredited college/university is required in the liberal arts and sciences (or equivalent) including specific course work to meet Virginia’s stated coursework competencies for subject area preparation. Students must meet the required criteria for admission by passing all section of the Praxis I exam (Reading- 178, Writing-176, Math-178). Provisional consideration will be given to students who achieve a minimum composite score on the Praxis I of 532. Scores below 532 will NOT be considered. Additionally, SAT and ACT scores will not be considered in lieu of Praxis I.

A cumulative undergraduate GPA of 2.80 is required for admission. No courses in the academic major or professional education in which the student has made below a C- will be accepted for admission in the Darden College of Education. An application for graduate studies, a resume highlighting 6 years of military/professional work experience, a 500 word goal statement indicating personal goals and motivation for pursuing teacher education, and official transcripts must be submitted by the appropriate deadline for admission. Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate program director for elementary/middle or secondary education.

Continuance

Students must maintain a cumulative GPA of 3.00. Students must take and pass all Virginia Board of Education prescribed professional assessments including the Virginia Board of Education approved reading assessment (PreK-6), the Virginia Communication and Literacy Assessment (VCLA), and the PRAXIS II examination appropriate for the endorsement prior to or while enrolled in the Seminar in Teacher Education (TLED 583) course. All assessments and course work must be passed prior to the start of the Teacher Candidate Internship Orientation session. A criminal background check must be completed prior to placement in a field experience required for practicum courses and for the teacher candidate internship. For more information please review the policy in the Teacher Education Services website: http://www.odu.edu/tes.

To review more information on the Virginia Board of Education prescribed professional assessments visit the Teacher Education Services website, www.odu.edu/tes.

Graduation

Requirements for graduation include passage of the written Comprehensive exam, completion of the Graduate Assessment, a minimum cumulative 3.00 GPA, successful completion of the Teacher Candidate Internship, an exit interview, complete all course requirements and submit an application for graduation. No courses in the academic major or professional education in which the student earned below a C- will be accepted toward licensure requirements in the Darden College of Education.

Program Requirements

Students seeking the Master of Science in Education Degree with initial licensure must meet the academic concentration requirements with a minimum grade of C-. Transcripts will be evaluated by the education advisor to determine whether these academic requirements have been met by previous course work. Subject area specific course work that was not met in previous course work must be completed prior to Teacher Candidate Internship (student teaching) orientation session. Experiential learning credit may be available for some non-academic work.

Curriculum

<table>
<thead>
<tr>
<th>Prerequisite</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 313</td>
<td>Fundamentals of Human Growth and Development: Birth through Adolescence</td>
</tr>
</tbody>
</table>

Graduate Professional Education

<table>
<thead>
<tr>
<th>Prerequisite</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLED 608</td>
<td>Foundations of Education and Instruction Assessment</td>
</tr>
<tr>
<td>TLED 616</td>
<td>Design for Effective Instruction</td>
</tr>
<tr>
<td>TLED 530</td>
<td>PK-12 Instructional Technology</td>
</tr>
<tr>
<td>SPED 500</td>
<td>Foundations of Special Education: Legal Aspects and Characteristics</td>
</tr>
<tr>
<td>READ 680</td>
<td>Reading to Learn Across the Curriculum</td>
</tr>
<tr>
<td>TLED 640</td>
<td>The Management of Learning and Instruction</td>
</tr>
<tr>
<td>TLED 568</td>
<td>Language Acquisition and Reading for Students with Diverse Learning Needs (required for PreK-6 and 6-8)</td>
</tr>
<tr>
<td>SPED 517</td>
<td>Collaboration and Transitions</td>
</tr>
<tr>
<td>FOUN 611</td>
<td>Introduction to Research Methods in Education</td>
</tr>
<tr>
<td>TLED 583</td>
<td>Seminar in Teacher Education</td>
</tr>
<tr>
<td>TLED 669</td>
<td>Internship/Student Teaching and Seminar</td>
</tr>
</tbody>
</table>

Select one or two from the following

<table>
<thead>
<tr>
<th>Prerequisite</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLED 656</td>
<td>Developing Instructional Strategies for Elementary Education (required for PreK-6)</td>
</tr>
<tr>
<td>TLED 657</td>
<td>Language Arts Methods for Middle and Secondary School</td>
</tr>
<tr>
<td>STEM 658</td>
<td>Math Methods for Middle and Secondary School</td>
</tr>
<tr>
<td>STEM 659</td>
<td>Science Methods for Middle and Secondary School</td>
</tr>
<tr>
<td>TLED 662</td>
<td>Social Studies Methods for Middle and Secondary School</td>
</tr>
</tbody>
</table>

Total Hours: 43-48

* 37 credit hours Elementary or Secondary, 39 credit hours Middle School.
** Select one of the courses, if seeking elementary and secondary. Select two of the courses, if seeking middle school.

Due to changing University requirements, national standards, and the Virginia Board of Education licensure regulations, the programs in the Darden College of Education 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 Teacher Education Services website: www.odu.edu/tes.

Master of Science in Education – Reading

145 Education Building
757-683-3284
Charlene Fleener, Graduate Program Director

General Description of Reading Education

Reading Education offers two programs, 1) the Reading Specialist Endorsement for licensed teachers (non-degree, post-baccalaureate) for candidates already having a master’s degree, and 2) the Master of Science in Education—Reading plus Reading Specialist Endorsement for licensed teachers. A Doctor of Philosophy in Education with an emphasis in Literacy Leadership within the Curriculum and Instruction program is offered for those seeking additional study in the field of literacy.
Endorsement – Reading Specialist K-12 (non-degree)

The non-degree post-baccalaureate endorsement program leads to licensure as a reading specialist for individuals already having a current Virginia teaching license and a master’s degree. Students applying to this program complete a licensure-only application form and submit official transcripts and evidence of a current teaching license (Collegiate Professional License) to the reading program director. Students intending to enter this graduate program must meet with the reading education graduate program director before or upon completion of no more than six graduate credits. In addition to required coursework, students must satisfactorily complete the Virginia Reading Assessment for Reading Specialists (prior to July 2011) or Reading for Virginia Educators: Reading Specialists-0304 or 5304 (after July 2011) and document three years successful teaching experience with reading as a major portion of the teaching responsibilities to obtain the reading specialist endorsement.

Curriculum

Required for Endorsement

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>READ 689</td>
<td>Survey of Reading Instruction</td>
<td>3</td>
</tr>
<tr>
<td>READ 680</td>
<td>Reading to Learn Across the Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>READ 683</td>
<td>Diagnostic Teaching of Reading in the Classroom</td>
<td>3</td>
</tr>
<tr>
<td>READ 685</td>
<td>Organizing and Supervising Reading Program Development</td>
<td>3</td>
</tr>
<tr>
<td>READ 686</td>
<td>Advanced Language Development and Reading</td>
<td>3</td>
</tr>
<tr>
<td>READ 693</td>
<td>Practicum in Reading</td>
<td>3</td>
</tr>
<tr>
<td>READ 618</td>
<td>Approaches to Teaching Literature and Writing K-12</td>
<td>3</td>
</tr>
<tr>
<td>READ 620</td>
<td>Multicultural Children’s Literature and Literacy</td>
<td>3</td>
</tr>
<tr>
<td>READ 621</td>
<td>Differentiated Literacy Instruction and Portfolio Development</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 612</td>
<td>Applied Research Methods in Education</td>
<td>3</td>
</tr>
<tr>
<td>READ 637</td>
<td>Problems in Reading Education</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>33</strong></td>
<td></td>
</tr>
</tbody>
</table>

Master of Science in Education—Reading plus Reading Specialist Endorsement

The program is designed to provide professional training for prospective reading specialists, literacy coaches, and elementary- and secondary-level reading teachers.

Extensive course offerings permit the graduate student to pursue an area of interest, such as elementary school reading, secondary school reading, college reading, literacy coaching, and reading in clinical settings. As a culminating experience, each student investigates a problem area and prepares a formal research paper or project on a topic of interest. Candidate study may include an intensive search of the professional literature on reading or selected field experiences in public, private, or governmental reading programs that provide reading services to clients. In addition, candidates tutor children and aid in the diagnosis and remediation of reading problems. Candidates who have three years of satisfactory experience in teaching reading, completed the entire degree program, and satisfactorily completed the Virginia Reading Assessment for Reading Specialists (prior to July 2011) or Reading for Virginia Educators: Reading Specialists-0304 or 5304 (after July 2011) may obtain the reading specialist endorsement.

Admission

Students must:

1. hold a bachelor’s degree from a regionally accredited college/ university;

2. have an undergraduate grade point average of 2.80 and an average of 3.00 in the major;

3. achieve a satisfactory score (as established by the T&L Department) on the Graduate Record Examination or the Miller Analogies Test;

4. have an interview with the graduate program director;

5. have had three semester credits in reading courses at the undergraduate level; and

6. submit an application for graduate studies.

Performance in classes taken as a non-degree student will not be taken into consideration in the admission process. Under certain circumstances, applicants who do not fully meet the requirements for regular admission to the program may be admitted on a provisional basis subject to conditions specified by the graduate program director for reading education.

Continuance

Students must

1. maintain a grade point average of 3.00 and

2. maintain a grade point average of 3.00 in the major.

Exit

Students must

1. have a 3.00 grade point average;

2. have a 3.00 grade point average in the major;

3. complete an exit survey;

4. have completed all course requirements;

5. submit an application for graduation; and

6. pass the Virginia Reading Assessment for Reading Specialists (prior to July 2011) or Reading for Virginia Educators: Reading Specialists-0304 or 5304 (after July 2011).

Program Requirements

A minimum of 33 semester credits is required for the master’s degree in reading education. The degree candidate must successfully pass the Virginia reading specialist licensure examination, usually taken in the last semester of the program.

Course requirements for completion of the degree program are listed below.

Area I: Core (the following is the suggested sequence for these courses.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>READ 689</td>
<td>Survey of Reading Instruction</td>
<td>3</td>
</tr>
<tr>
<td>READ 683</td>
<td>Diagnostic Teaching of Reading in the Classroom</td>
<td>3</td>
</tr>
<tr>
<td>READ 686</td>
<td>Advanced Language Development and Reading</td>
<td>3</td>
</tr>
<tr>
<td>READ 680</td>
<td>Reading to Learn Across the Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>READ 618</td>
<td>Approaches to Teaching Literature and Writing K-12</td>
<td>3</td>
</tr>
<tr>
<td>READ 620</td>
<td>Multicultural Children’s Literature and Literacy</td>
<td>3</td>
</tr>
<tr>
<td>READ 621</td>
<td>Differentiated Literacy Instruction and Portfolio Development</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 612</td>
<td>Applied Research Methods in Education</td>
<td>3</td>
</tr>
<tr>
<td>READ 637</td>
<td>Problems in Reading Education</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>33</strong></td>
<td></td>
</tr>
</tbody>
</table>

Area II: Research

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOUN 612</td>
<td>Applied Research Methods in Education</td>
<td>6</td>
</tr>
<tr>
<td>READ 693</td>
<td>Practicum in Reading</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td><strong>33</strong></td>
<td></td>
</tr>
</tbody>
</table>
Doctor of Philosophy in Education – Literacy Leadership Emphasis within the Curriculum and Instruction Program

145 Education Building
757-683-3283, 757 683-3284
Charlene Fleener, Graduate Program Director

The Doctor of Philosophy in Curriculum and Instruction at the Darden College of Education of Old Dominion University, with concentrations in Curriculum and Instruction, Early Childhood Education, and Literacy Leadership provides the opportunity for students to become scholarly leaders to serve our nation’s schools, colleges, universities and related agencies such as business, government, and research institutions to contribute to global education. The curricula is solidly grounded in interpreting and producing research, use of technology to enhance the teaching/learning process, equity, and leadership, which are woven into common core courses and concentration-specific courses.

Literacy Leadership Emphasis:

The Doctor of Philosophy in Education with an emphasis in Literacy Leadership is a degree with a unique focus to prepare individuals as literacy professionals for leadership and supervisory roles, teaching literacy curriculum and instruction in higher education, and/or consulting for educational organizations or private industry. The program provides study of theories, methodologies, and research with opportunities to develop individual expertise in research, writing, and pedagogy. Personalized mentorship is provided for those who desire careers in academic research, program/curriculum design and evaluation, and higher education, including teacher preparation, policy, and leadership.

See the PhD in Curriculum and Instruction for complete program information.

Education Specialist Curriculum and Instruction
Charlene Fleener, Graduate Program Director

Doctor of Philosophy in Education – Curriculum and Instruction

145 Education Building
757-683-3284
Charlene Fleener, Graduate Program Director

The Doctor of Philosophy in Curriculum and Instruction at the Darden College of Education of Old Dominion University, with concentrations in Curriculum and Instruction, Early Childhood Education, and Literacy Leadership provides the opportunity for students to become scholarly leaders to serve our nation’s schools, colleges, universities and related agencies such as business, government, and research institutions to contribute to global education. The curricula is solidly grounded in interpreting and producing research, use of technology to enhance the teaching/learning process, equity, and leadership, which are woven into common core courses and concentration-specific courses.

Concentration Areas:

Curriculum and Instruction:
The Doctor of Philosophy in Education with a concentration in Curriculum and Instruction is the degree most often desired by classroom teachers and school librarians. The program of study includes core courses shared by all three concentrations plus the freedom to choose courses that meet individual specialty area interests (e.g., library science, mathematics, social studies, instructional design etc.) Students are prepared to be scholarly leaders for academic positions in higher education or in K12 schools. Personalized mentorship is provided for those who desire careers in academic research, program/curriculum design and evaluation, and higher education, including teacher preparation, policy, and leadership.

Literacy Leadership:
The Doctor of Philosophy in Education with a concentration in Literacy Leadership is a degree with a unique focus to prepare individuals as literacy professionals for leadership and supervisory roles, teaching literacy curriculum and instruction in higher education, and/or consulting for educational organizations or private industry. The program provides study of theories, methodologies, and research with opportunities to develop individual expertise in research, writing, and pedagogy. Personalized mentorship is provided for those who desire careers in academic research, program/curriculum design and evaluation, and higher education, including teacher preparation, policy, and leadership.

Early Childhood Education:
The PhD in Education with a concentration in Early Childhood Education program, through its integral partnership with the Old Dominion University Child Study and Development Centers, focuses on the multidisciplinary study of the cognitive, language, and healthy social/emotional development of young children from birth to age nine. The program prepares students to become faculty in colleges and universities and senior administrators in institutions and agencies. Personalized mentorship and professional training is provided for those who desire careers in academic research, child advocacy, program design and evaluation, and higher education, including teacher preparation, policy, and administrative leadership.

Admission

For admission to this program, individuals should have a completed master’s degree in an appropriate discipline from a regionally accredited university. Degrees that are equivalent to a master’s degree such as L.L.B., J.D., and D.D.S., will be considered. Prospective students should also have prior course work in statistics, and curriculum and instruction. If this requirement is not met, then additional course work will be added to the candidate’s graduate program of study. Please see prerequisites on the curriculum description for specifics.

Application requirements for the Ph.D. in Curriculum and Instruction are as follows:

- A completed application form which is available online or from the Office of Graduate Admissions;
- Official transcripts of all undergraduate and graduate courses and degrees completed;
- Official report scores from the Graduate Record Examination (verbal, quantitative, and analytical) taken within the last five years. GRE scores expire after five years; however, candidates who have completed the exam prior to five years before the application deadline may submit those scores for consideration if they are provided from an official source such as a transcript or form provided by the Educational Testing Service. Old Dominion University reserves the right to determine what is an "official source;"
- Applicants whose native language is not English must submit a current score for the Test of English as a Foreign Language (TOEFL) of at least 600 (written) or 250 (computer based);
• Applicants must submit a 1500 word statement of their academic and professional goals with an emphasis on how the Ph.D. degree in curriculum and instruction will contribute to the achievement of the stated goals;

• Three letters of reference from sources capable of commenting on the applicant’s readiness for advanced graduate study. It is recommended that these letters come from employment supervisors and/or university faculty members; and,

• An interview with the curriculum and instruction graduate program director or designee. The Curriculum and Instruction program committee will also review applications for admission.

Admission to the Ph.D. programs in the Department of Teaching & Learning is competitive. A number of criteria are considered including graduate and undergraduate GPAs, GRE scores, writing ability, a personal interview, and the match between student interests and faculty expertise. Meeting the minimum requirements established by the department does not ensure admission to the program. A score of 1,000 or higher on the GRE (300 for 2011 scale) , 500 (150 on 2011 scale) on both the verbal and quantitative sections; and a score of 4.5 or higher on the analytical writing portion of the GRE are expected (not required). A minimum undergraduate GPA of 2.8 and a minimum graduate GPA of 3.25 are recommended.

**Degree Requirements**

The Ph.D. program in curriculum and instruction is comprised of courses totaling a minimum of 60 academic credit hours beyond the master’s degree. The curriculum includes a 15 hour research/foundations block, a 15 hour “common core” taken by all PhD students regardless of concentration, a 15 hour concentration core and a 15-hour dissertation block, which includes the dissertation seminar. The dissertation will often require more than 12 credit hours depending on the length of time necessary for completion. Students entering the program may also need to complete introductory research methods statistics courses if they have not had such courses or cannot demonstrate competency at a satisfactory level. Students who come into the Ph.D. program with a master’s degree in an academic field that is unrelated to curriculum and instruction and/or who have not completed courses to develop competency in specified areas may need to complete these courses in addition to the required courses.

Applicants must submit completed applications and all related material no later than March 15 of each year for summer or fall admission and no later than November 15 for spring admission. For exceptional cases, admissions may occur at other times.

**Program Completion and Exit**

In order to complete the program students must fully comply with the curriculum below, and all requirements noted elsewhere in the University catalog for graduate students and within the Ph.D. in Education Handbook. It is the responsibility of the student to obtain these materials and complete required portions.

**Curriculum**

**Course List**

<table>
<thead>
<tr>
<th>Prerequisite Coursework *</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ELS 660 Program Evaluation, Research and Planning</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 611 Introduction to Research Methods in Education</td>
<td>3</td>
</tr>
<tr>
<td>FOUN 612 Applied Research Methods in Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Students must also have the following or equivalent:

| FOUN 722 Introduction to Applied Statistics and Data Analysis | 3 |

Early Childhood Education students must also have the following two courses or equivalents as determined by the Program Director

| FOUN 641 Assessment and Evaluation of Student Learning | 3 |
| TLED 677 Advanced Child Development Theory and Research | 3 |

**Research Core (required)**

| FOUN 812 Advanced Research Design and Analysis | 3 |
| FOUN 814 Qualitative Research Design in Education | 3 |

Choose one course from EACH of the following bound pairs

| FOUN 822 Applied Linear Models in Educational Research or FOUN 823 Analysis of Variance Applied to Educational Research | 3 |
| FOUN 840 Advanced Educational Measurement and Assessment or FOUN 870 Formative Assessment of Student Learning for School Leaders and Curriculum Specialist | 3 |

| FOUN 815 Advanced Qualitative Research | 3 |
| FOUN 813 Advanced Program Evaluation in Education | 3 |

Note: A research cognate can be earned by taking an additional four courses beyond the required 15 hours.

| Common Core (Required by all C&I Concentrations)** |  |
| TCLI 802 Historical and Contemporary Perspectives on Education | 3 |
| TCLI 803 Perspectives and Inquiry in Curriculum and Instruction | 3 |
| FOUN 830 Theories of Learning and Instruction | 3 |
| TCLI 804 Instruction Theories and Models | 3 |
| TCLI 805 Critical Issues: Curriculum Research | 3 |

**Literacy Leadership Concentration (required)**

| TCLI 826 Advanced Supervision of Reading Programs | 3 |
| TCLI 827 Advanced Practicum in Reading | 3 |
| TCLI 828 Contemporary Issues in Literacy Research | 3 |
| ELS 787 Pupil Personnel Services for Diverse Populations | 3 |

| ELS 878 Leadership for Teaching and Learning | 3 |

The literacy leadership concentration requires a minimum of 18 graduate credit hours in Literacy or closely related coursework.

**Early Childhood Education**

| TCLI or SPED 800 Social/Emotional Aspects of Child Development |  |
| TCLI 835 Connecting Research In Early Developmental Practice in Early Childhood Education | 3 |
| TCLI 895 Topics in Education (Internship) | 1-3 |
| TCLI 836 Working with At-Risk Children and Families: An Ecological Approach | 3 |
| TCLI 840 Issue in Early Language and Literacy | 3 |

Prerequisite coursework for the ECE Concentration is 12 credits. In addition to FOUN 611/612 and FOUN 722, the following are required for all students who did not have them as part of a Masters Degree program: FOUN641 Assessment and Evaluation of Student Learning; TLED677 Advanced Child Development Theory and Research

**Curriculum and Instruction Concentration**

C&I emphasis students, working with an advisor, will complete a 15-hour concentration block according to individual areas of specialty.

| C&I Approved Course | 15 |

olds domoninion university 153
The emphasis areas are accredited by the National Council for Accreditation of Teacher Education (NCATE), the Council on Accreditation of Counseling and Related Program (CACREP), American Speech Language and Hearing Association (ASHA), and approved by the Virginia Department of Education (VDOE).

The TES staff is committed to serving candidates pursuing a professional education emphasis through their respective college’s academic departments and fostering a process with the following features:

- Academic advisement of prospective teacher candidates pursuing an undergraduate or graduate degree with a professional education, including development of appropriate academic plans;
- Promotion of professional education, including informing candidates of scholarship and study abroad opportunities, as well as credentialing requirements;
- Communication with prospective teacher candidates regarding admissions, continuance, and exit requirements for their respective education degree and initial licensure programs; and
- Facilitation of the placement of field experiences for teacher candidates in appropriate K-12 classroom settings in order to meet observation, practicum, and student teaching internship requirements.

**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 to an Approved Teacher Education Program. This requirement can be satisfied by meeting a passing score in one of the selected criteria below:

1. Passing PRAXIS I composite score of 532; or
2. Approved substitute test score for Praxis I:
   - SAT score of 1000 with at least 450 verbal and 510 mathematics taken prior to April 1, 1995; or
   - SAT score of 1100 with at least 530 verbal and 530 mathematics taken after April 1, 1995; or
   - ACT composite score of 21 with ACT mathematics score of at least 21, and ACT English plus Reading score of no at least 37, taken prior to April 1, 1995. ACT scores taken prior to 1989 are not valid; or
   - ACT composite score of 24 with ACT mathematics score of at least 22, and ACT English plus Reading score of at least 46, taken after April 1, 1995; or
   - PRAXIS I Math test score of 178 and a composite Virginia Communication and Literacy Assessment (hereafter referred to as the VCLA) score of 470; or
   - SAT Mathematics test score of at least 510 taken prior to April 1, 1995 and a VCLA score of 470; or
   - SAT Mathematics test score of at least 510 taken prior to April 1, 1995 and a composite VCLA score of 470; or
   - ACT Mathematics test score of at least 21 taken prior to April 1, 1995 and a composite VCLA score of 470; or
   - ACT Mathematics test score of at least 22 taken after April 1, 1995 and a composite VCLA score of 470.

For the most current information on the prescribed Virginia Board of Education admission assessment, visit the Teacher Education Services website, http://education.odu.edu/tes and review the Teacher Education Handbook.

**Early Field Experiences**

A candidate may participate in a course with a practicum experience through one of two tracks.

1. A candidate may be eligible to participate in the practicum field experience required by the course if they have been admitted into an approved teacher education program. This requires that candidates pass the Praxis I exam or meet the approved SAT or ACT scores prescribed by the Virginia Board of Education. In addition, candidates must meet the GPA for their individual programs, professional education courses, and minimum grade requirements, along with other course prerequisites.

2. A provisionally licensed teacher may participate in an early practicum course if they are currently employed with a school division, have a letter from the Virginia Department of Education listing the course as a needed requirement, and have passing Virginia Communication and Literacy Assessment scores (VCLA). The provisionally licensed teacher will have to meet all the requirements of the course as stated in the syllabus.
We are committed to developing candidates skilled in teaching students of all cultural and socioeconomic backgrounds. Thus, candidates must complete their early practice in a public or private school that has been accredited by the Virginia Department of Education. Thus, teacher candidates may request specific school districts and schools. However, these requests are informal and ARE NOT guaranteed. Candidates may not contact school district personnel in order to request or obtain a placement. Candidates may not complete their practicum at a school where a relative is attending or working. Candidates are required to disclose this information on the on-line application.

Teacher Candidate Internship

The teacher internship is the culminating experience in the teacher education programs. This experience is a crucial part of a candidate’s preparation to becoming a professional educator. During the teaching internship experience, candidates observe the operation of schools; analyze the implementation of curricula and instructional strategies; observe the growth and development of students; assist with classroom and extracurricular activities; and ultimately assume responsibility for the academic instruction and management of the classroom. Candidates’ work is evaluated by clinical faculty (cooperating teachers in the schools, in conjunction with University supervisors).

To be eligible to participate in the teaching internship experience, the candidate must have been admitted into an approved teacher education program. Applications for the Fall student teaching semester are due March 15. Applications for the Spring student teaching semester are due September 15. Individuals who submit late applications may not receive placement. This requires that the candidate pass the Praxis I exam or meet Virginia Board of Education approved cut off scores for the SAT or ACT. In addition, candidates must meet the GPA requirements for their individual programs, professional education GPA requirements, and minimum grade requirements. Also, candidates must pass the Praxis II exam in their content area if one is required by the Virginia Department of Education for licensure and the Virginia Communication and Literacy Assessment (VCLA), prior to the teacher internship. Candidates in the PreK-3, PreK-6, and Special Education programs must pass the Reading for Virginia Educators (RVE) Assessment prior to the teacher internship. (Candidates who previously passed the VRA do not need to take the RVE). All assessments must be on file in the Teacher Education Services and Advising office, room 152 Education Building prior to the student teaching orientation, no exceptions.

The TES staff are committed to supporting the development of candidates skilled in teaching students of all cultural and socioeconomic backgrounds. Thus, teacher candidates may complete their teaching internships in public or private schools that have been accredited by the Virginia Department of Education or other State Department of Education. Candidates may request specific school districts and schools. These requests are informal and are not guaranteed. Candidates may not contact school district personnel in order to request or obtain a placement. Candidate may not complete their internship at a school where a relative is attending or working. Candidates are required to disclose this information on the student teaching application. If a candidate is placed at a school where a relative is located, the candidate will be removed from the placement and will have to complete the internship the following semester. Candidates may not student teach in the schools where they attended/graduated from high school.

A negative tuberculin test is required prior to the teacher internship. Prospective candidates are required to provide authorization for the release of any disciplinary action that is contained in their student records. Prior to placement, candidates may be required to complete the Virginia State Police Criminal History Check (SP230), the Child Protective Service Central Registry Release of Information (032-02-1515/1), and a fingerprint check by the school district. Candidates may be liable for all costs incurred. All candidates are required to review the Teacher Education Services website at http://education.odu.edu/tes/pdf/backgroundcheckbydistrict.pdf for districts requiring background checks. Additionally, prospective teacher interns should avail themselves of liability or tort insurance, which can be obtained through membership in the Student Virginia Education Association of Old Dominion University.

Virginia Troops to Teachers

113 Education Building
757-683-3327, 1-800-560-4317
http://www.odu.edu/troopstoteachers

Joseph Wargo, Director

Troops to Teachers (TTT) was established in 1994 as a Department of Defense program and is managed by the Defense Activity for Non-Traditional Education Support (DANTES) in Pensacola, Fl. Old Dominion University is the headquarters for Virginia TTT with all Commonwealth of Virginia institutions of higher learning participating in the program. The primary objective of TTT is to help recruit quality teachers for schools that serve low-income families throughout the United States. TTT helps relieve the teacher shortages, especially in math, science, special education and other high-need subject areas, and assists military personnel in making a successful transition to a second career in teaching.

TTT provides a $5,000 stipend to assist military personnel who are retired, within one year of retiring with an approved retirement date, or honorably discharged with six or more years of service and willing to oblige in the active reserve on a three-year contract. The stipend may be used to pay for any approved teacher licensure program in any state above the required bachelor’s degree at any accredited college. The stipend may not be used for training principals, guidance counselors or ROTC instructors. TTT participants are obligated to teach for three years in a high-need school district.

Participants hired to teach in a setting where 50% or more of the students receive free or reduced lunches or their Individual Disability Education Act (IDEA) percentage is 13.5% or more are eligible for a $10,000 bonus. Acceptance of any monies obligates the Troops to Teachers participant to teach for three years in a poverty-level school.

Virginia Department of Education Career Switcher Program

122 Education Building
757-683-4686, 1-800-262-0009
www.odu.edu/careerswitcher

Fran Puchalski, Co-Director
Lisa Temple, Co-Director

The Old Dominion University Programs for Continued Learning has offered the Career Switcher Program on behalf of the Virginia State Department of Education since 1999. The General Assembly requested that the Board of Education develop an alternative pathway to teaching which would positively impact Virginia’s teacher shortages. ODU was approached by the Department of Education to create and run the state’s pilot Career Switcher Program. Since then, our program has trained hundreds of Career Switchers who have gone on to be valued educators in school districts statewide.

Varied program formats allow for extremely accelerated training, while accommodating participants who wish to remain employed in their current jobs while pursuing teacher licensure.

Level I preparation in instructional skills and classroom management is specific to content area and focuses on the “survival skills” of everyday classroom teaching. Opportunities for in-school observation offers participants the opportunity to make contacts in school districts while gaining knowledge about teacher responsibilities and instructional strategies.

The ODU Career Switcher Program, while offered in a non-credit format, will transfer six hours of experiential graduate academic credit toward a Master of Science in Education degree through the Darden College of Education. Career Switchers who engage in additional coursework may qualify to transfer more than six hours pending program approval.

Upon completion of Level I preparation, ODU Career Switchers will receive a Provisional License which qualifies them to teach in the Commonwealth
of Virginia. The renewable Collegiate Professional Teacher License will be issued upon completion of Level II.

Programs for Continued Learning
122 Education Building
757-683-4686, 1-800-262-0009
http://education.odu.edu/pcl/
Fran Puchalski, Co-Director

The department operates as the continuing education operation for the Darden College of Education. In this capacity, the office provides professional and personal noncredit programs. Program offerings range from alternative teacher certification, short courses, workshops, and institutes as well as offering educational training and conferences for educators and counselors. The services we provide assist individuals seeking to gain knowledge and individual satisfaction in their professional and private lives.

The Child Study Center
139 Child Study Center
757-683-3081
http://education.odu.edu/esse/academics/specprog/lions.shtml
Jane Elyce Glasgow, Director

The Lions Child Study Center, located on Hampton Boulevard on the Old Dominion University campus, serves as a cooperative link among the University, community, and early childhood, special education and speech pathology/audiology programs of the University. In conjunction with its mission of urban outreach, the center provides in-service education, consultation, and clinical services to the local community, agencies, institutions, and school systems. In addition to serving as a visible community resource for referral and information, the center also conducts on-site demonstrations for training and informational exchange, provides parent training, tutorial and assessment services, and develops intervention and service models.

Programs for Children
Mission Statement
Old Dominion University’s primary purpose in the children’s programs at the Child Development and Child Study Centers is to train teacher candidates and provide a setting for research conducted by the University community. A secondary mission is to provide exemplary child care for the greater Hampton Roads community.

The Child Development Center

The Old Dominion University Child Development Center is a full-service, full-time program offering quality care for children ages eight weeks through kindergarten. In each of seven classrooms, a lead teacher is assisted by practicum students from early childhood and other academic areas of study. The lead teacher is a master’s-level professional, trained to be knowledgeable about and attentive to the individual needs of children. Teacher aides also are employed to work in the center and are chosen from students in various disciplines who are trained and interested in working with young children. The Child Development Center provides care for children 49 weeks of the year from 7:30 a.m. to 5:30 p.m. and is housed in two locations: 1520 West 48th Street (the five classes for younger children) and the Child Study Center on 45th Street (the two classes for the oldest children).

The Preschool/Kindergarten Program

The Preschool/Kindergarten Program operates three hours a day, five days a week and emphasizes developmentally appropriate practices for children ages 3-5. The overall curriculum includes art, music, science, reading and math readiness, physical education, and computers. Children of kindergarten age are given a specific readiness program in preparation for their entrance into first grade. Lead teachers are assisted by graduate practicum students from early childhood education, as well as students from other academic areas of study, including speech-language pathology, psychology, leisure studies, elementary education and special education.

Speech and Hearing Clinic
Lions Child Study Center
757-683-4117
http://education.odu.edu/shc/
The Speech and Hearing Clinic including the Scottish Rite Center provides diagnostic and remedial clinical services to speech-language and hearing impaired children and adults. It operates on a twelve-month, five day per week schedule. Referrals are accepted from medical and educational agencies. Speech-language services are provided by advanced undergraduate and graduate student clinicians in Old Dominion University’s speech-language pathology program who are supervised by ASHA certified clinical faculty members. Audiology services are provided by clinical faculty members holding ASHA certification and by student clinicians who are supervised by these clinical faculty members. Clients typically served by the clinic display hearing, language, voice, fluency (stuttering) and articulation disorders as well as characteristics of social and foreign dialects.
Frank Batten College of Engineering and Technology

www.eng.odu.edu/

102 Kaufman Hall
757-683-3789

Oktay Baysal, Dean
Osman Akan, Associate Dean
Linda Vahala, Associate Dean
Berndt Bohm, Assistant Dean

Ph.D.
• Aerospace Engineering
• Biomedical Engineering
• Civil and Environmental Engineering
• Electrical and Computer Engineering
• Engineering Management
• Mechanical Engineering
• Modeling and Simulation

D. Eng.
• Aerospace Engineering
• Civil and Environmental Engineering
• Engineering Management and Systems Engineering
• Mechanical Engineering
• Modeling and Simulation

Master’s
• Aerospace Engineering
• Civil Engineering
• Electrical and Computer Engineering
• Engineering Management
• Environmental Engineering
• Mechanical Engineering
• Modeling and Simulation
• Systems Engineering

Master of Engineering Management (M.E.M)
• Engineering Management

Accelerated Degree Programs
Accelerated Bachelor’s/Master’s Degree Programs
Direct Bachelor’s-to-Ph.D. and Integrated Bachelor’s/Ph.D. Programs

Graduate Certificate Programs
• Advanced Engineering Certificate
• Bioelectrics Certificate
• Certificate of Professional Study in Engineering Management
• Coastal Engineering Certificate
• Engineering Management Certificate
• Homeland Security Certificate
• Modeling and Simulation Engineering Certificate

• Modeling and Simulation for Engineering Management Support Certificate
• Modeling and Simulation for Large-Scale Computational Mechanics
• Naval Architecture and Marine Engineering Certificate
• Systems-Based Modeling and Simulation Certificate
• Wireless Communication Certificate

Collaborative Programs
Commonwealth Graduate Engineering Program (CGEP)
Virginia Consortium for Engineering and Science Universities (VCES)

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.

Overview
The Frank Batten College of Engineering and Technology at Old Dominion University offers degrees in engineering and engineering technology.

The graduate engineering programs at Old Dominion University are specifically designed to take advantage of and enhance unique assets in the Hampton Roads area, a complex of seven major cities. These assets include: 1) a strong military presence with multiple high technology facilities, particularly as it relates to modeling and simulation; 2) the NASA Langley Research Center with its focus on aeronautics and space exploration; 3) the Jefferson Laboratories, a major center of nuclear physics and home of a major Free Electron Laser; 4) one of the major international deepwater ports on the east coast of the United States; 5) a major ship building and ship repair industry, including Newport News Shipbuilding, the only builder of nuclear aircraft carriers in the U.S.; 6) a major high technology industry base; and 7) a variety of commercial enterprises. These assets have enabled the development of distinctive engineering curricula.

Programs of Study
Table 1 lists the programs of study offered at master’s and/or doctoral levels.

Table 1: Graduate Degrees Offered

<table>
<thead>
<tr>
<th>Programs of Study</th>
<th>Master of Science (MS)</th>
<th>Master of Engineering (ME)</th>
<th>Doctor of Philosophy (PhD)</th>
<th>Doctor of Engineering (DEng)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Engineering (AE)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Biomedical Engineering (BME)</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Civil Engineering (CE)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil and Environmental Engineering (CEE)</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Electrical and Computer Engineering (ECE)</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Engineering Management (ENMA)</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

OLD DOMINION UNIVERSITY 157
Master’s-Level Programs

Admission Information

Each program requires a bachelor’s degree in the appropriate field from an accredited institution of higher education and the submission of Graduate Record Examination (GRE) scores. The GRE requirement is waived for the master’s program in civil engineering and environmental engineering if the applicant holds an ABET accredited engineering degree. Each applicant must submit an essay of 500 words or less describing personal and academic goals, professional objectives, preparation for graduate study, and how the chosen program will help the applicant achieve these goals and objectives. Two letters of recommendation must be submitted from former or current professors except in civil engineering, environmental engineering and engineering management where letters from employment supervisors are also accepted. Regular admission to a master’s program generally requires an undergraduate GPA of 3.0 or higher on a 4.0 scale. Applicants with a lower undergraduate GPA may be considered for regular or provisional admission on the basis of successful engineering work experience or other credentials demonstrating potential for success in the graduate program. Provisional admission may also be possible for applicants with a bachelor’s degree in a field other than the applicant’s intended graduate program. In such cases there will be pre-requisite course requirements. Exceptions to these requirements require consultation with the appropriate graduate program director.

Degree Requirements

Master’s degree requirements in various programs are summarized in Table 2 for non-thesis options and in Table 3 for thesis options. In these tables the program abbreviations are: AE-Aerospace Engineering, BME-Biomedical Engineering, CE-Civil Engineering, EnvE-Environmental Engineering, ECE-Electrical and Computer Engineering, ENMA-Engineering Management, SysE-Systems Engineering, and MSIM-Modeling and Simulation.

Table 2. Master of Engineering and Master of Engineering Management Degree minimum Requirements

<table>
<thead>
<tr>
<th>AE Minimum Requirements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester Credits of Course Work</td>
<td>30</td>
</tr>
<tr>
<td>Semester Credits of Research</td>
<td>0</td>
</tr>
<tr>
<td>Total Credits</td>
<td>30</td>
</tr>
<tr>
<td>Course Work Semester Credits of Graduate Math/Stat</td>
<td>3</td>
</tr>
<tr>
<td>Course Work Semester Credits in Major</td>
<td>24</td>
</tr>
<tr>
<td>Course Work Semester Credits at 600 Level or Above</td>
<td>24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CE Minimum Requirements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester Credits of Course Work</td>
<td>30</td>
</tr>
<tr>
<td>Semester Credits of Research</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>30</td>
</tr>
<tr>
<td>Course Work Semester Credits of Graduate Math/Stat</td>
<td>3</td>
</tr>
<tr>
<td>Course Work Semester Credits in Major</td>
<td>15</td>
</tr>
<tr>
<td>Course Work Semester Credits at 600 Level or Above</td>
<td>18</td>
</tr>
</tbody>
</table>

Comprehensive Exam - oral project exam

<table>
<thead>
<tr>
<th>CE Course Option Minimum Requirements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester Credits of Course Work</td>
<td>30</td>
</tr>
<tr>
<td>Semester Credits of Research</td>
<td>0</td>
</tr>
<tr>
<td>Total Credits</td>
<td>30</td>
</tr>
<tr>
<td>Course Work Semester Credits of Graduate Math/Stat</td>
<td>3</td>
</tr>
<tr>
<td>Course Work Semester Credits in Major</td>
<td>18</td>
</tr>
<tr>
<td>Course Work Semester Credits at 600 Level or Above</td>
<td>18</td>
</tr>
</tbody>
</table>

Comprehensive Exam - oral project exam

<table>
<thead>
<tr>
<th>EnvE Project Option Minimum Requirements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester Credits of Course Work</td>
<td>27</td>
</tr>
<tr>
<td>Semester Credits of Research</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>30</td>
</tr>
<tr>
<td>Course Work Semester Credits of Graduate Math/Stat</td>
<td>3</td>
</tr>
<tr>
<td>Course Work Semester Credits in Major</td>
<td>15</td>
</tr>
<tr>
<td>Course Work Semester Credits at 600 Level or Above</td>
<td>18</td>
</tr>
</tbody>
</table>

Comprehensive Exam - oral project exam

<table>
<thead>
<tr>
<th>EnvE Course Option Minimum Requirements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester Credits of Course Work</td>
<td>30</td>
</tr>
<tr>
<td>Semester Credits of Research</td>
<td>0</td>
</tr>
<tr>
<td>Total Credits</td>
<td>30</td>
</tr>
<tr>
<td>Course Work Semester Credits of Graduate Math/Stat</td>
<td>3</td>
</tr>
<tr>
<td>Course Work Semester Credits in Major</td>
<td>18</td>
</tr>
<tr>
<td>Course Work Semester Credits at 600 Level or Above</td>
<td>18</td>
</tr>
</tbody>
</table>

Comprehensive Exam - written

<table>
<thead>
<tr>
<th>ECE Project Option Minimum Requirements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester Credits of Course Work</td>
<td>27</td>
</tr>
<tr>
<td>Semester Credits of Research</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>30</td>
</tr>
<tr>
<td>Course Work Semester Credits of Graduate Math/Stat</td>
<td>3</td>
</tr>
<tr>
<td>Course Work Semester Credits in Major</td>
<td>15</td>
</tr>
<tr>
<td>Course Work Semester Credits at 600 Level or Above</td>
<td>18</td>
</tr>
</tbody>
</table>

Comprehensive Exam - oral project exam

<table>
<thead>
<tr>
<th>ECE Course Option Minimum Requirements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester Credits of Course Work</td>
<td>30</td>
</tr>
<tr>
<td>Semester Credits of Research</td>
<td>0</td>
</tr>
<tr>
<td>Total Credits</td>
<td>30</td>
</tr>
<tr>
<td>Course Work Semester Credits of Graduate Math/Stat</td>
<td>3</td>
</tr>
<tr>
<td>Course Work Semester Credits in Major</td>
<td>18</td>
</tr>
<tr>
<td>Course Work Semester Credits at 600 Level or Above</td>
<td>18</td>
</tr>
</tbody>
</table>

Comprehensive Exam - written

<table>
<thead>
<tr>
<th>ME Project Option Minimum Requirements</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester Credits of Course Work</td>
<td>27</td>
</tr>
<tr>
<td>Semester Credits of Research</td>
<td>3</td>
</tr>
<tr>
<td>Total Credits</td>
<td>30</td>
</tr>
<tr>
<td>Course Work Semester Credits of Graduate Math/Stat</td>
<td>3</td>
</tr>
<tr>
<td>Course Work Semester Credits in Major</td>
<td>18</td>
</tr>
</tbody>
</table>

Comprehensive Exam - written

Degree title is Master of Engineering Management (MEM).
<table>
<thead>
<tr>
<th>Table 3. Master of Science Degree Minimum Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AE</strong></td>
</tr>
<tr>
<td>Semester Credits of Course Work</td>
</tr>
<tr>
<td>Semester Credits of Research</td>
</tr>
<tr>
<td>Total Credits</td>
</tr>
<tr>
<td>Course Work Semester Credits of Graduate Math/Stat (600 Level or above)</td>
</tr>
<tr>
<td>Course Work Semester Credits in Major</td>
</tr>
<tr>
<td>Course Work Semester Credits at 600 Level or Above</td>
</tr>
<tr>
<td>Comprehensive Exam - Thesis defense</td>
</tr>
<tr>
<td><strong>CE</strong></td>
</tr>
<tr>
<td>Semester Credits of Course Work</td>
</tr>
<tr>
<td>Semester Credits of Research</td>
</tr>
<tr>
<td>Total Credits</td>
</tr>
<tr>
<td>Course Work Semester Credits of Graduate Math/Stat</td>
</tr>
<tr>
<td>Course Work Semester Credits in Major</td>
</tr>
<tr>
<td>Course Work Semester Credits at 600 Level or Above</td>
</tr>
<tr>
<td>Comprehensive Exam - Thesis defense</td>
</tr>
<tr>
<td><strong>ECE</strong></td>
</tr>
<tr>
<td>Semester Credits of Course Work</td>
</tr>
<tr>
<td>Semester Credits of Research</td>
</tr>
<tr>
<td>Total Credits</td>
</tr>
<tr>
<td>Course Work Semester Credits of Graduate Math/Stat</td>
</tr>
<tr>
<td>Course Work Semester Credits in Major</td>
</tr>
<tr>
<td>Course Work Semester Credits at 600 Level or Above</td>
</tr>
<tr>
<td>Comprehensive Exam - Thesis Defense</td>
</tr>
<tr>
<td><strong>ENMA</strong></td>
</tr>
<tr>
<td>Semester Credits of Course Work</td>
</tr>
<tr>
<td>Semester Credits of Research</td>
</tr>
<tr>
<td>Total Credits</td>
</tr>
<tr>
<td>Course Work Semester Credits of Graduate Math/Stat</td>
</tr>
<tr>
<td>Course Work Semester Credits in Major</td>
</tr>
<tr>
<td>Course Work Semester Credits at 600 Level or Above</td>
</tr>
<tr>
<td>Comprehensive Exam - Thesis defense</td>
</tr>
<tr>
<td><strong>ME</strong></td>
</tr>
<tr>
<td>Semester Credits of Course Work</td>
</tr>
<tr>
<td>Semester Credits of Research</td>
</tr>
<tr>
<td>Total Credits</td>
</tr>
<tr>
<td>Course Work Semester Credits of Graduate Math/Stat</td>
</tr>
<tr>
<td>Course Work Semester Credits in Major</td>
</tr>
<tr>
<td>Course Work Semester Credits at 600 Level or Above</td>
</tr>
<tr>
<td>Comprehensive Exam - Thesis defense</td>
</tr>
<tr>
<td><strong>MSIM</strong></td>
</tr>
<tr>
<td>Semester Credits of Course Work</td>
</tr>
<tr>
<td>Semester Credits of Research</td>
</tr>
<tr>
<td>Total Credits</td>
</tr>
<tr>
<td>Course Work Semester Credits of Graduate Math/Stat</td>
</tr>
<tr>
<td>Course Work Semester Credits in Major</td>
</tr>
<tr>
<td>Course Work Semester Credits at 600 Level or Above</td>
</tr>
<tr>
<td>Comprehensive Exam - Thesis defense</td>
</tr>
</tbody>
</table>

**Accelerated Bachelor’s/Master’s Degree Programs**

These programs are designed to allow qualified students to secure a space in a Master’s program available in the 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 an accelerated program can count up to six credit hours of course work towards both the undergraduate and the graduate degrees. Full-time students can complete the requirements for the Bachelor’s degree in four years and for the Master’s degree in one additional year.

Students who are matriculated in an undergraduate major in the 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 an accelerated Bachelor’s/Master’s program. Transfer students who desire to be admitted to an accelerated 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. Pre-requisite courses may be
required for engineering technology majors to pursue a Master’s degree in engineering. Continuance in an accelerated Bachelor’s/Master’s program requires maintenance of a GPA of 3.00 or higher overall and in the major.

**Doctor of Philosophy Programs**

**Admission Information**

In addition to general University admission requirements, applicants must have a master’s degree or equivalent and a grade point average of 3.50 in the appropriate field from an accredited institution of higher education. Additional requirements are listed in Table 4. The Graduate Record Examination (GRE) General Test is required of all applicants; the GRE requirement is waived for applicants in the Ph.D. programs of civil engineering and environmental engineering if the applicant holds an ABET-accredited engineering degree or graduate engineering degree from an institution of which the undergraduate degree is ABET-accredited. Each applicant must submit an essay of 500 words or less describing personal and academic goals, professional objectives, preparation for graduate study, and how the chosen program will help the applicant achieve these goals and objectives. All applicants must submit two letters of recommendation. Letters of recommendation must be from current professors. Engineering management applicants may submit letters from employment supervisors. Civil engineering and environmental engineering applicants are permitted to submit one of the two letters from an employment supervisor.

**Table 4. Ph.D. Degree Admission Requirements**

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>GPA (previous graduate work) for provisional admission</th>
<th>Letter of Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE</td>
<td>3.25</td>
<td>2</td>
</tr>
<tr>
<td>BME</td>
<td>3.25</td>
<td>2</td>
</tr>
<tr>
<td>CEE</td>
<td>3.25</td>
<td>2</td>
</tr>
<tr>
<td>ECE</td>
<td>3.25</td>
<td>2</td>
</tr>
<tr>
<td>ME</td>
<td>3.25</td>
<td>2</td>
</tr>
<tr>
<td>ENMA</td>
<td>3.50</td>
<td>2 (interview required)</td>
</tr>
<tr>
<td>MSIM</td>
<td>3.25</td>
<td>3</td>
</tr>
</tbody>
</table>

**Degree Requirements**

Table 5 lists requirements that are imposed by the Batten College of Engineering and Technology.

**Table 5. Ph.D. Degree Requirement**

<table>
<thead>
<tr>
<th>Minimum Requirements</th>
<th>Course Work</th>
<th>Dissertation</th>
<th>Foreign Language Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Semester Credit Hours</td>
<td>Hours</td>
<td>Requirement</td>
</tr>
<tr>
<td>AE</td>
<td>24</td>
<td>24</td>
<td>May apply as research skill</td>
</tr>
<tr>
<td>BME</td>
<td>24</td>
<td>24</td>
<td>None</td>
</tr>
<tr>
<td>CEE</td>
<td>24</td>
<td>24</td>
<td>None</td>
</tr>
<tr>
<td>ECE</td>
<td>24</td>
<td>24</td>
<td>None</td>
</tr>
<tr>
<td>ME</td>
<td>24</td>
<td>24</td>
<td>May apply as research skill</td>
</tr>
<tr>
<td>ENMA</td>
<td>27</td>
<td>24</td>
<td>None</td>
</tr>
<tr>
<td>MSIM</td>
<td>24</td>
<td>24</td>
<td>None</td>
</tr>
</tbody>
</table>

**Direct Bachelor-to-Ph.D. and Integrated Bachelor/Ph.D. Programs**

For a select number of exceptionally well-qualified students, the college has established an accelerated doctoral program that enables students to be admitted directly into the Ph.D. program upon completion of the baccalaureate degree. The total number of graduate course credits required is 48 plus a 24-credit dissertation. That is six credit hours shorter than the regular path, where a student obtains a master’s degree and then pursues Ph.D. study. The philosophy of the college is that the quality of the dissertation is judged more by the quality of research performed, rather than by the number of courses taken.

A select number of exceptionally well-qualified students can be admitted to the Integrated Bachelor/Ph.D. program while they are pursuing their junior year in one of the undergraduate programs at Old Dominion University. This program encourages admitted students to work closely with individual faculty members during the remainder of their undergraduate program. Just as in the accelerated Bachelor’s/Master’s program, six credit hours of graduate course work may again be counted towards the undergraduate degree and doctoral course work mentioned above for the integrated Bachelor/Ph.D. program. Therefore, the total graduate credit hours after obtaining the bachelor’s degree at Old Dominion can be 42 credit hours of graduate courses plus a 24-credit dissertation. That is 12 credits shorter than the regular path. 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 Ph.D., and also write a master’s thesis.

**Doctor of Engineering Program**

The College offers an interdisciplinary Doctor of Engineering (D.Eng.) program to provide the Commonwealth and the nation with exceptionally educated engineering practitioners. These individuals will have developed the highest possible capability to provide innovative solutions in specialized engineering endeavors. The graduates of the program will meet the highest standards for advanced level engineering and leadership positions in industry and government.

**Curriculum**

A minimum of 48 hours of graduate work beyond the master’s degree is required including:

- 18 credit hours of core courses
- At least 18 credit hours of graduate coursework in the student’s area of specialization
- At least 12 credit hours of applied doctoral project

At least three fifths of the course work must be at 800-level. The 18 credit hours of core courses are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENMA 604</td>
<td>Project Management</td>
<td>3</td>
</tr>
<tr>
<td>ENGN 611</td>
<td>Financial Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENGN 612</td>
<td>Engineering Corporate Management</td>
<td>3</td>
</tr>
<tr>
<td>ENGN 811</td>
<td>Methodologies for Advanced Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENGN 812</td>
<td>Engineering Leadership</td>
<td>3</td>
</tr>
<tr>
<td>ENGN 813</td>
<td>Engineering Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 18

Five specialization areas are available:

1. Aerospace Engineering
2. Civil and Environmental Engineering
3. Engineering Management and Systems Engineering
4. Mechanical Engineering
5. Modeling and Simulation

**Admission Criteria**

Consideration for admission to the Doctor of Engineering program requires a formal application, undergraduate and graduate transcripts, and two letters of recommendation. Also required is an essay describing the applicant’s preparation for graduate work, personal and academic goals, and professional objectives. One of the letters of recommendation should
be from an agency point of contact if a sponsoring agency is involved. Sponsorship does not necessarily imply financial support, but it rather focuses on the provision of a project and access to data, information, and means to apply and test a solution. A personal or telephone interview of the applicant with the graduate program director will be required.

The minimum eligibility requirements for regular admission to the Doctor of Engineering program are: engineering experience of at least two years within the last five years and a master’s degree with a grade point average of 3.50 out of 4.00 in an appropriate field from an accredited institution of higher education.

Continuation and Graduation Requirements
The continuation requirements are the same as the continuation requirements for the Doctor of Philosophy programs. The graduation requirements for the Doctor of Engineering degree are as follows:

1. Satisfactory completion of a minimum of 48 credit hours of approved graduate work beyond the master’s degree, including the doctoral project.
2. Satisfactory performance on a diagnostic examination at the completion of nine credit hours of coursework. The purpose of this examination is to determine if the student has adequate background to pursue a doctoral degree. The diagnostic examination may only be repeated once.
3. Satisfactory completion of a written and oral candidacy examination. The student will take the candidacy examination when he/she is within six credit hours of completing all the required coursework. The candidacy examination may only be repeated once.
4. Preparation and successful defense of a project concept proposal. The student will be required to prepare and present a concept proposal related to the work that will be undertaken for the doctoral project. The concept proposal will be defended before the doctoral committee.
5. Submission of progress reports as deemed necessary by the doctoral committee.
6. Written report of the project results. The doctoral project shall be documented in a manner consistent with advanced, professional work. The project report will follow the standard format for Old Dominion University dissertations and theses.
7. Comprehensive oral defense of the doctoral project before the student’s doctoral committee and a general audience.

The applied doctoral project must successfully demonstrate the student’s mastery of the subject area and his/her ability to apply advanced technical knowledge to identify, formulate, and solve novel and complex engineering problems. The project must address a complex but practical problem currently faced by the public, industry, or government, and it must provide a solution that satisfies all the technical, social, political, economic, safety, sustainability, and environmental requirements and/or constraints. The doctoral project committee will have at least three Old Dominion University faculty members certified for graduate instruction; two faculty members must be from the major department. The committee must also have at least one non-University person with special knowledge of the project subject area.

Additional Graduate Degrees Policy
Graduate students may pursue an additional graduate degree in any discipline at Old Dominion University. Such a degree may be sought subsequent to or concurrently with another degree. Students may request that up to six credit hours of graduate level course work used to fulfill requirements for one Master’s degree offered by the Batten College of Engineering and Technology be applied to another Master’s program offered by the College. Approval of the appropriate graduate program directors and college dean is required. Course work used to fulfill requirements for another graduate degree cannot be applied to a doctoral degree offered by the Batten College of Engineering and Technology.

Interdisciplinary Certificate Programs
Advanced Engineering Certificate
The Advanced Engineering Certificate Program consists of 12 credit hours of graduate level course work. The four courses comprising the certificate program are offered on a regular schedule to enable the completion of the program in two years. The program provides the opportunity for practicing engineers to further their knowledge and become more competent in their profession.

Program Requirements
Admission to the program requires a Bachelor of Science degree (or equivalent) in engineering. With the approval of the graduate program director, students select four graduate courses taught in CEE, MAE, ECE, ENMA, and MSIM. An overall grade point average of 3.0 or better is required to earn the certificate.

Bioelectrics Certificate
The Bioelectrics Certificate Program consists of 12 credit hours of graduate coursework. The four courses comprising the certificate program are offered on a regular schedule to enable the completion of the program in two years. The program provides the opportunity for practicing engineers to further their knowledge and become more competent in the new field of bioelectrics.

Program Requirements
Admission to the program requires a Bachelor of Science degree (or equivalent) in engineering. The program consists of two graduate courses taught in Electrical and Computer Engineering: ECE 554 (Introduction to Bioelectrics) and ECE 775 (Non-thermal Plasma Engineering) and two courses taught in Biological Sciences: BIOL 523 (Cellular and Molecular Biology) and BIOL 524 (Comparative Animal Physiology). An overall grade point average of 3.0 or better is required to earn the certificate.

Homeland Security Certificate
The Homeland Security Certificate Program consists of 12 credit hours of graduate level course work that can be taken across colleges. The four courses comprising the certificate program are offered on a regular schedule to enable the completion of the program in two years. The program provides the opportunity for students to further their knowledge and become more competent in their profession.

Program Requirements
Admission to the program requires a Bachelor’s degree (or equivalent). The program will consist of three tracks, with courses taught in the colleges of Business and Public Administration, Batten Engineering and Technology and Arts and Letters. An overall grade point average of 3.0 or better is required to earn the certificate.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENMA 724</td>
<td>Risk Analysis *</td>
</tr>
<tr>
<td>or ENMA 714</td>
<td>Crisis Project Management</td>
</tr>
<tr>
<td>PADM 695</td>
<td>Advanced Topics</td>
</tr>
</tbody>
</table>

Track One

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 646</td>
<td>Contingency Readiness and Facility Management with GIS</td>
</tr>
<tr>
<td>ENGN 622</td>
<td>Remote Sensing</td>
</tr>
</tbody>
</table>

Track Two

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PORT 612</td>
<td>Port Operations and Management</td>
</tr>
<tr>
<td>PORT 614</td>
<td>Port Planning and Economics</td>
</tr>
</tbody>
</table>

Track Three

Select two from the following: IS 701/801 Global Change and American Foreign Policy, IS 702/802 Approaches to Collective Security, IS 706/806 The Causes of War
The Biomedical Engineering Ph.D. program strives to provide the highest quality engineering education at the graduate level, to engage in scholarly research at the forefront of biomedical engineering, and to serve the profession of biomedical engineering. Cutting edge research opportunities are offered in:

**Bioelectrics**
Encompasses the study of endogenous electrical phenomena and externally induced electromagnetic field effects in biological systems, particularly human tissue and organs. Research includes the interaction of pulsed electromagnetic fields and ionized gases with biological systems, mapping of cardiac electrophysiology, and brain-computer interfaces.

**Biomechanics and BioMicro/NanoFluidics**
Encompasses the study of macro, micro, and nano-scale solid and fluid mechanics in biological systems, particularly human tissue and organs. Research includes point-of-care microfluidic devices, orthopedic biomechanics, rehabilitation engineering, biomechanics of trauma, and micromechanical analysis of soft tissue.

**Facilities**
BioMicro Fluidics Laboratory, Center for Brain Research and Rehabilitation, Biomechanics Laboratory.

**Biomedical Imaging**
Utilizes ODU’s diverse resources in computer-based imaging, visualization and simulation. Research includes medical imaging and analysis, modeling of human physiology, and development of virtual medicine tools and software.

**Facilities**
Medical Imaging Diagnostics and Analysis (MIDA) Laboratory, Virginia Modeling Analysis and Simulation Center, Advanced Signal Processing in Engineering and Neuroscience (ASPEN) Laboratory.

**Biomedical Instrumentation**
Utilizes ODU’s significant resources in engineering design and fabrication to develop new technologies for research and clinical applications. Includes development of biosensors, fiber optic-based devices, stimulation and ablation technologies and surgical instrumentation.

**Facilities**
Micro-Nano Fabrication Laboratory, Photonics Laboratory, and Rapid Prototyping Laboratories.

The program also has strong ties to several other on- and off-campus laboratories including the Laser and Plasma Engineering Institute, Center for Advanced Engineering Environments, Computational Intelligence and Machine Vision Laboratory, and Applied Research Center at the Jefferson National Laboratory. These unique resources position the biomedical engineering program to be a leader in education and research in the Southeast and nationally.

**Admission Requirements**
Admission to the Ph.D. program in biomedical engineering is in accordance with Old Dominion University and Frank Batten College of Engineering and Technology requirements for doctoral programs as specified in this catalog. Specific additional requirements include the following:

1. Completion of a master’s degree in a closely related field is expected. However, students who have completed 24 credits of graduate courses in an appropriate field from an accredited institution or have demonstrated an exceptionally high level of academic capability may petition for direct admittance into the program.
2. A minimum GPA of 3.50 (out of 4.0) is required of most students. A student with a lower GPA meeting Old Dominion University’s graduate admission requirements and with evidence of a high level of professional capability may be eligible for admission to the program upon submission of a petition to the graduate program director.
3. Recent scores, typically, not more than five years old, on the Graduate Record Examination’s (GRE) verbal, quantitative, and analytical writing sections must be submitted by all applicants.
4. Three letters of recommendation (typically at least two of which are from faculty in the highest degree program completed when the application is within five years of graduation from that degree program) are required.
5. The applicant must submit a resume and a statement of purpose and goals.
6. Foundation knowledge in physics, basic chemistry, computer programming, and mathematics is expected.

**Degree Requirements**
The Ph.D. in biomedical engineering is offered in accordance with the general requirements for doctoral degrees as specified in the Requirements for Graduate Degree Section of this catalog. Specific program of study requirements include the following:

1. Completion of a minimum of 48 hours of graduate credits to include: a minimum of 24 credits of course work beyond the master’s degree and a minimum of 24 credits of dissertation research. At least 15 credits of non-dissertation course work must be at the 800-level.
2. Successful completion of a written diagnostic examination before completion of nine credits of advanced course work.
3. Successful completion of a written and oral qualifying examination near the completion of the coursework.
4. Successful presentation of a dissertation research proposal at the beginning of the dissertation research.
5. The successful completion and public defense of a dissertation representing independent, original research worthy of publication in a peer-reviewed scholarly journal.
The program of study will be developed with the approval of the graduate program director and the student’s advisor. The program shall include a common core of 12 credits and 12 credits of technical electives.

### Common Core

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BME 820</td>
<td>Modern Biomedical Instrumentation</td>
<td>12</td>
</tr>
<tr>
<td>BME 821</td>
<td>Quantitative Analysis of Human Physiological Systems I</td>
<td></td>
</tr>
<tr>
<td>BME 822</td>
<td>Quantitative Analysis of Human Physiological Systems II</td>
<td></td>
</tr>
<tr>
<td>ECE 851</td>
<td>Biostatistics: Fundamentals and Applications</td>
<td></td>
</tr>
</tbody>
</table>

#### Technical Electives

Select 4 of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL/MAE 483</td>
<td>Bio-micro/Nanofluids</td>
<td></td>
</tr>
<tr>
<td>BME 502</td>
<td>Biomedical Engineering Principles</td>
<td></td>
</tr>
<tr>
<td>BME 823</td>
<td>Engineering Consultation in Medical Technology</td>
<td></td>
</tr>
<tr>
<td>BME 824</td>
<td>Neural Engineering</td>
<td></td>
</tr>
<tr>
<td>BME 825</td>
<td>Advanced Microelectrode Techniques</td>
<td></td>
</tr>
<tr>
<td>BME 895</td>
<td>Topics</td>
<td></td>
</tr>
<tr>
<td>ECE 554</td>
<td>Introduction to Bioelectrics</td>
<td></td>
</tr>
<tr>
<td>ECE 562</td>
<td>Introduction to Medical Image Analysis (MIA)</td>
<td></td>
</tr>
<tr>
<td>MSIM 635</td>
<td>Modeling in Musculoskeletal Biomechanics</td>
<td></td>
</tr>
<tr>
<td>BME 899</td>
<td>PHD Dissertation Research</td>
<td></td>
</tr>
<tr>
<td>BME 742</td>
<td>Multibody Dynamics: Theories and Applications</td>
<td>3</td>
</tr>
<tr>
<td>BME 630</td>
<td>Advanced Bioelectrics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours: 30**

*The technical elective courses provide a basis for dissertation research and future career objectives. These courses can be selected from the biomedical engineering technical electives or a wide variety of appropriate graduate courses in engineering, biology, chemistry, psychology, computer science, modeling and simulation, mathematics, statistics, or other programs. No more than six credits from course work satisfying foundation knowledge requirements may be included in the program of study for elective credit. At least 15 credits of non-dissertation course work must be at the 800-level. A minimum of 3 credits must be selected from the biomedical engineering technical electives list; the remaining credits can be selected from this list or other graduate courses with approval of the student’s advisor.*

### Department of Civil and Environmental Engineering

135 Kaufman Hall  
757-683-3753  
http://eng.odu.edu/cee  
Gary Schafran, Chair  
Isao Ishibashi, Graduate Program Director

### Degree Programs

The department offers the following graduate degrees:

- Master of Science in Civil Engineering  
- Master of Engineering in Civil Engineering  
- Master of Science in Environmental Engineering  
- Master of Engineering in Environmental Engineering  
- Ph.D. in Civil and Environmental Engineering  
- Doctor of Engineering in Civil and Environmental Engineering

### Master’s Degrees

In this rapidly changing technological world, graduate degrees are highly desirable and most often master’s degrees are required to hold professional civil and environmental engineering positions in the industry, and in federal, state and municipal government agencies. The department’s graduate programs are designed to educate the technological leaders of the future in civil and environmental engineering, and are structured to accommodate both full-time and part-time students. The specialty areas include coastal, geotechnical, structural, transportation and water resources engineering in civil engineering, and sub-fields in environmental engineering including water quality, water and wastewater treatment, hydrologic processes, water resources, environmental engineering microbiology, air quality, hazardous and solid waste, and pollution prevention. For additional information please request a departmental handbook from the graduate program director.

### Master’s Admission Information

In addition to general University admission requirements, applicants’ bachelor degrees should be in civil engineering, environmental engineering or in engineering with a strong background in mathematics and physical sciences. Provisional admission will be given to those applicants who do not hold a bachelor’s degree in civil or environmental engineering; however these students will be required to complete undergraduate course work in addition to the graduate program requirements. Potential prerequisite courses are listed below.

#### Potential Prerequisite Courses for M.S. & M.E. in Civil Engineering:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 211</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 212</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 307</td>
<td>Ordinary Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 312</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 231N</td>
<td>University Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 232N</td>
<td>University Physics</td>
<td>4</td>
</tr>
<tr>
<td>CS 150</td>
<td>Problem Solving and Programming I</td>
<td>4</td>
</tr>
<tr>
<td>CEE 204</td>
<td>Statics</td>
<td>3</td>
</tr>
<tr>
<td>MAE 205</td>
<td>Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>MAE 220</td>
<td>Engineering Mechanics II - Solid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 310</td>
<td>Structures I</td>
<td>3</td>
</tr>
<tr>
<td>CEE 323</td>
<td>Soil Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 330</td>
<td>Hydromechanics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 340</td>
<td>Hydraulics and Water Resources</td>
<td>3</td>
</tr>
<tr>
<td>CEE 410</td>
<td>Concrete Design I</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Potential Prerequisite Courses for M.S. & M.E. in Environmental Engineering:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 211</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 212</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 307</td>
<td>Ordinary Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 312</td>
<td>Calculus III</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 231N</td>
<td>University Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 232N</td>
<td>University Physics</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 121N</td>
<td>Foundations of Chemistry I Lecture</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 122N</td>
<td>Foundations of Chemistry I Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 123N</td>
<td>Foundations of Chemistry II Lecture</td>
<td>3</td>
</tr>
<tr>
<td>CS 150</td>
<td>Problem Solving and Programming I</td>
<td>4</td>
</tr>
<tr>
<td>CEE 330</td>
<td>Hydromechanics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 340</td>
<td>Hydraulics and Water Resources</td>
<td>3</td>
</tr>
<tr>
<td>CEE 350</td>
<td>Environmental Pollution and Control</td>
<td>3</td>
</tr>
</tbody>
</table>
Master’s Degree Requirements

Civil Engineering and Environmental Engineering (except Transportation Engineering concentration):

The graduate courses applicable towards a master’s degree in the Department of Civil and Environmental Engineering are grouped into various categories listed below. The required number of the credit hours from these categories for the Master of Science (M.S.) and the Master of Engineering (M.E.) degrees in Civil Engineering (except transportation engineering concentration) and in Environmental Engineering are summarized in Table CEE-1 and CEE-2, respectively.

Category A – Upper level courses in Civil Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 710</td>
<td>Structural Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 711</td>
<td>Finite Element Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CEE 712</td>
<td>Advanced Reinforced Concrete</td>
<td>3</td>
</tr>
<tr>
<td>CEE 713</td>
<td>Prestressed Concrete</td>
<td>3</td>
</tr>
<tr>
<td>CEE 714</td>
<td>Advanced Structural Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CEE 715</td>
<td>Engineering Optimization I</td>
<td>3</td>
</tr>
<tr>
<td>CEE 717</td>
<td>Bridge Structures Design</td>
<td>3</td>
</tr>
<tr>
<td>CEE 719</td>
<td>Inelastic Structures</td>
<td>3</td>
</tr>
<tr>
<td>CEE 720</td>
<td>Structural Stability</td>
<td>3</td>
</tr>
<tr>
<td>CEE 721</td>
<td>Plates</td>
<td>3</td>
</tr>
<tr>
<td>CEE 722</td>
<td>Cluster Parallel Computing</td>
<td>3</td>
</tr>
<tr>
<td>CEE 723</td>
<td>Seismic Design of Steel Structures</td>
<td>3</td>
</tr>
<tr>
<td>CEE 724</td>
<td>Engineering Behavior of Soils</td>
<td>3</td>
</tr>
<tr>
<td>CEE 730</td>
<td>Advanced Foundation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 731</td>
<td>Advanced Soil Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 732</td>
<td>Engineering Behavior of Soils</td>
<td>3</td>
</tr>
<tr>
<td>CEE 733</td>
<td>Soil Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 741</td>
<td>Open Channel Flow *</td>
<td>3</td>
</tr>
<tr>
<td>CEE 747</td>
<td>Groundwater Flow *</td>
<td>3</td>
</tr>
<tr>
<td>CEE 761</td>
<td>Water Resources Systems Analysis *</td>
<td>3</td>
</tr>
<tr>
<td>CEE 770</td>
<td>Transportation Safety</td>
<td>3</td>
</tr>
<tr>
<td>CEE 771</td>
<td>Transportation Operations II</td>
<td>3</td>
</tr>
<tr>
<td>CEE 772</td>
<td>Intelligent Transportation Systems</td>
<td>3</td>
</tr>
<tr>
<td>CEE 774</td>
<td>Transportation Planning</td>
<td>3</td>
</tr>
<tr>
<td>CEE 775</td>
<td>Transportation Network Models and Optimization</td>
<td>3</td>
</tr>
<tr>
<td>CEE 776</td>
<td>Simulation in Transportation Networks</td>
<td>3</td>
</tr>
<tr>
<td>CEE 782</td>
<td>Design of Coastal Structures</td>
<td>3</td>
</tr>
<tr>
<td>CEE 787</td>
<td>Dredging and Beach Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 788</td>
<td>Coastal Hydrodynamics and Sediment Transport</td>
<td>3</td>
</tr>
<tr>
<td>CEE 789</td>
<td>Computational Environmental Fluid Dynamics</td>
<td>3</td>
</tr>
</tbody>
</table>

Category B – Upper level courses in Environmental Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 650</td>
<td>Pollution Prevention</td>
<td>3</td>
</tr>
<tr>
<td>CEE 653</td>
<td>Environmental Engineering Law</td>
<td>3</td>
</tr>
<tr>
<td>CEE 700</td>
<td>Civil and Environmental Engineering Design #</td>
<td>3</td>
</tr>
<tr>
<td>CEE 741</td>
<td>Open Channel Flow *</td>
<td>3</td>
</tr>
<tr>
<td>CEE 747</td>
<td>Groundwater Flow *</td>
<td>3</td>
</tr>
<tr>
<td>CEE 751</td>
<td>Physicochemical Treatment Processes</td>
<td>3</td>
</tr>
<tr>
<td>CEE 752</td>
<td>Biological Wastewater Treatment</td>
<td>3</td>
</tr>
<tr>
<td>CEE 753</td>
<td>Advanced Processes for Water and Wastewater</td>
<td>3</td>
</tr>
<tr>
<td>CEE 754</td>
<td>Environmental Engineering Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>CEE 755</td>
<td>Water Quality Management</td>
<td>3</td>
</tr>
<tr>
<td>CEE 756</td>
<td>Water Quality Modeling</td>
<td>3</td>
</tr>
<tr>
<td>CEE 761</td>
<td>Water Resources Systems Analysis *</td>
<td>3</td>
</tr>
<tr>
<td>CEE 762</td>
<td>Aquatic Chemistry in Environmental Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 788</td>
<td>Coastal Hydrodynamics and Sediment Transport</td>
<td>3</td>
</tr>
</tbody>
</table>

Category C – Lower level courses in Civil & Environmental Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 511</td>
<td>Concrete Design II</td>
<td>3</td>
</tr>
<tr>
<td>CEE 514</td>
<td>Masonry Structures Design</td>
<td>3</td>
</tr>
<tr>
<td>CEE 515</td>
<td>Steel Structures Design</td>
<td>3</td>
</tr>
<tr>
<td>CEE 516</td>
<td>Wood Structures Design</td>
<td>3</td>
</tr>
<tr>
<td>CEE 530</td>
<td>Foundation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 531</td>
<td>Earth Structures Design with Geosynthetics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 532</td>
<td>Introduction to Earthquake Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 540</td>
<td>Hydraulic Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 546</td>
<td>Urban Stormwater Hydrology</td>
<td>3</td>
</tr>
<tr>
<td>CEE 547</td>
<td>Groundwater Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>CEE 550</td>
<td>Water Distribution and Wastewater Collection</td>
<td>3</td>
</tr>
<tr>
<td>CEE 552</td>
<td>Air Quality</td>
<td>3</td>
</tr>
<tr>
<td>CEE 554</td>
<td>Hazardous Wastes</td>
<td>3</td>
</tr>
<tr>
<td>CEE 558</td>
<td>Sustainable Development</td>
<td>3</td>
</tr>
<tr>
<td>CEE 559</td>
<td>Biofuels Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 570</td>
<td>Transportation Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CEE 571</td>
<td>Transportation Operations I</td>
<td>3</td>
</tr>
<tr>
<td>CEE 576</td>
<td>Transportation Operations Applications</td>
<td>3</td>
</tr>
<tr>
<td>CEE 582</td>
<td>Introduction to Coastal Engineering</td>
<td>3</td>
</tr>
</tbody>
</table>

Category D – Other graduate courses

Graduate level courses offered from other departments. These courses must be related to the program of study and must be approved by the student’s academic advisor.

MATH or STAT Category

CEE 700 Civil and Environmental Engineering Experimental Design; or a graduate level MATH or STAT course.

* Double listings in A and B categories.
# Double listings in B and STAT categories.

Table CEE-1. Required Course Distributions for M.S. and M.E. in Civil Engineering (except for Transportation Engineering Concentration)

<table>
<thead>
<tr>
<th>Category</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>12</td>
</tr>
<tr>
<td>A.B.C. or D</td>
<td>9</td>
</tr>
<tr>
<td>MATH/STAT</td>
<td>3</td>
</tr>
<tr>
<td>Thesis</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>30*</td>
</tr>
</tbody>
</table>

M.E. - Project Option

<table>
<thead>
<tr>
<th>Category</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>15</td>
</tr>
<tr>
<td>A.B.C. or D</td>
<td>9</td>
</tr>
<tr>
<td>MATH/STAT</td>
<td>3</td>
</tr>
<tr>
<td>Project</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>30*</td>
</tr>
</tbody>
</table>
M.E. - Course Option

<table>
<thead>
<tr>
<th>Category</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>15</td>
</tr>
<tr>
<td>A.B.C, or D</td>
<td>9</td>
</tr>
<tr>
<td>MATH/STAT</td>
<td>3</td>
</tr>
<tr>
<td>A or B</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
</tr>
</tbody>
</table>

Note: For M.S. and ME Project options, no more than 9 credit hours can be at 500 level.

Table CEE-2. Required Course Distributions for M.S. and M.E. in Environmental Engineering

M.S. - Thesis

<table>
<thead>
<tr>
<th>Category</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>12</td>
</tr>
<tr>
<td>A.B.C, or D</td>
<td>9</td>
</tr>
<tr>
<td>MATH/STAT</td>
<td>3</td>
</tr>
<tr>
<td>Thesis</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>30*</td>
</tr>
</tbody>
</table>

M.E. - Project Option

<table>
<thead>
<tr>
<th>Category</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>15</td>
</tr>
<tr>
<td>A.B.C, or D</td>
<td>9</td>
</tr>
<tr>
<td>MATH/STAT</td>
<td>3</td>
</tr>
<tr>
<td>Project</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>30*</td>
</tr>
</tbody>
</table>

M.E. - Course Option

<table>
<thead>
<tr>
<th>Category</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>15</td>
</tr>
<tr>
<td>A.B.C, or D</td>
<td>9</td>
</tr>
<tr>
<td>MATH/STAT</td>
<td>3</td>
</tr>
<tr>
<td>A or B</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
</tr>
</tbody>
</table>

For the M.S. option students must pass an oral thesis defense examination. For the M.E. project option students must pass an oral project defense examination. For the M.E. course option, student must pass an oral (for civil engineering) or written (for environmental engineering) comprehensive examination at the end of all course work.

Transportation Engineering Concentration in Civil Engineering

The department offers Master of Science (M.S.) and Master of Engineering (M.E.) degrees in Civil Engineering with concentration in Transportation Engineering. Table CEE-3 summarizes the requirements for the M.S. and M.E. degrees in the Transportation Engineering concentration. Note that an M.E. course option is not available in this concentration. The student must pass an oral thesis or project defense examination respectively for the M.S. and M.E. degrees.

Table CEE-3. Required Course Distributions for M.S. and M.E. in Civil Engineering – Transportation Engineering Concentration

M.S. (Thesis) Credit Hrs

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Credit Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 570</td>
<td>Transportation Fundamentals</td>
</tr>
<tr>
<td>CEE 571</td>
<td>Transportation Operations I</td>
</tr>
</tbody>
</table>

M.E. (Project) Credit Hrs

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Credit Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 570</td>
<td>Transportation Fundamentals</td>
</tr>
<tr>
<td>CEE 571</td>
<td>Transportation Operations I</td>
</tr>
<tr>
<td>CEE 774</td>
<td>Transportation Planning</td>
</tr>
</tbody>
</table>

Upper-level Transportation Elective

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 770</td>
<td>Transportation Safety</td>
<td>3</td>
</tr>
<tr>
<td>CEE 771</td>
<td>Transportation Operations I</td>
<td>3</td>
</tr>
<tr>
<td>CEE 772</td>
<td>Intelligent Transportation Systems</td>
<td>3</td>
</tr>
<tr>
<td>CEE 775</td>
<td>Transportation Network Models and Optimization</td>
<td>3</td>
</tr>
</tbody>
</table>

Statistics Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 700</td>
<td>Civil and Environmental Engineering Experimental Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Other Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 770</td>
<td>Transportation Safety</td>
<td>3</td>
</tr>
<tr>
<td>CEE 771</td>
<td>Transportation Operations I</td>
<td>3</td>
</tr>
<tr>
<td>CEE 772</td>
<td>Intelligent Transportation Systems</td>
<td>3</td>
</tr>
<tr>
<td>CEE 775</td>
<td>Transportation Network Models and Optimization</td>
<td>3</td>
</tr>
</tbody>
</table>

Other Approved Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 552</td>
<td>Air Quality</td>
<td>3</td>
</tr>
<tr>
<td>CEE 558</td>
<td>Sustainable Development</td>
<td>3</td>
</tr>
<tr>
<td>CEE 576</td>
<td>Transportation Operations Applications</td>
<td>3</td>
</tr>
<tr>
<td>CEE 715</td>
<td>Engineering Optimization I</td>
<td>3</td>
</tr>
</tbody>
</table>
Electrical and computer engineering graduate studies encompass four broad areas:

- Electrical engineering
- Computer engineering
- Systems engineering
- Engineering management

Electrical and computer engineering degree programs are designed to provide a high quality and broad-based education that prepares graduates for college-level teaching and employment in research institutions. Many leading industries and agencies also seek well-trained doctoral graduates. The specialty areas include coastal, geotechnical, structural, transportation, and water resources engineering in Civil Engineering and a variety of sub-fields in Environmental Engineering including water quality, water and wastewater treatment, hydrologic processes, water resources, environmental engineering microbiology, air quality, hazardous and solid waste, and pollution prevention.

Doctor of Philosophy Admission Requirements
A master’s degree or equivalent in engineering or a related field is required for admission; however exceptionally well qualified students can be admitted to the doctoral program directly without a master’s degree. In addition to general University admission requirements, submission of GRE scores is required except for applicants who hold an ABET accredited engineering degree or a graduate engineering degree from an institution of which the undergraduate degree is ABET accredited. One of the two recommendation letters may be from an employment supervisor.

Doctor of Philosophy Degree Requirements
Refer to Table 5 for the college summary of degree requirements. Three-fifths (3/5) of the courses shall be from 800-level courses as required by the University.

Doctor of Engineering Degree
The Department offers a Doctoral of Engineering program (D.Eng.) with concentration in Civil and Environmental Engineering in accordance with the D.Eng. program criteria and requirements specified for the Batten College of Engineering and Technology in this catalog.

Certificate Programs

Coastal Engineering Certificate
David Basco, Director, Coastal Engineering Center

In order to provide the opportunity for practicing civil/coastal engineers to further their knowledge and to become more competent in their profession, the Department of Civil and Environmental Engineering offers a non-degree Coastal Engineering Certificate. Admission to the program requires a Bachelor of Science degree (or equivalent) in civil engineering, coastal engineering, or a related field (e.g. oceanography, geoscience). The program consists of the following four graduate courses (12 credit hours) that are taught over the course of two years (one each semester); these courses are made available on-line.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEE 582</td>
<td>Introduction to Coastal Engineering (Spring, odd year)</td>
<td>3</td>
</tr>
<tr>
<td>CEE 782</td>
<td>Design of Coastal Structures (Fall, even year)</td>
<td>3</td>
</tr>
<tr>
<td>CEE 787</td>
<td>Dredging and Beach Engineering</td>
<td>3</td>
</tr>
<tr>
<td>CEE 788</td>
<td>Coastal Hydrodynamics and Sediment Transport Processes (Spring, even year)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 12

An overall grade point average of 3.00 or better is required to earn the certificate.

Modeling and Simulation for Large-Scale Computational Mechanics Certificate
Duc T. Nguyen, Director

Modeling and Simulation for Large-Scale Computational Mechanics Certificate requires 12 credit hours of graduate-level course work. Admission to the program requires a bachelor of science (or equivalent) degree in Engineering for a closely related field. The courses comprising the certificate program are offered on a regular schedule to enable the completion of the program in two years.

The four three-credit courses comprising the program are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSIM 601</td>
<td>Introduction to Modeling and Simulation *</td>
<td>3</td>
</tr>
<tr>
<td>CEE 711</td>
<td>Finite Element Analysis</td>
<td>3</td>
</tr>
<tr>
<td>CEE 715</td>
<td>Engineering Optimization I</td>
<td>3</td>
</tr>
<tr>
<td>CEE 795</td>
<td>Topics in Civil and Environmental Engineering</td>
<td>1-3</td>
</tr>
</tbody>
</table>

Total Hours: 10-12

* MSIM 601 and one of the CEE courses can be substituted with MSIM 611 and MSIM 612.

An overall grade point average of 3.00 or better is required to earn the certificate.

Department of Electrical and Computer Engineering
231 Kaufman Hall
757-683-3741
http://eng.odu.edu/ece/
Shirshak Dhali, Chair
Oscar González, Graduate Program Director

Degree Programs
The department offers the following graduate degrees:
- Master of Science in Electrical and Computer Engineering
- Master of Engineering in Electrical and Computer Engineering
- Ph.D. in Electrical and Computer Engineering

Degrees Description
The Department of Electrical and Computer Engineering strives to provide the highest quality engineering education at the undergraduate and graduate levels, to engage in scholarly research at the forefront of electrical and computer engineering, and to serve the profession of electrical and computer engineering. The department has strong graduate and research programs providing a high quality and broad-based education that prepares graduates for successful professional careers and a lifetime of learning.

Electrical and computer engineering graduate studies encompass four broad areas:
1. systems
2. signal and image processing
3. physical electronics
4. and computer engineering

The department offers both master’s and doctoral degrees in electrical and computer engineering. The research laboratories in the department include the Advanced Signal Processing in Engineering and Neuroscience Lab, the Laser and Plasma Engineering Institute, the Medical Imaging Diagnostics and Analysis Laboratory, the Microelectronics Laboratory, the Photovoltaics Laboratory, the Vision Laboratory, and the Wireless Communication and Networking Laboratory. In addition, the department has strong ties to several off-campus laboratories including the Applied Research Center at the Jefferson National Laboratory, the Frank Reidy Center for Bioelectronics, and the Virginia Modeling Analysis and Simulation Center. These research facilities position the department for national leadership in several research areas and as a leading institution of research and higher education in the southeastern United States. For additional information, please visit our website at eng.odu.edu/ece.

Master of Science and Master of Engineering in Electrical and Computer Engineering

Master’s Admission Information
Applicants are expected to hold a B.S. degree in electrical engineering (EE) or computer engineering (CpE) from an accredited institution. Applicants are also expected to have a minimum grade point average of 3.0 (on a 4.0 scale) in both the baccalaureate major area (EE or CpE) and overall. The applications are submitted through the Office of Admissions of Old Dominion University. Together with the completed application form, two letters of recommendation from former undergraduate instructors, transcripts from all colleges and universities attended, GRE scores, a resume, and a personal statement of objectives are required. TOEFL scores are also required for international applicants. Applicants with academic degrees in areas other than electrical and computer engineering may be considered, subject to evaluation by the graduate program director. Those with degrees in math, physics, computer science, or other engineering fields are encouraged to apply. The accelerated Bachelor’s/Masters degree program in the Frank Batten College of Engineering and Technology at Old Dominion University is designed to provide an opportunity for exceptionally qualified engineering undergraduate students to obtain both a bachelors and a master’s degree in Electrical and Computer Engineering. Typically undergraduate students apply at the end of their junior year for admission to the accelerated programs.

Accepted students from disciplines other than EE or CpE are required to complete additional courses from the list below to meet prerequisites for graduate studies. All students are required to have one year of college chemistry and one year of calculus-based college physics in addition to Calculus III and Differential Equations courses. The listing courses required are decided after the student meets with the graduate program director.

List of Possible Courses to Meet the Leveling Requirement

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 202</td>
<td>Circuits, Signals and Linear Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 241</td>
<td>Fundamentals of Computer Engineering</td>
<td>4</td>
</tr>
<tr>
<td>ECE 303</td>
<td>Introduction to Electrical Power</td>
<td>3</td>
</tr>
<tr>
<td>ECE 304</td>
<td>Probability, Statistics, and Reliability</td>
<td>3</td>
</tr>
<tr>
<td>ECE 313</td>
<td>Electronic Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ECE 322</td>
<td>Electromagnetics</td>
<td>3</td>
</tr>
<tr>
<td>ECE 341</td>
<td>Digital System Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 346</td>
<td>Microcontrollers</td>
<td>3</td>
</tr>
</tbody>
</table>

Students interested in taking computer engineering graduate courses may need to take additional leveling computer science courses as indicated below.

List of Possible Computer Science Courses to Meet the Leveling Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 250</td>
<td>Problem Solving and Programming II</td>
<td>4</td>
</tr>
<tr>
<td>CS 252</td>
<td>Introduction to Unix for Programmers</td>
<td>1</td>
</tr>
<tr>
<td>CS 361</td>
<td>Advanced Data Structures and Algorithms</td>
<td>3</td>
</tr>
<tr>
<td>CS 381</td>
<td>Introduction to Discrete Structures</td>
<td>3</td>
</tr>
<tr>
<td>CS 350</td>
<td>Introduction to Software Engineering</td>
<td>3</td>
</tr>
</tbody>
</table>

Master’s Degree Requirements
Both M.S. and M.E. degrees require a minimum of 30 credit hours of graduate study.

The M.S. degree requires a minimum of 24 credit hours of courses (not including Graduate Seminar) and 6 credit hours of thesis along with the oral defense examination.

The M.E. degree project option requires a minimum of 27 credit hours of courses and 3 credit hours in a project that includes an oral defense examination.

These degree programs are available to full-time and part-time students seeking to improve their professional skills in electrical and computer engineering. Students are required to complete at least one course that meets the department’s mathematics requirement. The current list of courses that meet this requirement is given next.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 601</td>
<td>Linear Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 623</td>
<td>Electromagnetism</td>
<td>3</td>
</tr>
<tr>
<td>ECE 651</td>
<td>Statistical Analysis and Simulation</td>
<td>3</td>
</tr>
<tr>
<td>ECE 695</td>
<td>Topics in Electrical or Computer Engineering (NUMERICAL METHODS IN ENGINEERING ANALYSIS)</td>
<td>3</td>
</tr>
</tbody>
</table>

The remaining courses are chosen to meet the student’s career objectives. The graduate course descriptions are included at the end of the Frank Batten College of Engineering and Technology section of the catalog. Additional graduate courses are offered through the Commonwealth Graduate Engineering Program and the Virginia Consortium for Engineering and Science. The selection of courses is made in coordination with the students’ research advisor and/or the graduate program director. To earn a master’s degree, a student needs to take at least five courses at the 600 or higher level, and no more than three courses at the 500 level. Also, no more than three graduate courses can be taken in other departments. All funded students are required to enroll in ECE 731.

Doctor of Philosophy in Electrical and Computer Engineering

Doctor of Philosophy Admission Requirements
Applicants to a doctoral degree in electrical and computer engineering are expected to have completed a master’s degree in electrical engineering and/or computer engineering or a closely related technical field with a minimum grade point average of 3.5 (on a 4.0 scale) in graduate course work. The applications are submitted through the Office of Admissions of Old Dominion University. Together with the completed application form, three letters of recommendation, transcripts from all colleges and universities attended, GRE scores, a resume, and a personal statement of objectives are required. TOEFL scores are required for international applicants.
Wireless Networking Certificate

This graduate certificate program provides the working professional with a thorough knowledge of the engineering aspects of wireless networking and wireless communication that meet the requirements to practice in this highly evolving technological field. Students in the program will gain expertise in wireless networking focusing on wireless local area networks. The program will enable them to design and develop future voice, data and video systems utilizing wireless communications. The networks will incorporate mobile and fixed wireless systems.

Program Requirements

To obtain the certificate, each participant must successfully complete four three-credit graduate-level courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 551</td>
<td>Communication Systems</td>
<td>3</td>
</tr>
<tr>
<td>ECE 555</td>
<td>Network Engineering and Design</td>
<td>3</td>
</tr>
<tr>
<td>ECE 652</td>
<td>Wireless Communications Networks</td>
<td>3</td>
</tr>
<tr>
<td>ECE 695</td>
<td>Topics in Electrical or Computer Engineering</td>
<td>3</td>
</tr>
</tbody>
</table>

Students enrolling in this program must have an undergraduate B.S. degree in electrical or computer engineering or computer science. Applicants with appropriate background and with B.S. degrees in other engineering, math or science disciplines may qualify to enroll in the program, but will need to consult with the graduate program director. In general, all applicants will be expected to have a background in mathematics at least through integral calculus, some knowledge of computer programming, general computer literacy, and knowledge of scientific and engineering methods. Students may also complete the certificate program as part of a master’s degree in electrical and computer engineering.

Department of Engineering Management and Systems Engineering

241 Kaufman Hall
757-683-4558
http://eng.odu.edu/enma
Resit Unal, Chair
C. Ariel Pinto, Graduate Program Director

Degree Programs

The department offers the following graduate degrees:

- Master of Engineering Management
- Master of Science in Engineering Management
- Master of Engineering with a concentration in Systems Engineering
- Ph.D. in Engineering Management
- Doctor of Engineering in Engineering Management and Systems Engineering

Degree Description

The Department of Engineering Management and Systems Engineering at Old Dominion University is the recipient of the American Society of Engineering Management’s 1995, 2000, 2002, 2004, 2005, 2007 and 2010 awards for Excellence in Leadership in Graduate Programs. The Master of Engineering Management (MEM) program at Old Dominion University is also one of the first three in the nation that has been certified by the American Society for Engineering Management and is the first to have been recertified in 2007.

The Department of Engineering Management and Systems Engineering provides its graduates with the necessary skills, knowledge, and abilities required to design and manage the technology-based, project-driven enterprise. Fundamentally, the engineering management discipline addresses the problems, design, and management of projects and complex operations. The programs are grounded in solid principles of systems science and systems engineering while exploiting the tools of management science and project management. The Department of Engineering Management and Systems Engineering emphasizes the concept of technological leadership. Technological leadership focuses on the development of a professional perspective that anticipates opportunities for competitive advantages technology can provide to an enterprise.

Core course work in the engineering management and systems engineering programs concentrate on developing the knowledge and skills required by
graduates to provide the project and program leadership and management necessary for an organization to develop and apply technologies. Technological leadership’s vision looks to the creation of new products, processes, and services which, in turn, will create new markets or enable domination of existing ones. Through design projects and exercises centered around complex system and technology, students are led through alternative ways of thinking and communicating. The engineering management and systems engineering programs at Old Dominion University provide students opportunities in the classroom and involvement with industrial partners. This allows students to gain confidence and experience to effectively create, integrate, and apply technology in enterprise operations.

The following requirement is applicable for all Engineering Management and Systems Engineering degree programs (Master’s and Doctoral): All students admitted to Engineering Management and Systems Engineering programs must earn a grade of “C” or better in all courses required for the degree and in all Engineering Management prerequisite courses. A student may be removed from the program if he/she receives 2 (two) grades of “C” or lower.

Master’s Admission Information

Master of Engineering Management/Master of Science in Engineering Management

Admission to graduate programs in Engineering Management is in accordance with the general requirements for graduate degrees as specified in the Admission section of this Catalog. Applicants must have an undergraduate degree from an ABET-accredited program in engineering or engineering technology or from an accredited program in applied science with a GPA of 3.00 (out of 4.00) or better. Students with an undergraduate GPA between 2.70 and 3.00 may be admitted provisionally based on their academic preparation and GRE scores. The Department requires university-level TOEFL scores for all international students when English is not their first language.

Master of Engineering—Systems Engineering

Admission to the graduate program in Systems Engineering is in accordance with the general requirements for graduate degrees as specified in this Catalog. Specific requirements for systems engineering include a bachelor’s degree in science, engineering, mathematics, computer science, or other related field. Applicants with a bachelor’s degree in a non-technical discipline with approved college-level calculus and five years experience are eligible for admission to the program. An undergraduate grade point average of 3.00 (out of 4.00) in both the major and overall is required. Students with a GPA between 2.70 and 3.00 may be admitted provisionally based upon their work record, academic preparation, and GRE scores. Students with a GPA below 2.70 must complete additional academic course work so their overall GPA is raised to the appropriate level for admission. A minimum TOEFL score of 550 is required for all international students when English is not their first language.

Master’s Degree Requirements

Master of Engineering Management/Master of Science in Engineering Management

The M.E.M and M.S. programs are oriented toward the design and management of technical projects, complex operations, and technology-based organizations. The Master of Science (M.S.) program requires thesis research, and the student is expected to identify an advisor and work with him/her starting from the first semester. Courses are scheduled in the evenings and at off-campus sites, including the Peninsula Higher Education Center in Hampton and the Virginia Beach Higher Education Center. A complete M.E.M. program is available through Old Dominion University’s TELETECHNET distance learning program and through the Commonwealth Graduate Engineering Program. Both systems transmit courses to educational, industrial, and government locations throughout Virginia.

The master’s degree programs in the Department of Engineering Management and Systems Engineering are in accordance with the general requirements for master’s degrees as specified in the Requirements for Graduate Degrees section of this Catalog. Specific requirements for the Master of Engineering Management and Master of Science in engineering management are as follows:

The Engineering Management and Systems Engineering Department requires 31 credit hours of course work (10 three-credit courses plus a one-credit capstone course) for the M.E.M. The M.S. degree requires 24 credit hours of course work and six credit hours of thesis research for a total of 30 credit hours.

### M.E.M. Courses:

**Prerequisite**

<table>
<thead>
<tr>
<th>Core</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENMA 600</td>
<td>15</td>
</tr>
<tr>
<td>ENMA 601</td>
<td>Analysis of Organizational Systems</td>
</tr>
<tr>
<td>ENMA 603</td>
<td>Operations Research</td>
</tr>
<tr>
<td>ENMA 604</td>
<td>Project Management</td>
</tr>
<tr>
<td>ENMA 614</td>
<td>Quality Systems Design</td>
</tr>
</tbody>
</table>

**Select one of the following:**

| ENMA 640              | Integrated Systems Engineering I |
| ENMA 715              | Systems Analysis |
| ENMA 724              | Risk Analysis |

<table>
<thead>
<tr>
<th>Electives **</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capstone</td>
<td>1</td>
</tr>
<tr>
<td>ENMA 605</td>
<td>Program Capstone (required final semester)</td>
</tr>
</tbody>
</table>

**Total Hours:** 31

### M.S. Courses:

**Prerequisite**

<table>
<thead>
<tr>
<th>Core</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENMA 600</td>
<td>Cost Estimating and Financial Analysis</td>
</tr>
<tr>
<td>ENMA 601</td>
<td>Analysis of Organizational Systems</td>
</tr>
<tr>
<td>ENMA 603</td>
<td>Operations Research</td>
</tr>
<tr>
<td>ENMA 604</td>
<td>Project Management</td>
</tr>
<tr>
<td>ENMA 614</td>
<td>Quality Systems Design</td>
</tr>
<tr>
<td>ENMA 715</td>
<td>Systems Analysis</td>
</tr>
<tr>
<td>ENMA 721</td>
<td>Foundations of Research</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives ***</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thesis Research ***</td>
<td>6</td>
</tr>
</tbody>
</table>

**Total Hours:** 30

* All students must have mathematics course work through the level of integral calculus; matrix algebra or differential equations; and a course in calculus-based statistics (ENMA 420/ENMA 520 or equivalent).

** ENMA 711 or ENMA 721 may be an elective required by the thesis advisor. At least three-fifths (3/5) of course work must be at the 600 or 700 level for the M.E.M. and M.S. degrees. Students must select twelve credit hours of elective coursework for the M.E.M. and six credit hours of elective course work for the M.S. degree. The electives may be selected from the ENMA courses (and/or from courses in other departments with the approval of the Graduate Program Director). All electives must be at the graduate level.

*** M.S. students take six credits of thesis research, which must be spread over a minimum of two semesters.
Exceptions to these requirements must be approved by the Graduate Program Director.

**Master of Engineering—Systems Engineering**

The focus of this degree program is to provide students with in-depth, real-world practitioner expertise in engineering and the integration of complex systems for government and commercial clients. Students in the program are introduced to core competencies for systems engineering, complex systems, modeling, systems analysis, complex problem solving, and the engineering disciplines needed for successful delivery of system solutions.

The Master of Engineering degree program in systems engineering is in accordance with the general requirements for master’s degrees as specified in this Catalog. Specific requirements for the Master in Engineering with a concentration in systems engineering include the following:

The Engineering Management and Systems Engineering Department requires 31 graduate credit hours of course work (10 courses plus a one-credit capstone course) for the M.E. with a concentration in systems engineering program.

Prerequisite/Corequisite "

<table>
<thead>
<tr>
<th>Core</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENMA 602</td>
<td>Systems Engineering Management</td>
</tr>
<tr>
<td>ENMA 640</td>
<td>Integrated Systems Engineering I</td>
</tr>
<tr>
<td>ENMA 641</td>
<td>Requirements Management, Verification and Validation</td>
</tr>
<tr>
<td>ENMA 660</td>
<td>Systems Architecture and Modeling</td>
</tr>
<tr>
<td>ENMA 715</td>
<td>Systems Analysis</td>
</tr>
<tr>
<td>ENMA 771</td>
<td>Risk and Vulnerability Management of Complex Interdependent Systems</td>
</tr>
</tbody>
</table>

Capstone ** 1

<table>
<thead>
<tr>
<th>Electives ***</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENMA 605 or ENMA 690</td>
<td>Program Capstone or Preparation Seminar for Systems Engineering Certification</td>
</tr>
</tbody>
</table>

Select four of the following:

| ENMA 702 | Methods for Rational Decision Making |
| ENMA 703 | Optimization Methods |
| ENMA 710 | Modeling and Analysis of Systems |
| ENMA 712 | Multi-Criteria Decision Analysis and Decision Support Systems |
| ENMA 716 | Complex Adaptive Situations Environment |
| ENMA 717 | Cost Engineering |
| ENMA 723 | Enterprise and Complex System Dynamics |
| ENMA 750 | System of Systems Engineering |
| ENMA 751 | Complexity, Engineering and Management |
| ENMA 763 | Robust Engineering Design |

Total Hours 31

* All students must have mathematics course work through the level of integral calculus, matrix algebra or differential equations, and ENMA 520 or equivalent calculus-based probability and statistics. Students who have not had a calculus-based probability and statistics course will be required to include ENMA 520, or equivalent, as part of their plan of study.

** Required for the Master of Engineering in systems engineering, is to be taken near the final semester of study.

*** Or others approved by the Graduate Program Director.

**** All students are expected to communicate effectively both orally and in written documents, that are correct in grammar, style, and mechanics. Those deemed insufficient may be required to take remedial speech or writing courses.

---

**Doctor of Philosophy in Engineering Management**

The Doctor of Philosophy (Ph.D.) focuses on developing the necessary skills to perform and evaluate rigorous research in areas related to the design and management of projects, programs, and complex human-technological systems. The goal of the Ph.D. program is to prepare graduates for careers in teaching and research at academic institutions as well as in other public and private organizations characterized by innovation and technological leadership.

**Ph.D. Admission Requirements**

Admission to graduate programs in engineering management and systems engineering is in accordance with the general requirements for graduate degrees as specified in the Graduate Admission section of this catalog. Specific requirements for the Department of Engineering Management and Systems Engineering include the following: applicants for the Ph.D. must have a bachelor’s or master’s degree from an accredited institution in engineering, engineering technology, applied science or applied mathematics, and at least 24 semester hours of graduate study approved by the graduate program director. An undergraduate GPA of at least 3.00 and a graduate GPA of at least 3.50 (on a 4.00 basis) and GRE general aptitude scores are required. Students lacking adequate academic preparation may be required to complete coursework in addition to the graduate admission requirements. A minimum TOEFL score of 550 is required for all international students when English is not their first language. As part of the admission process, all applicants will go through an interview process. The applicant will be contacted by the Graduate Program Director once the application and credentials are received to initiate the interview process. Students must also secure a faculty advisor prior to admission.

**Ph.D. Degree Requirements**

Curriculum requirements in engineering management are in accordance with the general requirements for Ph.D. degrees as specified in the Requirements for Graduate Degrees section of this catalog.

Requirements in preparing for the Ph.D. program in engineering management include:

1. Satisfactory completion of 51 credit hours of postmaster’s degree credit or equivalent level of performance course work, including 24 credit hours of dissertation credit, and a minimum of 27 credit hours of coursework.
2. Passing a written and oral candidacy examination at the end of the program of study course work.
3. The successful defense of a written dissertation proposal before the completion of nine hours of dissertation research.
4. The completion of a dissertation representing independent original research worthy of publication in a refereed scholarly journal.
5. The successful public defense of the dissertation before an audience which includes an appropriately selected committee of faculty knowledgeable in the field of the project.

**Master’s-Level Courses:** As part of master’s-level course work, all students must have completed the following engineering management leveling courses or their equivalent: ENMA 600, ENMA 603, and ENMA 604. Students may be admitted to the Ph.D. program deficient in these leveling courses, but as part of their plan of study, the student must take and successfully complete these courses at the earliest possible opportunity.

**Plan of Study:** The Ph.D. program is governed by a Plan of Study that is established by the student in conjunction with his/her advisor and guidance committee within the first nine credit hours of course work and will follow the established course requirements (below) unless a substitution to one or more courses is agreed upon between the advisor and student and approved by the Graduate Program Director.
**Prequisite**

Master’s-Level **

**Plan of Study***

Core ****

- ENMA 711 Methodology for Advanced Engineering Projects (required)
- ENMA 821 Foundations of Research (required)

Select one from the each of the following methods

**Empirical Methods +**

- ENMA 863 Robust Engineering Design

-Equivalent Course (with GPD authorization)

**Analytic Methods ++**

- ENMA 803 Optimization Methods
- ENMA 823 Enterprise and Complex System Dynamics
- ENMA 810 Modeling and Analysis of Systems
- ENMA 802 Methods for Rational Decision Making

**Social Research Methods ***

- ENMA 815 Systems Analysis
- ENMA 816 Complex Adaptive Situations Environment

-Equivalent course (with GPD authorization)

**Electives #**

- 12

**Dissertation Research ##**

- 24

**Exams ###**

Total Hours 51

---

**Certificate Programs**

**Certificate of Professional (C.P.S.) Study in Engineering Management**

The Certificate of Professional Study in Engineering Management is a non-degree certificate program for post-master’s degree students. The C.P.S. program is designed for working professionals who desire to continue their education beyond the master’s degree and advance to senior management positions. The program specifically prepares students for positions involving the management of technology and research and development programs and projects. Students must take all courses through Old Dominion University; no transfer courses are permitted for the C.P.S. Program.

**Certificate Admission Requirements:**

Admission to graduate programs in engineering management is in accordance with the general requirements for graduate degrees as specified in the Graduate Admission section of this Catalog. Specific requirements for the Department of Engineering Management and Systems Engineering include the following:

Applicants for the C.P.S. must have a bachelor’s or master’s degree from an accredited institution in engineering, engineering technology, applied science or applied mathematics, and at least 27 semester hours of graduate study approved by the graduate program director. An undergraduate GPA of at least 3.00 and a graduate GPA of at least 3.50 (on a 4.00 basis) and GRE general aptitude scores are required. Students lacking adequate academic preparation may be required to complete coursework in addition to the graduate admission requirements. A minimum TOEFL score of 550 is required for all international students when English is not their first language. All admitted students must submit a Plan of Study.

**Certificate Requirements**

The Certificate of Professional Study in Engineering Management requires the completion of 27 credit hours of post-master’s coursework:

Core Courses (12 credit hours): Same as courses for the Ph.D. program.

Elective courses (15 credit hours): Same requirements as the Ph.D. program.

**Engineering Management Certificate**

The Engineering Management Certificate Program consists of 12 credit hours of graduate-level coursework. The four courses comprising the certificate program are offered on a regular schedule to enable the completion of the program in two years. The program provides students with the necessary knowledge, skills and abilities to manage and address issues related to the design, operation, analysis, and transformation of complex problems.

**Program Requirements**

Admission to the Engineering Management Certificate Program requires a Bachelor’s degree (or Master’s) from an ABET-accredited program in
engineering, engineering technology, or applied sciences with a GPA of 3.00 or better for regular admission. An overall GPA of 3.00 or better is required to earn the certificate.

Required courses are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENMA 600</td>
<td>Cost Estimating and Financial Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ENMA 601</td>
<td>Analysis of Organizational Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENMA 604</td>
<td>Project Management</td>
<td>3</td>
</tr>
<tr>
<td>ENMA 640</td>
<td>Integrated Systems Engineering I</td>
<td>3</td>
</tr>
<tr>
<td>ENMA 715</td>
<td>Systems Analysis</td>
<td></td>
</tr>
<tr>
<td>ENMA 724</td>
<td>Risk Analysis</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 12

**Modeling and Simulation for Engineering Management Support (MSEMS) Certificate**

Engineering Management is a field which requires individuals to make decisions every day using the best available tools at their disposal. Modeling and Simulation (M&S) provides tools to assist engineering managers in making better informed decisions. With modeling and simulation, analysts can determine optimal parameters for a system design, perform sensitivity analyses, and explore “what-if” scenarios on the results of an analysis. These tasks are all crucial to an engineering manager’s success and provide the basis for the natural linkage between M&S and Engineering Management.

Modeling and Simulation for Engineering Management Support (MSEMS) requires 12 credit hours of graduate-level course work. Applicants must have an undergraduate degree from an ABET-accredited program in engineering or engineering technology, or from a fully accredited program in applied science.

Required courses are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSIM 601</td>
<td>Introduction to Modeling and Simulation</td>
<td>3</td>
</tr>
<tr>
<td>ENMA 702</td>
<td>Methods for Rational Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>ENMA 712/812</td>
<td>Multi-Criteria Decision Analysis and Decision</td>
<td>6</td>
</tr>
<tr>
<td>ENMA 724/824</td>
<td>Support Systems</td>
<td></td>
</tr>
<tr>
<td>ENMA 703/803</td>
<td>Optimization Methods</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 12

An overall grade point average of 3.00 or better is required to earn a certificate.

**Systems-Based Modeling and Simulation (SBMS) Certificate**

At the basis of systems engineering is the ability to compose well-understood solutions and new approaches into working systems or system of systems as well as to decompose and analyze complex systems to understand their behavior and functionality. Modeling and simulation provide tools to analyze the influence of formal modeling and model construction on the discipline of Systems Engineering as well as tools to “work with the virtual system and ensure feasibility and usability before the first prototype is built.” This modeling approach influences the basic system engineering principles of models and architectures that govern fundamental model and system development. This linkage provides the rationale for a certificate between Systems Engineering and M&S.

Systems-Based Modeling and Simulation (SBMS) Certificate requires 12 credit hours of graduate-level work. Applicants must have an undergraduate degree from an ABET-accredited program in engineering or engineering technology, or from a fully accredited program in applied science.

Required courses are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSIM 601</td>
<td>Introduction to Modeling and Simulation</td>
<td>3</td>
</tr>
<tr>
<td>ENMA 660</td>
<td>Systems Architecture and Modeling</td>
<td>3</td>
</tr>
<tr>
<td>ENMA 715</td>
<td>Systems Analysis</td>
<td></td>
</tr>
<tr>
<td>ENMA 724</td>
<td>Risk Analysis</td>
<td></td>
</tr>
<tr>
<td>ENMA 710</td>
<td>Modeling and Analysis of Systems</td>
<td></td>
</tr>
<tr>
<td>ENMA 723</td>
<td>Enterprise and Complex System Dynamics</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours 12

**Department of Mechanical and Aerospace Engineering**

238 Kaufman Hall
757-683-6363
http://www.eng.odu.edu/mae

Jen-Kuang Huang, Chair
Colin Britcher, Aerospace Engineering Graduate Program Director
Gene Hou, Mechanical Engineering Graduate Program Director

**Degree Programs:**

The department offers the following graduate degrees:

- Master of Science in Mechanical Engineering
- Master of Science in Aerospace Engineering
- Master of Engineering in Mechanical Engineering
- Master of Engineering in Aerospace Engineering
- Ph.D. in Mechanical Engineering
- Ph.D. in Aerospace Engineering
- Doctor of Engineering in Mechanical Engineering
- Doctor of Engineering in Aerospace Engineering

**Degree Descriptions**

The Department of Mechanical and Aerospace Engineering strives to provide the highest quality engineering education at the undergraduate and graduate levels, to engage in scholarly research at the forefront of mechanical and aerospace engineering, and to serve the professions of mechanical and aerospace engineering. Graduate degrees in mechanical engineering and aerospace engineering include the Master of Engineering, Master of Science, Doctor of Philosophy, and Doctor of Engineering degrees and are designed to prepare graduates for professional practice in teaching, research and development, design, and consulting. Graduates are prepared for challenging and rewarding employment in high-technology industries, research organizations, consulting firms and government agencies. These programs are also designed to serve both full-time and part-time graduate students. The department is closely associated with area industries, consulting firms, government agencies and research laboratories, which add relevance to the graduate engineering curricula, creating a stimulating environment for the pursuit of graduate studies. The students also benefit from the University’s affiliation with NASA Langley Research Center, the Jefferson National Laboratory, the National Institute of Aerospace, and the Virginia Modeling Analysis and Simulation Center. All degree programs offered by the department can be utilized as components within the accelerated Baccalaureate-Master’s and Baccalaureate-Doctoral degree programs offered through the Batten College of Engineering and Technology. For additional information about the educational and research opportunities available please visit our website at eng.odu.edu/mae

**Master’s Admission Information**

To qualify as a candidate for a Master of Science or a Master of Engineering program, applicants must meet the general University admission requirements and have completed undergraduate-level coursework that
includes subject matter equivalent to a bachelor’s degree in mechanical engineering, aerospace engineering, engineering mechanics, or a closely related discipline such as physics or mathematics. An applicant with an overall grade point average (GPA) of 3.0 and a GPA in the major of 3.0 (4.0 scale) is eligible for regular admission. Applicants with a GPA below 3.0 may be eligible for provisional admission. Students are typically required to submit their Graduate Record Examination (GRE) scores, although the Graduate Program Director (GPD) may waive the GRE requirement for applicants with excellent academic credentials. For those applicants with non-engineering degrees, or with engineering degrees other than mechanical engineering, aerospace engineering, or engineering mechanics, successful completion of remedial graduate coursework may be required as a condition of admission. The Master of Science programs require a minimum of 24 semester credit hours of coursework beyond the bachelor’s degree with at least a B (3.0) average and a minimum of 6 semester credit hours of thesis research. The Master of Engineering program requires a minimum of 30 semester credit hours of course work with at least a B (3.0) average.

**Master’s Program Requirements**

Students pursuing traditional Mechanical or Aerospace programs are required to take:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAE 601</td>
<td>Engineering Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 691</td>
<td>Engineering Analysis I</td>
<td></td>
</tr>
</tbody>
</table>

Select three from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAE 602</td>
<td>Fluid Dynamics and Aerodynamics</td>
<td>3</td>
</tr>
<tr>
<td>MAE 603</td>
<td>Advanced Mechanics of Solids</td>
<td>3</td>
</tr>
<tr>
<td>MAE 604</td>
<td>Analytical Dynamics</td>
<td></td>
</tr>
<tr>
<td>MAE 605</td>
<td>Advanced Classical Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>MAE 607</td>
<td>Continuum Mechanics</td>
<td></td>
</tr>
</tbody>
</table>

The remainder of the program is selected primarily from a chosen emphasis area, according to a study plan developed by the student and their faculty advisor.

Students pursuing the Manufacturing emphasis area within Mechanical Engineering follow a modified core program, comprising:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAE 608</td>
<td>Applied Mathematics for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>MAE 680</td>
<td>Engineering Software for Computer-Aided Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>MAE 682</td>
<td>Concurrent Engineering</td>
<td>3</td>
</tr>
<tr>
<td>MAE 681</td>
<td>Robots and Manufacturing Automation</td>
<td>3</td>
</tr>
</tbody>
</table>

Students pursuing the Experimental Methods emphasis area within Aerospace Engineering also follow a modified core program, which consists of:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAE 606</td>
<td>Real-Time Signals and Systems</td>
<td>3</td>
</tr>
<tr>
<td>MAE 608</td>
<td>Applied Mathematics for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>MAE 691</td>
<td>Experimental Research Project</td>
<td>3</td>
</tr>
</tbody>
</table>

Two course sequences in thematic areas such as: * 6

<table>
<thead>
<tr>
<th>Area</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerodynamics</td>
<td></td>
</tr>
<tr>
<td>Structural Mechanics</td>
<td></td>
</tr>
<tr>
<td>Experimental Design</td>
<td></td>
</tr>
<tr>
<td>Control System Applications</td>
<td></td>
</tr>
</tbody>
</table>

* In all programs, a maximum of 6 semester credit hours may be derived from 500-level courses.

**Master of Science (Thesis) Programs**

The Master of Science degree is a research degree requiring a written thesis. The thesis constitutes 6 semester credit hours within the 30 semester credit hour requirement. Students are given a verbal examination, administered as the student’s thesis defense, under the direction of the faculty advisor with support from the Thesis Advisory Committee. The examination consists of two parts, a student presentation of their thesis research followed by a closed session where the Thesis Advisory Committee further questions the student. The committee concentrates on research presented in both oral and written formats, but may expand questioning to include related course work. The thesis should be formatted with guidelines established by the College.

**Master of Engineering (Non-Thesis) Programs**

The Master of Engineering is a non-research degree. The 30 semester credit hours is thus met entirely by course work. During their final semester, students are required to either pass a comprehensive examination covering their course work or successfully complete a 3 hour project course, which includes written and oral presentations. The master’s comprehensive examination is administered by the faculty advisor with support from the Master’s Examination Committee or a Project Committee.

**Doctor of Philosophy Programs**

The Doctor of Philosophy programs in Mechanical or Aerospace Engineering are advanced research degrees requiring a written dissertation offering new and unique contributions of a fundamental nature. Graduates are prepared for leadership roles in the many facets of engineering including teaching, research and development, design, and consulting. Doctoral students may select specializations in such technical areas as:

- aerodynamics and fluids
- thermodynamics and energy
- structures
- dynamics and controls
- materials
- design and manufacturing

Students are also encouraged to select complementary courses in other engineering or science disciplines. The University’s close associations with area industries, consulting firms, government agencies, and research laboratories create a stimulating environment for the pursuit of graduate studies.

**Doctor of Philosophy Admission Requirements**

To qualify for admission to a Doctor of Philosophy degree in Mechanical or Aerospace Engineering, a student must have earned a master’s degree from an accredited institution of higher learning in engineering, physics, or mathematics, including graduate-level course work equivalent to the corresponding master’s programs in Mechanical and Aerospace Engineering. Applicants with an overall grade point average (GPA) of 3.5 on a 4.0 scale at the master’s level are eligible for regular admission. Applicants with a GPA below 3.5 who present evidence and potential for improvement may be eligible for provisional admission. Students are typically required to submit their Graduate Record Examination (GRE) scores, although the Graduate Program Director (GPD) may waive the GRE requirement for applicants with excellent academic credentials.

**Doctor of Philosophy Degree Requirements**

A minimum of 24 credit hours of course work beyond the master’s degree and a minimum of 24 semester credit hours of dissertation research must be included in the doctoral degree program. At least 60% of the course work for the doctoral degree should be at the 800-level and the student should maintain at least a B (3.0) average. All doctoral students should satisfy either a foreign language or research skill requirement.

**Preliminary Diagnostic Examination**

The Preliminary Diagnostic examination must be taken prior to completion of 12 semester credit hours, preferably during the student’s first semester. Students who have recently completed Masters degrees at ODU with GPAs above 3.5 may seek partial or full exemption from this requirement.

**Mechanical Engineering**

The examination covers the core courses for the master’s degree in Mechanical Engineering and is given in the same format as the M.E.
Comprehensive Examination. The Ph.D. diagnostic examination is closed book/notes consisting of five problems from a total of five courses including: either MATH 691, MAE 608 or an approved substitute, one problem from each of two core courses, plus two problems from non-core courses in the program of study. The advisor and the Advisory Committee may recommend courses different from the above list; however, this change is subject to the final approval of the graduate program director.

Aerospace Engineering
Students submit a written portfolio covering their Master’s coursework and other academic and professional experience and are subject to an oral examination administered by the advisor and Advisory Committee lasting not less than two hours. The examination is diagnostic in nature, and should assist in completion of a complete plan of study for the remainder of the PhD program. The committee may recommend additional testing and/or additional remedial coursework as a condition for continuation.

Candidacy Examination
Mechanical Engineering
The format, contents, and duration of the parts are as follows –
• Part 1: A written examination covering the fundamental and specialized subjects associated with the student’s emphasis;
• Part 2: An oral examination covering fundamental and specialized subject examination must be approved by the graduate program director.
Aerospace Engineering
The examination has three components. Students prepare a written document covering a research topic related to, but distinct from, their dissertation topic. This document is reviewed by the Guidance Committee and an oral presentation is scheduled, which is held in closed session, and is followed by questioning of the student’s research emphasis and supporting theoretical principles. Students must demonstrate a level of understanding that projects confidence in a successful completion of doctoral research requirements. After successful completion, students are required to pass an oral presentation of their dissertation proposal.

Dissertation
Ph.D. candidates are expected to work with their dissertation advisors to form their Dissertation Committees. A Dissertation Committee should be composed of individuals with significant knowledge related to the candidate’s dissertation research. The majority of whom must be full-time faculty members of the department.
Ph.D. candidates must submit their written dissertation to the committee members at least two weeks prior to the dissertation defense. The dissertation should be formatted in accordance with guidelines established by the college.
The dissertation defense consists of two parts; an open presentation to the general public and a closed examination conducted by the dissertation committee. The dissertation must be approved by the majority of the dissertation committee and must constitute a significant original contribution to the field. Students are permitted only two attempts to successfully complete the dissertation defense.

Doctor of Engineering
The Department offers a Doctor of Engineering (D.Eng.) program with concentrations in Mechanical Engineering or Aerospace Engineering in accordance with the D.Eng. program criteria and requirements specified for the Batten College of Engineering and Technology in this catalog.
The Department’s graduate course portfolio is listed below:

Core Graduate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAE 601</td>
<td>Engineering Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MAE 602</td>
<td>Fluid Dynamics and Aerodynamics</td>
<td>3</td>
</tr>
<tr>
<td>MAE 603</td>
<td>Advanced Mechanics of Solids</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAE 604</td>
<td>Analytical Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>MAE 605</td>
<td>Advanced Classical Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>MAE 606</td>
<td>Real-Time Signals and Systems</td>
<td>3</td>
</tr>
<tr>
<td>MAE 607</td>
<td>Continuum Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>MAE 608</td>
<td>Applied Mathematics for Engineers</td>
<td>3</td>
</tr>
</tbody>
</table>

Aerodynamics and Fluids Graduate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAE 506</td>
<td>Flight Vehicle Aerodynamics</td>
<td>3</td>
</tr>
<tr>
<td>MAE 514</td>
<td>Introduction to Gas Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>MAE 610</td>
<td>Supersonic Flow</td>
<td>3</td>
</tr>
<tr>
<td>MAE 611</td>
<td>Computational Fluid Dynamics I</td>
<td>3</td>
</tr>
<tr>
<td>MAE 612</td>
<td>Experimental Aerodynamics</td>
<td>3</td>
</tr>
<tr>
<td>MAE 613</td>
<td>Aerospace Test Facilities</td>
<td>3</td>
</tr>
<tr>
<td>MAE 710/810</td>
<td>Transonic Aerodynamics</td>
<td>3</td>
</tr>
<tr>
<td>MAE 711/811</td>
<td>Hypersonic Aerodynamics</td>
<td>3</td>
</tr>
<tr>
<td>MAE 712/812</td>
<td>Unsteady Aerodynamics and Aeroelasticity</td>
<td>3</td>
</tr>
<tr>
<td>MAE 713/813</td>
<td>Turbulent Flow</td>
<td>3</td>
</tr>
<tr>
<td>MAE 714/814</td>
<td>Aerodynamic Flow Control</td>
<td>3</td>
</tr>
<tr>
<td>MAE 715/815</td>
<td>Boundary Layer Theory</td>
<td>3</td>
</tr>
<tr>
<td>MAE 716/816</td>
<td>Computational and Fluid Dynamics II</td>
<td>3</td>
</tr>
<tr>
<td>MAE 717/817</td>
<td>Microfluidics</td>
<td>3</td>
</tr>
</tbody>
</table>

Thermodynamics and Energy Graduate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAE 511</td>
<td>Mechanical Engineering Power Systems Theory and Design</td>
<td>3</td>
</tr>
<tr>
<td>MAE 512</td>
<td>Environmental Control</td>
<td>3</td>
</tr>
<tr>
<td>MAE 513</td>
<td>Energy Conversion</td>
<td>3</td>
</tr>
<tr>
<td>MAE 517</td>
<td>Propulsion Systems</td>
<td>3</td>
</tr>
<tr>
<td>MAE 620</td>
<td>Heat Transfer I</td>
<td>3</td>
</tr>
<tr>
<td>MAE 622</td>
<td>Theory and Design of Turbomachines</td>
<td>3</td>
</tr>
<tr>
<td>MAE 623</td>
<td>Nuclear Engineering</td>
<td>3</td>
</tr>
<tr>
<td>MAE 624</td>
<td>Energy Utilization and Conservation</td>
<td>3</td>
</tr>
<tr>
<td>MAE 720/820</td>
<td>Heat Transfer II</td>
<td>3</td>
</tr>
<tr>
<td>MAE 721/821</td>
<td>Fundamentals of Combustion</td>
<td>3</td>
</tr>
</tbody>
</table>

Structure Graduate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAE 520</td>
<td>Aerospace Structures</td>
<td>3</td>
</tr>
<tr>
<td>MAE 540</td>
<td>Introduction to Finite Element Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MAE 630</td>
<td>Finite Element Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>MAE 631</td>
<td>Experimental Structural Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>MAE 633</td>
<td>Flight Vehicle Structural Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MAE 634</td>
<td>Theory of Vibrations</td>
<td>3</td>
</tr>
<tr>
<td>MAE 730/830</td>
<td>Finite Element Analysis II</td>
<td>3</td>
</tr>
<tr>
<td>MAE 731/831</td>
<td>Mechanics of Composite Structures</td>
<td>3</td>
</tr>
<tr>
<td>MAE 733/833</td>
<td>Nonlinear Aerospace Structures</td>
<td>3</td>
</tr>
<tr>
<td>MAE 734/834</td>
<td>Structural Vibrations II</td>
<td>3</td>
</tr>
</tbody>
</table>

Dynamics and Controls Graduate Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAE 503</td>
<td>Flight Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>MAE 504</td>
<td>Vibrations</td>
<td>3</td>
</tr>
<tr>
<td>MAE 531</td>
<td>Mechanisms Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>MAE 538</td>
<td>Applied Analog and Digital Control</td>
<td>3</td>
</tr>
<tr>
<td>MAE 640</td>
<td>Modern Control Theory</td>
<td>3</td>
</tr>
<tr>
<td>MAE 641</td>
<td>Aerospace Vehicle Performance</td>
<td>3</td>
</tr>
<tr>
<td>MAE 642</td>
<td>Flight Control Actuators and Sensors</td>
<td>3</td>
</tr>
<tr>
<td>MAE 740/840</td>
<td>Autonomous and Robotic Systems Analysis and Control</td>
<td>3</td>
</tr>
<tr>
<td>MAE 741/841</td>
<td>Optimal Control Theory</td>
<td>3</td>
</tr>
</tbody>
</table>
Aerospace Engineering. The certificate program offers two tracks: one in Marine Engineering or a related field. The students must complete four 3-credit graduate-level courses to earn a certificate. The certificate program credits will be transferable to the Master’s degree programs in Mechanical Engineering. The certificate program offers two tracks:

1. Naval Architecture
2. Marine Engineering

Materials Graduate Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAE 522</td>
<td>Modern Engineering Materials</td>
<td>3</td>
</tr>
<tr>
<td>MAE 650</td>
<td>Composite Materials</td>
<td>3</td>
</tr>
<tr>
<td>MAE 652</td>
<td>Mechanical Behavior of Materials</td>
<td>3</td>
</tr>
<tr>
<td>MAE 654</td>
<td>Thermomechanical Processing of Materials</td>
<td>3</td>
</tr>
<tr>
<td>MAE 750/850</td>
<td>Nanoscale Mechanical and Structural Properties of Materials</td>
<td>3</td>
</tr>
<tr>
<td>MAE 751/851</td>
<td>Fatigue and Fracture</td>
<td>3</td>
</tr>
</tbody>
</table>

Miscellaneous Topics Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAE 450/550</td>
<td>Principles of Naval Architecture</td>
<td>3</td>
</tr>
<tr>
<td>MAE 688</td>
<td>Computational Intelligence for Engineering Design Optimization Problems</td>
<td>6</td>
</tr>
<tr>
<td>MAE 695</td>
<td>Topics in Mechanical and Aerospace Engineering (Numerical Marine Hydrodynamics)</td>
<td>3</td>
</tr>
<tr>
<td>MAE 695</td>
<td>Topics in Mechanical and Aerospace Engineering (Ship Resistance and Propulsion)</td>
<td>3</td>
</tr>
<tr>
<td>MAE 695</td>
<td>Topics in Mechanical and Aerospace Engineering (Ship Production and Maintenance)</td>
<td>3</td>
</tr>
<tr>
<td>MAE 695</td>
<td>Topics in Mechanical and Aerospace Engineering (Dynamics of Marine Crafts)</td>
<td>3</td>
</tr>
<tr>
<td>MAE 695</td>
<td>Topics in Mechanical and Aerospace Engineering (Engineering Structures)</td>
<td>3</td>
</tr>
</tbody>
</table>

Design/Manufacturing Graduate Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAE 507</td>
<td>Ground Vehicle Aerodynamics</td>
<td>3</td>
</tr>
<tr>
<td>MAE 550</td>
<td>Principles of Naval Architecture</td>
<td>3</td>
</tr>
<tr>
<td>MAE 557</td>
<td>Motorsports Vehicle Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>MAE 560</td>
<td>Introduction to Space Systems Engineering</td>
<td>3</td>
</tr>
<tr>
<td>MAE 567</td>
<td>Racecar Performance</td>
<td>3</td>
</tr>
<tr>
<td>MAE 577</td>
<td>High Performance Piston Engines</td>
<td>3</td>
</tr>
<tr>
<td>MAE 670</td>
<td>Computational Methods in Mechanical and Aerospace Engineering</td>
<td>3</td>
</tr>
<tr>
<td>MAE 770/870</td>
<td>Perturbation Methods in Aerospace Engineering</td>
<td>3</td>
</tr>
</tbody>
</table>

Naval Architecture and Marine Engineering Certificate

In order to provide the opportunity for practicing engineers to further their knowledge and to become more competent in the fields of Naval Architecture and Marine Engineering, the Department of Mechanical and Aerospace Engineering offers a non-degree graduate level certificate program in Naval Architecture and Marine Engineering. Admission to the program requires a Bachelor of Science degree (or equivalent) in Mechanical Engineering, Aerospace Engineering, Naval Architecture and Marine Engineering, or a related field. The students must complete four 3-credit graduate-level courses to earn a certificate. The certificate program credits will be transferable to the Master’s degree programs in Mechanical and Aerospace Engineering. The certificate program offers two tracks:

1. Naval Architecture
2. Marine Engineering
and research. The Master's Degree is available as a thesis option (MS) or
non-thesis option (ME); both require 30 hours of graduate credit. The Master
of Science in Modeling and Simulation requires six hours of thesis credit
and 24 hours of course credit. The Master of Engineering in Modeling and
Simulation requires 30 hours of course credit.

The program’s subject core consists of:

1. an overview of modeling and simulation;
2. an in-depth exploration of a specific simulation methodological
   approaches;
3. simulation system modeling principles and techniques;
4. an introduction to computer visualization and visual simulation; and,
5. principles of stochastic analysis.

Most courses are offered in the evenings and are in distance learning format.
They are delivered to Old Dominion University’s higher education centers
and are available online using Polycom PVSX software. Additionally, the
MSVE department is offering a Master of Engineering online program that
would be focused on developing the practical skills and knowledge needed
to solve problems requiring applications of modeling and simulation.

A significant resource to the program is the Virginia Modeling, Analysis
and Simulation Center (VMASC). The primary purposes of VMASC include the
advancement of state-of-the-art modeling and simulation through research
and development and the transfer of modeling and simulation technology
to industry, education, and government. Constituent interest in this center
is shared by numerous industrial partners as well as local Department of
Defense organizations.

Master’s Admission Requirements

The Master’s Degree in Modeling and Simulation is designed for students
having bachelor’s degrees in Engineering, Science or Mathematics, although
students from other educational backgrounds may apply with appropriate
leveling courses. Prerequisites for admission include: mathematics – two
courses in differential and integral calculus and one course in calculus-
based probability and statistics; and computer science – algorithmic problem
solving using a high-level object-oriented programming language (C++ or
JAVA).

A minimum GPA of 2.80 overall and a minimum GPA of 3.0 in the
undergraduate major are required. Students with notable deficiencies
may be considered for provisional admission and will be required to
complete prerequisite course requirements in addition to the graduate degree
requirements. Job experience and training may be considered in evaluating
prerequisite requirements. Applicants should plan to submit a completed application form, transcripts from all colleges and universities attended, GRE scores (verbal, quantitative, and analytical writing), a resume and personal statement of objectives, two letters of recommendation from former university instructors, and TOEFL scores if an international applicant.

Potential prerequisite courses for the master’s degrees in modeling and
simulation include the following:

1. Introductory differential and integral calculus equivalent to MATH
   211 (Calculus I) and MATH 212 (Calculus II).
2. Calculus-based probability and statistics; this material is available for
   graduate credit in ENMA 520, PSYC 727, or PSYC 728.
3. Computer science fundamentals including an object-oriented
   programming language such as C++ or JAVA, algorithmic problem
   solving, and data structures.

Master of Science Degree Requirements

The Master of Science program requires 15 hours of course credit in
modeling and simulation foundation courses. These foundation courses include:

- MSIM 601 Introduction to Modeling and Simulation
- MSIM 603 Discrete Event Simulation
- MSIM 605 Engineering Systems Modeling
- MSIM 641 Visualization I
- MSIM 651 Analysis I

The remaining course credits (9 credits) are elective course credits. These
courses are selected to achieve one or more program objectives or themes
and must be approved by the student’s advisor and/or graduate program
director. Such themes might include military M&S, medical M&S, human
computer interfacing, distributed simulation, human behavior modeling,
simulation interoperability, or other themes reflecting M&S applications or
sub-areas. Elective courses can include courses offered by colleges other
than Engineering.

Master of Engineering Degree Requirements

The Master of Engineering program requires completion of 10 three-credit
courses, seven core course that all students are required to complete and
three elective courses.

Core ME Courses

- MSIM 601 Introduction to Modeling and Simulation
- MSIM 603 Discrete Event Simulation
- MSIM 605 Engineering Systems Modeling
- MSIM 641 Visualization I
- MSIM 651 Analysis I
- MSIM 720/820 Foundations for Continuous and Real-Time
  Simulation
- MSIM 763 Distributed Simulation

Students must take three electives, 3 credit hours each, in addition to the
core courses. Several electives are available covering topics such as system
dynamics, social networks, graduate level statistics, and combat modeling.
Students who need to take certain level graduate courses may possibly
choose to use them for these electives.

Master of Engineering Online Program

The MSVE department also offers an ME online degree in Modeling
and Simulation via the Blackboard Academic Suite which provides
students with a richer overall experience that provides online lectures,
homework submissions, examinations, discussion boards, wikis, video/audio
sessions and grading. Students having access to reliable high
speed internet service can connect and participate in engaging discussion
and distributed asynchronous learning with the instructor and other students.
All course materials are distributed and collected electronically. Students
located in the Hampton Roads region may utilize live courses to fulfill the
elective course requirement with approval from the MSVE graduate program
director.

Master of Engineering Online Admission Requirements

Most students in this program would have limited or no knowledge of
modeling and simulation before starting the program. Their objective
would be to develop knowledge and credentials needed for employment
or advancement in a modeling and simulation company or organization.
The Master of Engineering degree program offers courses that develop
the practical skills and knowledge needed to solve problems requiring the
application of modeling and simulation. Applicants are expected to have
earned a bachelor’s degree and have successfully taken previous courses in
calculus and statistics, have PC literacy and familiarity with MS Office tools.
The GPA in the student’s undergraduate major, student’s performance in
prerequisite courses, and GRE scores (verbal, quantitative, and analytical)
will be used to determine eligibility for admission into the program. Job
experience and training may also be considered in evaluating prerequisite
requirements.
Description of Doctor of Philosophy Degree

The Ph.D. in Modeling and Simulation program focuses on developing the necessary skills and knowledge to enable the graduate to conduct and evaluate independent, original research in an area of modeling and simulation. The goal of the program is to prepare students for careers in teaching and research at academic institutions, as well as the conduct or leadership of research and development in public and private organizations.

Doctor of Philosophy Admission Requirements

Admission to the Ph.D. in M&S program is made in accordance with Old Dominion University and Batten College of Engineering and Technology requirements for doctoral programs as specified in this Catalog. Specific requirements for the modeling and simulation degree include the following:

1. Completion of a master’s degree in an appropriate and closely related field is expected. However, students who have completed 24 credits of graduate courses in an appropriate field from an accredited institution may apply.

2. A minimum GPA in graduate course work of 3.50 (out of 4.0) is required of most students. A student with a GPA greater than 3.25 and with evidence of a high level of professional capability in the field of modeling and simulation may be eligible for admission to the program upon submission of a petition to the graduate program director.

3. Recent scores (typically, not more than five years old) on the Graduate Record Examination’s (GRE) verbal, quantitative, and analytical writing sections must be submitted by all applicants.

4. Three letters of recommendation (typically at least two of which are from faculty in the highest degree program completed when the application is within five years of graduation from that degree program) are required.

5. The applicant must submit a statement of purpose, goals, and objectives related to the program and a resume.

Applicants are expected to have the following foundation knowledge:


2. Computer science fundamentals including an object-oriented programming language such as C++ or JAVA, algorithmic problem solving, and data structures.

3. Knowledge of the content of the foundation courses required in the Modeling and Simulation Master’s Program.

Doctor of Philosophy Degree Requirements

The Ph.D. in modeling and simulation is offered in accordance with the general requirements for doctoral degrees as specified in the Requirements for Graduate Degrees Section of this Catalog. Specific program of study requirements for the concentration in modeling and simulation include the following:

1. Completion of a minimum of 24 credits of course work beyond the master’s degree; and a minimum of 24 credits of dissertation research.

2. Successful completion of a written diagnostic examination before completion of nine credits of advanced course work.

3. Successful completion of a written and oral qualifying examination near the completion of the course work.

4. Successful presentation of a dissertation research proposal at the beginning of the dissertation research.

5. The successful completion and public defense of a dissertation representing independent, original research worthy of publication in a peer-reviewed scholarly journal.

The program of study for the Modeling and Simulation program is developed with the approval of the graduate program director and the student’s advisor. The program shall include a minimum of 24 credit hours of course work beyond the master’s degree distributed as follows.

<table>
<thead>
<tr>
<th>Common Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSIM 820 Foundations for Continuous and Real-Time Simulation</td>
</tr>
<tr>
<td>MSIM 830 Simulation Formalisms</td>
</tr>
<tr>
<td>MSIM 842 Visualization II</td>
</tr>
<tr>
<td>MSIM 852 Analysis II</td>
</tr>
<tr>
<td>Total Hours</td>
</tr>
</tbody>
</table>

Electives - Minimum of 12 credits of elective courses that provide a basis for dissertation research. No more than six credits from course work satisfying foundation knowledge requirements may be included in the program of study for elective credit. At least three-fifths (15 credits) of non-dissertation course work must be at the 800-level.

Description of Doctor of Engineering Degree

The D. Eng. In Modeling and Simulation program focuses on developing the advanced skills and knowledge to enable the graduate to conduct and lead advanced technical projects in an engineering environment. It affords engineering practitioners the opportunity to achieve advanced graduate education beyond the master’s degree.

Doctor of Engineering Admission Requirements

Admission to the D. Eng. Program with a concentration in modeling and simulation is made in accordance with Old Dominion University and Batten College of Engineering and Technology requirements for doctoral programs as specified in this catalog. Specific admission requirements are identical to the admission requirements for the Doctor of Philosophy program with a concentration in modeling and simulation.

Doctor of Engineering Degree Requirements

The D. Eng. in modeling and simulation is offered in accordance with the D. Eng. degree requirements as specified for the Batten College of Engineering and Technology in this catalog. Specific program of study requirements for the concentration in modeling and simulation include the following:

1. Completion of a minimum of 18 credits of core professional courses; a minimum of 18 credits of core and elective technical courses; and a minimum of 12 credits of applied doctoral project.

2. Successful completion of a written diagnostic examination before completion of nine credits of advanced course work.

3. Successful completion of a written and oral qualifying examination near the completion of the course work.

4. Successful presentation of a project concept proposal.

5. Successful presentation and public defense of the completed project. The project should be worthy of publication in a peer-reviewed scholarly journal.

The program of study for the Modeling and Simulation program is developed with the approval of the graduate program director and the student’s advisor. The program shall include a minimum of 18 credits of professional course work and 18 credits of technical core course work beyond the master’s degree distributed as follows:

<table>
<thead>
<tr>
<th>Professional Core Courses</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENMA 604 Project Management</td>
<td></td>
</tr>
<tr>
<td>ENGN 611 Financial Engineering</td>
<td></td>
</tr>
<tr>
<td>ENGN 612 Engineering Corporate Management</td>
<td></td>
</tr>
<tr>
<td>ENGN 811 Methodologies for Advanced Engineering Projects</td>
<td></td>
</tr>
<tr>
<td>ENGN 812 Engineering Leadership</td>
<td></td>
</tr>
<tr>
<td>ENGN 813 Engineering Ethics</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technical Core Courses</th>
<th>18</th>
</tr>
</thead>
</table>
Graduate Certificate in Modeling and Simulation Engineering

Frederic (Rick) McKenzie, Graduate Program Director

The Graduate Certificate in Modeling and Simulation Engineering is designed for those who meet the admission requirements of the modeling and simulation master’s program who wish to broaden their knowledge of modeling and simulation related principles and practices without pursuing a graduate degree. This is a 12 credit hour non-degree program offered by the Department of Modeling Simulation and Visualization Engineering. The certificate program is open to both degree-seeking and non-degree-seeking graduate students. Courses taken for the certificate program may later be applied to the master’s degree in modeling and simulation.

Graduate Certificate Admission Requirements

Students should have either an undergraduate degree from a regionally accredited institution and should have a mathematical background through calculus, along with a calculus based probability and statistics course. Students should submit a graduate non-degree application through the Office of Admissions, and then submit a departmental application with copies of unofficial transcripts from all previous coursework to the MSVE Department. Departmental applications are available online on the MSVE Department’s website – http://eng.odu.edu/msve - and should be sent to:

Academic Services Coordinator
MSVE Department
Old Dominion University
1300 Engineering and Computational Sciences Building
Norfolk, VA 23529

Graduate Certificate Requirements

The Graduate Certificate in Modeling and Simulation Engineering requires the completion of 12 credit hours at the graduate level. The course requirements are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSIM 601</td>
<td>Introduction to Modeling and Simulation</td>
<td>3</td>
</tr>
<tr>
<td>Two Core Courses from the MSIM ME Core Course List</td>
<td>6 credits each *</td>
<td></td>
</tr>
<tr>
<td>MSIM 603</td>
<td>Discrete Event Simulation</td>
<td></td>
</tr>
<tr>
<td>MSIM 605</td>
<td>Engineering Systems Modeling</td>
<td></td>
</tr>
<tr>
<td>MSIM 641</td>
<td>Visualization I</td>
<td></td>
</tr>
<tr>
<td>MSIM 651</td>
<td>Analysis I</td>
<td></td>
</tr>
<tr>
<td>MSIM 720</td>
<td>Foundations for Continuous and Real-Time Simulation</td>
<td></td>
</tr>
<tr>
<td>MSIM 763</td>
<td>Distributed Simulation</td>
<td></td>
</tr>
<tr>
<td>MSIM ELE - MSIM Elective **</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total Hours</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

* One of the two core courses taken must be either MSIM 603 or MSIM 720.
** A graduate level elective approved by the graduate program director. This elective may be an MSIM course or from another discipline outside of modeling and simulation. It is possible that this course may be outside the discipline of modeling and simulation, but approved because it complements the field of M&S and the student’s interests.

An overall GPA of 3.00 or better is required to earn the graduate certificate in modeling and simulation engineering.
The College of Health Sciences

www.hs.odu.edu

Shelley C. Mishoe, Dean
Richard Benjamine, Associate Dean
Deborah B. Bauman, Assistant Dean

2114 Health Sciences Building
Norfolk, VA 23529
757-683-4960

Doctorate:
• Health Services Research (Ph.D.)
• Physical Therapy (D.P.T.)
• Doctor of Nursing Practice (D.N.P.)

Master’s:
• Community Health (M.S.)
• Emphasis area: Environmental Health
• Dental Hygiene (M.S.)
• Nursing (M.S.N.)
• Public Health (M.P.H)
• Tracts: Environmental Health &
  • Health Promotion

Accelerated Programs:
• B.S. in Health Sciences to Master of Public Health
• B.S. in Dental Hygiene to M.S. in Dental Hygiene
• B.S. in Environmental Health to Master of Public Health
• B.S. in Nursing to DNP – Nurse Executive
• B.S. in Nursing to DNP – FNP Program
• B.S. in Nursing to DNP – WHNP Program

Graduate Certificate Programs:
• Family Nurse Practitioner
• Modeling and Simulation in Health Sciences
• Molecular Diagnostics
• Nurse Administrator
• Nurse Educator
• Occupational Safety
• Women’s Health Nurse Practitioner

College Mission
The college mission is to improve individual and community health by advanced professional education, influential research, and responsive service. The vision of the College of Health Sciences is to be an internationally recognized leader in advancing health care by educating competent practitioners, generating practically significant scientific knowledge and innovative technologies, fostering scholarly collaborations, and promoting positive public health policies.

The college consists of the School of Community and Environmental Health, the Gene W. Hirschfeld School of Dental Hygiene, the School of Medical Laboratory and Radiation Sciences, the School of Nursing, and the School of Physical Therapy. These schools offer a variety of master’s and doctoral degrees, and non-degree certificate programs, accelerated and degree completion programs, and professional continuing education programs. In addition, many of these programs are offered off-campus and in a variety of distance learning formats. The degree programs are competitive, fully accredited, and nationally recognized for their quality graduates.

Program Application, Acceptance, and Continuance
A separate application must be submitted to be considered for acceptance into the health sciences majors. Application information, qualifications, deadlines, and advisors are listed in the specific program sections of this catalog and on the web site.

Acceptance to the University does not constitute or guarantee acceptance into a health sciences major. 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 health sciences 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. Any student deemed unacceptable for clinical rotation due to results from a criminal background check will not be allowed to complete the program of study.

The College of Health Sciences has developed graduate programs in the health-related professions that prepare individuals for practice, teaching, research, or administration in health-care delivery to meet the needs of the region, the state, and the nation. These programs include Master of Science degrees in community health and dental hygiene, the Master of Science in Nursing degree, the Master of Public Health degree, the Doctor of Physical Therapy degree, the Doctor of Nursing Practice degree, and the Ph.D. in health services research.

PhD in Health Services Research
757-683-6953
www.hs.odu.edu/commhealth/academics/PhD/

Dr. Deanne Shuman, Program Director

The primary mission of the Ph.D. in health services research is to develop leaders and problem solvers whose professional services will improve the health of the population not only in Eastern Virginia but also statewide, nationally, and internationally. Health services researchers examine health care quality and effectiveness, patient outcomes, access to care, health care costs and financing, primary and managed care, new technologies, and other critical topics. Health services researchers pursue careers in many settings, including academia, professional organizations, research centers, health policy groups, clinical settings, and in federal, state, and local agencies.

The goals of the program are to enable students to conduct and interpret health services research, to formulate and analyze public health policy, to lead programs and organizations that address the health care needs of populations and to work directly with community members to empower them to be a part of the policy formulation process. In accomplishing these goals students in the program will develop the critical skills necessary to assemble and integrate qualitative and quantitative evidence applicable to problem formulation and policy analysis. They will be able to design viable programs, manage resources, and measure the effectiveness of service delivery to populations. Students will be awarded the Ph.D. in health services research after the completion of all University and program requirements for graduate degrees.

Requirements for Admission
Students are admitted to the Ph.D. program during the fall term only.
Applications for admission are reviewed by the Ph.D. in Health Services Research Program admissions committee which includes the graduate program director. To qualify for admission, an applicant must meet the general University admission requirements at the graduate level as well as specific program requirements, including:

1. A completed master’s degree from a program that is accredited by an appropriate specialized accrediting agency or from an institution of higher education that is regionally or nationally accredited; degrees such as M.D., J.D. and D.D.S. are also acceptable;
2. A minimum acceptable grade point average overall for the master’s degree;
3. Acceptable overall total score on the Graduate Record Exam (GRE);
4. For those whose native language is not English a TOEFL score of at least 550 (213 for online version);
5. Official transcripts from all institutions of higher education attended;
6. A current curriculum vitae or resume;
7. Three letters of reference from sources capable of commenting on the applicant’s readiness and commitment for doctoral studies. At least one, and preferably all letters will be from academic sources; however, letters may also be from professional colleagues;
8. A 1500 word essay discussing the applicant’s academic and professional goals. This essay should discuss how the Ph.D. in Health Services Research program will contribute towards meeting these goals.

Prerequisite courses are necessary for students who do not have graduate preparation in basic statistics, research design, health management and basic computer literacy. Prerequisite courses in health delivery systems and community health may be required for students without academic preparation or experience in these areas.

Complete the application form and submit all required materials to the Office of Admissions, Old Dominion University.

Degree Requirements
1. Satisfactory completion of at least 60 semester hours of graduate level coursework, including all required courses as listed below. (Students who receive two or more grades of C+ or one grade of F may not continue in the program).
2. Two semesters of full-time residency. These do not have to be consecutive.
3. A health services research internship.
4. Acceptable performance on written and oral candidacy examinations in the major field of study at the end of the program coursework. Students may re-take the candidacy exams only once.
5. Successful defense of a dissertation proposal.
6. Completion of a dissertation representing the candidate’s ability to conduct scholarly, original research. The quality of the research must be suitable for publication in an academic, peer-reviewed journal.
7. Successful oral defense of the dissertation.
8. Submission of the approved final copy of the dissertation.

Time frames for completion of degree requirement are as follows:
1. The entire process (from admission to dissertation defense) must be completed within eight years. Exceptions to this time limit require the approval of the graduate program director, the department chair, and the college dean.
2. Academic credit which is more than eight years old at the time of graduation must be re-validated by an examination before the work can be applied to a doctoral degree.
3. The dissertation must be completed within five years after the candidacy exams are passed.
4. Dissertations should be defended at least six weeks prior to the end of the semester in which the student expects to graduate.

Each student is required to have an advisory faculty member who will meet with the student after the first nine hours of coursework are complete. The faculty member, with the Graduate Program Director, approves the student’s planned coursework (plan of study) and conducts the written and oral competency exams at the end of the coursework. Students must maintain a 3.0 grade point average.

Curriculum
The coursework consists of 12 credits of health services core courses, 18 credits of research core courses, six credits of health policy core courses and a six credit cognate area. Additionally students complete an internship (three credits), a dissertation seminar (three credits), and 12 dissertation credits.

Up to nine hours of coursework may be at the 600 level. Up to 12 hours of graduate credit may be transferred from another university and applied towards the Ph.D. degree. Transfer of credit is approved at the discretion of the guidance committee and the graduate program director.

<table>
<thead>
<tr>
<th>The Health Services Core</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLSC 801 Introduction to Health Services</td>
<td></td>
</tr>
<tr>
<td>HLSC 809 MULTIDISC APPRCH HLTH SVC RSCH</td>
<td></td>
</tr>
<tr>
<td>HLSC 814 Theory in the Health Sciences</td>
<td></td>
</tr>
<tr>
<td>HLSC 864 Health Economics</td>
<td></td>
</tr>
<tr>
<td>Research Core</td>
<td>18</td>
</tr>
<tr>
<td>HLSC 810 Research Design and Application</td>
<td></td>
</tr>
<tr>
<td>HLSC 811 Health-Care Research Methodologies I</td>
<td></td>
</tr>
<tr>
<td>HLSC 812 Qualitative Research Methods</td>
<td></td>
</tr>
<tr>
<td>HLSC 813 Instrumentation in the Health Sciences</td>
<td></td>
</tr>
<tr>
<td>HLSC 846 Epidemiology-Advanced</td>
<td></td>
</tr>
<tr>
<td>HLSC 804 Methods of Program Evaluation</td>
<td></td>
</tr>
<tr>
<td>Health Policy Core</td>
<td>6</td>
</tr>
<tr>
<td>HLSC 815 Decision Analysis in Health Care</td>
<td></td>
</tr>
<tr>
<td>HLSC 872 Policy and Politics of Health</td>
<td></td>
</tr>
<tr>
<td>Culminating Courses</td>
<td>6</td>
</tr>
<tr>
<td>HLSC 868 Internship in Health Sciences</td>
<td></td>
</tr>
<tr>
<td>HLSC 881 Dissertation Seminar</td>
<td></td>
</tr>
<tr>
<td>Cognate Courses</td>
<td>6</td>
</tr>
<tr>
<td>Total Hours</td>
<td>48</td>
</tr>
</tbody>
</table>

* Cognate areas offer choices for students to specialize in an area inside and outside of the health arena. Students choose their cognate with the approval of their guidance committee. Some examples are:
  • Epidemiology
  • Education of Health Professionals
  • Environmental Health
  • Engineering Management
  • Clinical Research
  • Industrial and Organizational Psychology
  • Health Psychology
  • Modeling and Simulation
  • Demography/GIS
  • Other areas to be determined by students and faculty

Candidacy Exams (Written and Oral)
The candidacy examination is normally taken during the spring or fall semester of registration in the last formal graduate credits. Through the candidacy examination, the student’s Advisory and Examination Committee in conjunction with the graduate program director shall ensure that the student has demonstrated a mastery of the subject matter in all fields of the program, has an adequate knowledge of relevant literature, and has the ability to identify, utilize, and apply research skills and techniques.

To be eligible to take the examination, the student must meet the program requirements, must have completed or be in the semester of completing all coursework and the internship, must be recommended by his/her Advisory and Examination Committee, and must achieve at least a 3.0 GPA on all coursework taken within the program. Students need to apply to take the
candidacy exam to the graduate program director by the specified deadline each semester. The application form must be submitted by February 10 to take the exam in the spring semester and by September 10 to take the exam in the fall semester.

Questions for the candidacy examination are based on coursework taken in the core, cognate and culminating areas and require a sophisticated demonstration of skills. The examination is comprehensive in nature and consists of written and oral components. The written section of the exam is taken over a two-day period. Questions for the written exam consist of the problem, case study, or scenario variety and require approximately nine hours of writing time. The oral examination is taken only after all of the components of the written exam are passed, and must be taken in the same semester as the written exam. The oral examination is approximately one and one-half hours in length and permits an in-depth discussion of the written topics and other related materials. All parts of the examination are graded pass/fail. Students may retake the exam only once. Parts of the written exam that are not passed on the first attempt need to be re-taken when the exam is offered again. The oral exam can be re-taken in the same semester.

Dissertation (12 credits)

The candidate’s program of study culminates in a dissertation representing an original research project which makes a real and significant contribution to health services knowledge and practice. The dissertation provides a demonstration of the student’s ability to conduct independent scholarly research in health services research. The dissertation phase begins only after all other degree requirements (coursework, candidacy exams, dissertation seminar) have been completed. Towards this end, the candidate must form a dissertation committee, compose a letter of intent for the dissertation topic and have approved by their committee, and the college human subjects committee or the ODU IRB, write and successfully defend a dissertation proposal, conduct the research necessary to complete the dissertation, write the dissertation, successfully defend it at an oral defense, make any necessary changes and submit a final approved copy. Additionally, all Ph.D. students are strongly encouraged to author at least one journal article based upon their dissertation research.

Dissertation Committee

After the candidacy exams are successfully passed, the dissertation committee is formed by the student in conjunction with, and approval by, the graduate program director. A dissertation committee must have at least three members, one of whom is from outside the department of the major field of study. The members of the dissertation committee must all hold doctorates and be graduate certified unless an exception must be approved by the graduate program director and the college dean. The committee’s purpose is to supervise the entire process from proposal writing and defense through the oral defense of the dissertation. The committee supervises and approves the choosing of a topic, the choosing of a theoretical framework, the development of the research methods, the actual conduct of the research and the writing of the results.

Dissertation Letter of Intent

A dissertation starts with a letter of intent. The student will draft a 3-5 page description of the proposed study. This letter should contain the statement of purpose of the study and a brief description of why the topic is important to health services research. The letter should also identify the theoretical framework that will be employed, as well as provide an overview of the proposed methods. Where appropriate, the letter should also have an addendum that indicates the student has permission to use the proposed data source and/or access the proposed population of interest. The dissertation committee needs to unanimously approve the letter of intent in order for the student to write and defend the dissertation proposal.

Dissertation Proposal

The dissertation proposal provides a detailed explanation of the research being proposed, and should address the significance of the study, provide a substantive literature review and describe, in detail, the methods that will be used to collect data. The proposal will be defended in a public forum to which all faculty, staff and students in the college will be invited. The final draft of the dissertation proposal must be available for public viewing two weeks before the defense date. No formal work should begin on the dissertation until the dissertation committee and the graduate program director unanimously approve the dissertation proposal in writing. Dissertation proposals can be defended prior to IRB approval/exemption. However, no data collection or interaction with study participants can ever begin until the dissertation chair and the student have obtained IRB approval or exemption. Approval of the dissertation proposal is NOT a pro forma activity and the student is cautioned never to regard it as such.

Dissertation and Final Oral Defense

The completion of a dissertation is the cornerstone of the Ph.D. program. Through the dissertation, candidates demonstrate that they are prepared to join the company of scholars and to be leaders in health services research. The candidate should work closely with his/her dissertation committee throughout this process. Dissertations must be carefully prepared, publicly available for viewing, defended in a public forum and approved by the dissertation committee, the graduate program director and the college dean.

The dissertation committee plays a vital role in the completion of the dissertation. Candidates are expected be in regular communication with the committee chair and members regarding the progress of the study, research results and manuscript drafts. While preparing a dissertation, candidates must be continuously enrolled for a minimum of one credit hour per semester. University resources may not be used unless a candidate is officially enrolled. Advice or assistance from committee members should not be expected unless the candidate is officially enrolled.

Dissertations must be carefully prepared according to ODU guidelines using the most current version of the Guide for the Preparation of Theses and Dissertations (obtained from the Office of Graduate Studies). The APA style manual should be used to cover specific questions of style. However, the requirements of the Guide for the Preparation of Theses and Dissertations take precedence over all the guidelines contained in the APA manual. All proposed dissertation research which involves human subjects must be reviewed and approved by the college or University’s Human Subjects Committee. The process and approval must be documented in the text of the dissertation. Once the dissertation is successfully defended and in its final form, the student should ensure that five copies of the dissertation (with all necessary signatures) are given to the Office of the University Registrar for binding and sign the microfilming and copyright agreements. Students can choose to have additional copies bound for their own personal use. All dissertations will be published in Dissertation Abstracts International.

Once the dissertation committee approves that the dissertation is ready, the student works with the dissertation committee to set a defense date and to ensure that the defense date is made public. The student should provide sufficient copies of the dissertation for public viewing at least two weeks before the defense date. The defense itself needs to be publicized two weeks in advance as well. While the defense is publicized and open to the public in general, care should be taken to ensure that all college faculty and administrators and all departmental students receive invitations to the defense. The entire dissertation committee must attend the final oral dissertation defense. After the dissertation defense, the dissertation committee meets in a closed-door meeting to discuss the dissertation defense and to vote on its approval or disapproval. If the dissertation is not approved, it can be defended only once more (no sooner than three months after the initial defense). The final dissertation must be approved through a signature process that includes the dissertation chair, all members of the dissertation committee, the graduate program director and the dean of the College of Health Sciences. Note that a dissertation may be approved orally at the final defense, but may still require some editing before the final copy is approved by the committee. The Doctor of Philosophy in Health Services Research will be awarded upon the oral defense of the dissertation, the submission of the final approved copy of the dissertation and the completion of all other program requirements for graduation.
Continuing Education Programs
www.odu.edu/hsece

Short courses, national conferences, workshops, refresher courses, certificate programs and seminars are offered by the different schools in the college on and off campus on a noncredit continuing education (CEU) basis. Professional continuing education programs cover a wide range of topics, including environmental health, dental hygiene, dental assisting, nursing, nuclear medicine technology, health-care management, medical technology, physical therapy, community health, mental health, and chemical dependency.

- Continuing education serves the following functions:
- licensure and certification for professionals and practitioners,
- credential and degree achievement and professional development to update knowledge and skills. Clients served by the programs include nursing and allied health professionals, human service workers, managers and supervisory personnel, technicians, laboratory personnel, and health educators.

Visit the website to view current offerings.

School of Community and Environmental Health
3134 Health Sciences Building
757-683-4259
www.hs.odu.edu/commhealth/

Deanne Shuman., PhD, Interim Chair

The School of Community and Environmental Health offers graduate and certificate programs which lead to careers in health services research, public health, community health, health care administration and environmental health, and occupational safety. The Master of Science in community health offers practicing health care professionals the opportunity to complete their degrees in a distance format with emphasis areas in environmental health, occupational safety and health, and industrial hygiene. ODU also offers a Master of Public Health degree in collaboration with Eastern Virginia Medical School.

Master of Public Health

The ODU School of Community and Environmental Health, in partnership with EVMS, offers the MPH graduate program leading to careers in the nation’s public health and environmental systems. MPH specialty tracks provided by ODU are available in health promotion and in environmental health.

The courses leading to the MPH degree are available in a blend of traditional and non-traditional teaching methods. Online options are ideal for those professionals currently engaged in public health practice, such as environmental health specialists, industrial hygienists and occupational safety specialists, and individuals who wish to earn an advanced degree for increased career mobility or to update professional skills and competencies.

The course of study covers a minimum of two years including the summer term. Options for part-time students, which may take up to 6 years, are also available. The program includes core courses, specialty track courses and completion of a practicum and capstone.

The MPH Degree Program

The Master of Public Health (MPH) degree is an accredited professional degree offered by Eastern Virginia Medical School in collaboration with Old Dominion University. The program provides graduates with an understanding of the public health sciences and with knowledge and skills that can be utilized in healthcare management, population-based research and the community practice of public health.

The Program focuses upon four specialized tracks: Health Management, Epidemiology, Environmental Health; and Health Promotion. Students complete both didactic and experience-based courses. A community practicum exposes students to community organizations that support public health. The MPH degree will be granted jointly by the two sponsoring institutions. Classes are taught during three semesters each year. Full-time students are expected to take six to eight credits hours per semester. With this schedule, the required 42 credit hours could be completed in two years. Accommodation is made for part-time students who have up to 6 years to complete the course of study.

Eastern Virginia Medical School offers the tracks in Health Management and in Epidemiology. ODU offers the tracks in Environmental Health and in Health Promotion. All of the MPH core courses in the ODU Environmental Health and Health Promotion tracks are offered as distance learning courses, either web-based, televised, hybrid, or video streamed.

The Program will benefit health professionals who are or will be working in private, government or community organizations with the following responsibilities: assessing health status or needs in populations, designing and implementing programs, managing administrative functions, conducting program evaluation and outcomes research, developing coalitions to meet community needs, marketing health services, analyzing the epidemiology of specific diseases and measuring or assuring the quality of healthcare and public health services and products.

Accreditation

The State Council on Higher Education for Virginia approved the MPH program in 1999. The program has been fully accredited since 2000 by the Council on Education for Public Health (CEPH). This accreditation was renewed in 2005 for seven years. The Environmental Health track has been accredited by the National Environmental Health Science and Protection Accreditation Council (EHAC).

Sponsoring Institutions

Old Dominion University is a publicly funded university, established as an independent college in 1962 and as a university in 1969. Eastern Virginia Medical School is an academic institution dedicated to medical and health education, biomedical research and the enhancement of healthcare in eastern Virginia. EVMS and ODU have a long history of collaboration that includes several joint degree programs. Classes are held on weekday afternoons or evenings and/or on Saturdays on the EVMS and ODU campuses in Norfolk, Virginia. Courses are taught by faculty from both institutions.

MPH core courses are held at both the EVMS and ODU campuses, and may be offered as distance courses with a classroom option for local students. The Environmental Health and Health Promotion track courses are provided at the ODU campus as distance learning courses. Health Management and Epidemiology track courses are held at EVMS. Students in the Environmental Health or Health Promotion tracks are advised by the MPH faculty at ODU. Students in the Health Management and Epidemiology tracks are advised by MPH faculty at EVMS.

Curriculum

The educational program includes 42 total credit hours. Core courses consist of 18 credit hours in Principles of Epidemiology, Health Education & Behavioral Science, Ethics in Public Health Practice, Introduction to Biostatistics, Health Administration and Organization and Environmental Health.

In addition to the core courses, students concentrate on courses in Epidemiology, Health Management, Environmental Health, or Health Promotion for an additional 9-12 credit hours. The remaining credit hours are earned through Selectives or Electives, a Community Practicum, and a Capstone culminating experience. For more detailed information on the Joint ODU/EVMS Master of Public Health Program visit:
Admission to the Program

Application to the Program

All applications for the MPH program are made through EVMS. ODU participates in the decision process for candidates for the environmental health and health promotion tracks. Admission requirements may be found at: http://www.evms.edu/evms-school-of-health-professions/public-health-master-more-information.html

To start an application go to the web site at https://secure.visualzen.com/vzcollegeapp/evms/default.aspx.

Application Procedure

Complete the online application, including personal statement and $60 application fee payable to EVMS;

Using the online application system, submit three letters of recommendation;

Submit official transcripts from all colleges and universities attended, from the registrar at those institutions;

Submit a Graduate Record Examination (GRE) score, taken within the last five (5) years, sent directly from the Educational Testing Service;

The EVMS Admissions Committee may request a personal interview to complement the information contained in the application materials. Potential applicants are encouraged to ask questions about the program through e-mail, telephone calls, or scheduling an appointment with the Program Director.

Application materials are considered on a rolling basis, starting September 1 (one year before desired matriculation) and are considered until all positions are filled.

Those U.S. students seeking financial assistance are advised to submit their applications as early as possible. Students may begin studies only in the fall term of each year.

Official transcripts should be mailed to the EVMS Director of Enrollment for Health Professions at the address shown below. If you experience technical difficulties or related problems in completing your online application, please contact:

Graduate Program in Public Health
Attention: Director of Enrollment for Health Professions
Eastern Virginia Medical School
P.O. Box 1980
Norfolk, Virginia 23507-1607
Tel: (757) 446-7153 or (757) 446-7096
Fax: (757) 446-8915

Prerequisite Courses:

For the Environmental Health track, students must have 8 credit hours each of biology, chemistry, and either physics (with a lab) or a geological science, and one course in either general college mathematics or statistics in the undergraduate level or graduate level.

For the Health Promotion, Health Management, and Epidemiology tracks there are no specific prerequisite courses.

For additional information about the MPH in the Environmental Health or the Health Promotion track, please contact the Track Coordinator at 757-683-4259.

Tuition

Tuition costs for Master of Public Health (MPH) students are based upon the number of credit hours taken per semester. Tuition is paid to EVMS for all courses, including ODU track courses. Tuition is due at the beginning of each term of your enrollment. There is no tuition difference for in-state and out-of-state residents. Additional costs to the student budget are fees, books, room/board and transportation. All fees are due at the beginning of the first term of each year.

The MPH Program Requirements

This is a 42 hour curriculum including a public health related capstone project that demonstrates the knowledge and the skill set to assume increasingly responsible positions in the public health sector are required to earn the MPH in any of the specialty tracks. Information on the ODU Environmental Health and Health Promotion track courses or the EVMS Epidemiology and Health Management tracks, can be found at http://www.evms.edu/evms-school-of-health-professions/master-in-public-health.html.

Master of Science - Community Health

757-683-4594
http://hs.odu.edu/commhealth/academics/ms_commhealth/
Anna Jeng, SCD, Graduate Program Director

The School of Community and Environmental Health offers a Master of Science in Community Health with an emphasis in environmental health. The emphasis is designed to meet the needs of students seeking graduate education in the environmental health field. The goal of the program is to provide advanced understanding of public health effort due to interaction with chemical, biological and physical agents in natural and man-made environments. Students may shape the emphasis area to meet their needs in general environmental health, industrial hygiene, occupational safety, or hazardous materials management.

Admission

The selection of community health students is based on several criteria. To qualify for admission, an applicant must meet the general University admission requirements at the graduate level. In addition, the School of Community and Environmental Health requires:

1. Two letters of recommendation from teachers, supervisors, and/or employers.
2. Evidence of a basic foundation of undergraduate courses in the life sciences, behavioral sciences, and social sciences with a minimum 2.80 grade point average. If it is determined that a student is deficient in one of these three general foundation areas, he or she may be required to take additional course work prior to admission or to enroll in undergraduate course work to strengthen the foundation area.
3. A satisfactory Graduate Record Examination (GRE) aptitude score.
4. Work experience or voluntary participation in a health-related agency or program will be evaluated as part of the student’s admission package. Students can be admitted who do not have work or volunteer experience, however, students without experience will be required to produce a portfolio of health related volunteer or work experiences that they have acquired during their time in the program.
5. A career-goals paper. This paper asks the applicant to discuss his or her career goals and the relationship of the community health graduate program to those goals. This paper is evaluated by the faculty of the school for the applicant’s ability to present a clear sense of professional purpose, as well as his or her ability to write a concise and grammatically acceptable paper.

Requirements
The curriculum includes a 24-credit hour core of environmental and community health courses that constitutes the foundation of the program complemented by a minimum of six credit hours of practicum experience or six hours of thesis research.

Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHP 600</td>
<td>Principles of Community Health</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 600</td>
<td>Principles of Environmental Health Science and Protection</td>
<td>3</td>
</tr>
<tr>
<td>MPH 612</td>
<td>Statistical Reasoning for Public Health</td>
<td>3</td>
</tr>
<tr>
<td>CHP 601</td>
<td>Epidemiology for Public Health Practice</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 602</td>
<td>Environmental Health Law and Policy</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 643</td>
<td>Principles of Toxicology</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 566</td>
<td>Environmental Risk Assessment and Decision Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 24

Comprehensive Examinations
All candidates for the Master of Science in community health must pass a written and oral comprehensive examination covering the course work in the program of study. Comprehensive examinations are administered once a semester during the fall and spring sessions.

Thesis or Practicum Option. Students must complete a six credit practicum (CHP 669) or a six credit thesis (CHP 698).

Environmental Health Concentration Area
This emphasis has specific prerequisite courses at the undergraduate level that must be met. Also, admission to the program is at the discretion of the faculty. In addition to the core course requirements, there are specific course requirements for each concentration area.

Prerequisite Courses.

General Biology 8
General Chemistry 8
One of the following: 8
  - Introduction to Physics (with a lab)
  - Ocean, Earth, and Atmospheric Sciences
One of the following: 3
  - General College Mathematics
  - Statistics

Total Hours: 27

Concentration Area Requirements
12 to 13 credit hours from the following courses or their equivalents must be taken in one of the following options in order to be eligible for the degree.

General Environmental Health:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVH 520</td>
<td>Communicable Diseases and Their Control</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 521</td>
<td>Food Safety</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 522</td>
<td>Water and Wastewater Technology</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 523</td>
<td>Vector Control</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 524</td>
<td>Residential and Institutional Environments</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 545</td>
<td>Air Pollution and Its Control</td>
<td>3</td>
</tr>
</tbody>
</table>

Industrial Hygiene:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVH 526</td>
<td>Physical Hazards and Their Control</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 541</td>
<td>Industrial Hygiene</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 542</td>
<td>Sampling and Analysis Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>ENVH 545</td>
<td>Air Pollution and Its Control</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 546</td>
<td>Physical Hazards Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>ENVH 570</td>
<td>Industrial Environmental Management</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 822</td>
<td>Control of Hazards in the Workplace</td>
<td>3</td>
</tr>
</tbody>
</table>

Hazardous Materials Management:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVH 545</td>
<td>Air Pollution and Its Control</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 546</td>
<td>Physical Hazards Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>ENVH 561</td>
<td>Hazardous Waste Management</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 565</td>
<td>Hazardous Materials Management</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 722</td>
<td>Control of Hazards in the Workplace</td>
<td>3</td>
</tr>
</tbody>
</table>

Occupational Safety:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVH 506</td>
<td>Principles of Occupational Safety and Health</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 507</td>
<td>Occupational Safety Standards, Laws and Regulations</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 525</td>
<td>Occupational Safety and Health Program Management</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 526</td>
<td>Physical Hazards and Their Control</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 570</td>
<td>Industrial Environmental Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Certificate in Occupational Safety
Charlene Brassington, Coordinator, cbrasin@odu.edu
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 occupational health and safety field. Course taken for the Certificate may also be used to qualify for safety positions, enhance the qualifications of Certified Safety Professional (CSP) and Certified Industrial Hygienist (CIH) candidates, and provide maintenance points for professionals holding the CSP or CIH certifications. Courses in the certificate program may be taken through degree or non-degree programs, and may be applied to degree requirements at the graduate level in environmental health. For completion of the graduate certificate program students must have a minimum cumulative grade point average of 3.00 in all courses taken toward the certificate. After successful completion of the program, a Certificate in Occupational Safety will be awarded.

A total of 15-16 semester hours is required, comprised of three core courses and six to seven hours of electives. All course, with the exception of the lab course, are provided as distance learning, either as televised or web-based courses. There are no prerequisites.

Core courses include:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVH 506</td>
<td>Principles of Occupational Safety and Health</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 506</td>
<td>Principles of Occupational Safety and Health</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 525</td>
<td>Occupational Safety and Health Program Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Select two of the following electives: 6-7

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVH 501</td>
<td>Occupational Health</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 526</td>
<td>Physical Hazards and Their Control</td>
<td>2</td>
</tr>
<tr>
<td>ENVH 540</td>
<td>Principles of Ergonomics</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 541</td>
<td>Industrial Hygiene</td>
<td>3</td>
</tr>
<tr>
<td>ENVH 542</td>
<td>Sampling and Analysis Laboratory</td>
<td>3</td>
</tr>
</tbody>
</table>
Accelerated Program – Bachelor of Science in Environmental Health (B.S.E.H.) to Master of Science in Community Health

Accelerated Program – Bachelor of Science in Environmental Health (B.S.E.H.) to Master of Public Health (MPH)

B.S.E.H. students who have a 3.00 GPA and have senior standing may apply for acceptance into the Bachelor of Science in Environmental Health to M.S. in Community Health accelerated program or to a Master of Public Health (MPH). This program allows gifted undergraduate B.S.E.H. students the opportunity to take up to 12 semester hours of graduate course work and apply them to both degrees. Other restrictions apply. Students interested in this program should contact the B.S.E.H. program director James English at 757-683-6010 for more information.

Gene W. Hirschfeld School of Dental Hygiene

2011 Health Sciences Building 757-683-3338 http://hs.odu.edu/dental/academics/ms/about.shtml

Master of Science - Dental Hygiene

757-683-5150 http://www.hs.odu.edu/dental/academics/ms/about.shtml

Gayle McCombs, Graduate Program Director

The challenge of effecting change in the scope and direction of dental hygiene and health care requires expert skills in problem solving, evidence-based decision making, and leadership.

Recipients of the Master of Science degree in dental hygiene develop skills to meet complex national and global health challenges in professional education, knowledge-generation, information transfer, and health care for all members of society. Within a multidisciplinary, multicultural curricular framework that integrates theory, research, and practical experience, the competency-based program links the goals and career aspirations of the student with relevant learning experiences, technologies, and resources to facilitate career advancement. Through specialized skills training, graduates are prepared to assume leadership roles necessary for quality professional dental hygiene care and advancing knowledge and practice.

Solutions to complex health problems need the participation of dental hygienists educated in community health, research, management, education, public policy, and advocacy, just to name a few. Therefore, the program offers distinct specialty areas in which students may focus: education, administration/management, research, marketing, modeling, and simulation, and community health. Although graduate education focuses on developing a specialty, such specialization is viewed as secondary to generating evidence-based knowledge and theory through research. Demand for master’s level dental hygienists in these key areas of specialization continues to be strong and students are able to develop competencies essential in today’s employment market.

Applicants are encouraged to contact the graduate program director to obtain additional information regarding requirements, experiential credit, cognate offerings, travel abroad, practica and externship opportunities. The program is available on campus, online, or as a hybrid of the two. Up to 12 approved graduate credit hours also can be taken at another University and applied toward degree requirements, making this program one of the most flexible in the nation. Other advantages of graduate study at Old Dominion University include the opportunity to engage in learning within the state-of-the-art Dental Hygiene Care Facility and Dental Hygiene Research Center, the hub for independent investigations with other scholars both within and external to the University; the student-focused, nationally and internationally recognized faculty committed to the educational preparation of dental hygienists leading to degrees at advanced levels; and the opportunity to segue to doctoral education in health services research within the College of Health Sciences.

Admission Information

To qualify for admission, the applicant must possess a certificate or associate degree from an accredited dental hygiene program and a baccalaureate degree in dental hygiene or a related field. The applicant must have an overall grade point average (GPA) of at least 2.80 (on a 4.00 scale) in undergraduate education and a minimum of 3.00 in the undergraduate dental hygiene major.

The following documents must be submitted for program consideration:

1. The official National Board Dental Hygiene Examination passing score,
2. Recommendation form from a previous clinical supervisor
3. Recommendation form from a dental hygiene program director
4. Recommendation forms from two academic sources (employer in the field may substitute)
5. A formal written statement of personal goals and objectives
6. A clinical self assessment
7. Official transcripts of all college work

Forms are available at www.hs.odu.edu/dental/academics/ms.app.shtml.

International applicants must score at least a 550 on the TOEFL or 79 on the TOEFL iBT.

Visit: International Admission and Immigration at: http://admissions.odu.edu/international

Applicants whose qualifications are slightly below the required level will be considered for admission to provisional status and may be required to take additional course work. The master’s degree program is available under the Southern Regional Education Board’s (SREB) Academic Common Market. Applicants who are legal residents of Delaware, Kentucky, Mississippi, or South Carolina may enroll, if accepted, as Academic Common Market students at in-state tuition rates. Students also may be required to take undergraduate courses or non-credit courses to make-up deficiencies in other areas.

For additional information, visit http://www.schev.edu/students/Acmvainsttable.asp http://sreb.org/programs/acm/acmindex.asp.

Degree Requirements

Students must complete all courses within a six-year time period with a minimum GPA of 3.0 on a 4.0 scale. Students must also successfully present and defend a thesis research or nonthesis project and pass an oral comprehensive examination. Students not graduating from the BSDH program at Old Dominion University must also pass a writing examination. Competencies for the Master of Science in dental hygiene program are found at www.hs.odu.edu/dental/academics/ms/msdhcompetencies.pdf.

Thesis degree requirements include a minimum of 34 semester hours. Nonthesis degree requirements require 37 semester hours distributed as follows:

Curriculum Core Requirements. All core requirements may be taken on campus or online. Candidates are required to fulfill a 22 credit hour core requirement to include:
DNTH 514  Educational Concepts for the Health Professional I  3
DNTH 515  Research Methods in the Health Sciences  3
DNTH 516  Administrative Leadership and Professional Development  3
DNTH 604  Clinical Administration and Teaching  4
DNTH 660  Educational Concepts for the Health Professional II  3
DNTH 668  Internship  3-9
CHP 640  Data Interpretation Methods for Health Care  3
or FOUN 722  Introduction to Applied Statistics and Data Analysis  3

Total Hours  22-28

Specialty Area. Candidates must select one of the six specialty areas: Education, Community Health, Administration/Management, Research, Marketing, or Modeling and Simulation and complete the required six to 12 credit hours satisfactorily. Each specialty area includes electives chosen to support the specialty area. Students may also be generalists.

Thesis Option (34 credit hours). Candidates are required to complete a minimum of six credit hours in:

DNTH 698  Research  3
DNTH 699  Thesis  3

Total Hours  6

This option requires original thesis research and writing for a total minimum program requirement of 34 credit hours and is considered essential for students interested in developing investigative and data management skills. The student is encouraged to become familiar with possible research areas soon after admission and contact the graduate program director to discuss the research proposal, funding options and the selection of the thesis advisor. The student will be provided with a committee consisting of the thesis advisor and two other faculty members selected by the graduate program director and the student. Prior to beginning the research, the student will present a written proposal to the thesis committee for approval.

Candidates choosing this thesis option must satisfactorily complete the thesis at least four weeks prior to graduation with copies delivered to the thesis committee. An oral comprehensive examination and thesis defense will be conducted by the student’s thesis committee during the last four weeks of the semester prior to graduation. The cost of the thesis is a student expense. The thesis option is not available to distance learning (on-line) students.

Nonthesis Option. (37 credit hours). Candidates are required to complete:

DNTH 698  (3 credits) and a minimum of three (3) additional credits of approved elective course work. This option is designed for students pursuing a less research-oriented program of study. A student in this program is required to complete an in-depth term paper or execute a modest project as approved by the faculty. An oral comprehensive examination and project defense will be conducted prior to graduation.

Writing Proficiency. Students who do not hold an undergraduate degree from Old Dominion University are required to participate in diagnostic writing exercises for evaluation by the staff of the Testing Center. Each student is responsible for making an appointment with the Testing Center to complete this requirement early in the first semester of graduate studies. Students deemed deficient in writing skills will be required to remedy their deficiency through the services of the Writing Center prior to the completion of 15 graduate credits. Students who fail to participate in the diagnostic writing exercise or to complete recommended developmental work through the Testing Center will not be allowed to register for subsequent semesters. All faculty members in the school require written assignments, which will be evaluated on the basis of form and content. If needed, resources are available through the Writing Center. Graduate students and faculty employ the current edition of the Publication Manual of the American Psychological Association as the standard reference text for written assignments within the School of Dental Hygiene.

Dental Hygiene Research Center

The ODU Dental Hygiene Research Center is dedicated to conducting quality, multidisciplinary, clinical, and population-based research to explore diagnosis, pathogenesis, and treatment of conditions that are related to overall health and dental hygiene. The Center, officially sanctioned by the University in 2000, is the first facility in the world dedicated solely to dental hygiene research. The Center strives to advance oral and general health through interdisciplinary and multidisciplinary research in collaboration with other academic institutions, medical facilities, private industry, and the community.

The Center represents a research paradigm unique for graduate education in that no other dental hygiene program has such a facility. Research is an integral and essential component of the School of Dental Hygiene’s mission. Students experience the link between theory and practice, and collaborate with faculty to create new knowledge via discovery, apply evidence-based findings, and disseminate information through professional publications and presentations.

Accelerated Bachelor’s to Master’s Program

Dental hygiene students who have a 3.25 grade point average from each institution attended and who have senior standing may apply to the bachelor’s to master’s accelerated program. This program allows gifted undergraduate students the opportunity to take up to 12 semester hours of graduate coursework and apply them to both degrees. Consult with the graduate program director for more information.

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 worldwide. 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.

School of Medical Laboratory and Radiation Sciences

Molecular Diagnostics Certificate Program

www.hs.odu.edu/medlab/academics/mddiag/

Patricia Hentosh, Sc.D., Program Director

The discipline of molecular diagnostics includes all tests and methods to identify disease, a predisposition for a disease, diagnosis and prognosis of disease and potential responses to drug therapy by analysis of an individual’s DNA, RNA, and proteins. Molecular technology is now widely applied to infectious disease, genetics testing, identification of methicillin-resistant Staph aureus (MRSA), cancer diagnosis and metastasis, forensic science, and personalized medicine.

The post-baccalaureate molecular diagnostics certificate program is designed to provide fundamental principles, advanced applications and laboratory skills needed for molecular diagnostic and molecular biology procedures conducted in clinical and research environments.

The Certificate is awarded upon completion of 12 credit hours in a coherent sequence with a 3.0 GPA. The following courses are required: MLRS 500, MLRS 501, MLRS 600 and MLRS 601. An optional internship in a clinical or molecular laboratory is also offered (MLRS 668).
Modeling and Simulation Certificate in Health Sciences

http://hs.odu.edu/hs/academics/ms

Gianluca DeLeo, PhD, MBA, Program Coordinator

The Modeling and Simulation in Health Sciences certificate program is designed for students to develop competency in the use of modeling and simulation techniques and technologies to support health sciences research, policy-making, and training.

The University Modeling and Simulation Steering Committee sets the basic standards regarding the components of a Graduate Certificate in Modeling & Simulation. The basic certificate requires four (4) three-hour courses for a total of twelve (12) required credits. A basic simulation core of 3 or 6 credits is required, plus 6 or 9 credits of discipline specific work. A 3.00 GPA for the four-course sequence is required for successful completion. Admission to the certificate program requires a bachelor’s degree (or equivalent).

M&S Certificate in Health Sciences – Version 1

<table>
<thead>
<tr>
<th>Required Credits</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSIM 611</td>
<td>Modeling and Simulation Fundamentals I</td>
</tr>
<tr>
<td>MSIM 612</td>
<td>Modeling and Simulation Fundamentals II</td>
</tr>
<tr>
<td>HLSC 795/895</td>
<td>Topics in Health Sciences (Special Topics - M&amp;S in Heath Sciences)</td>
</tr>
<tr>
<td>HLSC 795/895</td>
<td>Topics in Health Sciences (Special Topics - GIS in Heath Sciences)</td>
</tr>
<tr>
<td>Basic Simulation Core</td>
<td>3-6</td>
</tr>
<tr>
<td>Discipline Specific Work</td>
<td>6-9</td>
</tr>
<tr>
<td>Total Hours</td>
<td>21-27</td>
</tr>
</tbody>
</table>

For students with substantial mathematics and computing backgrounds, MSIM 601 may replace MSIM 611 and MSIM 612. A fourth course must be chosen to complete the 12 credit requirement.

M&S Certificate in Health Sciences – Version 2

<table>
<thead>
<tr>
<th>Required Credits</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSIM 601</td>
<td>Introduction to Modeling and Simulation</td>
</tr>
<tr>
<td>HLSC 795</td>
<td>Topics in Health Sciences (Special Topics - M&amp;S in Heath Sciences)</td>
</tr>
<tr>
<td>M&amp;S Elective</td>
<td>1-3</td>
</tr>
<tr>
<td>Basic Simulation Core</td>
<td>3-6</td>
</tr>
<tr>
<td>Discipline Specific Work</td>
<td>6-9</td>
</tr>
<tr>
<td>Total Hours</td>
<td>16-24</td>
</tr>
</tbody>
</table>

School of Nursing

www.hs.odu.edu/nursing

3009 Health Sciences Building
757-683-4298

Karen Karlowicz, Chair

The program leading to the Master of Science in Nursing is designed to prepare graduates with expertise in theory, research, and advanced nursing practice. Through academic courses and clinical experiences, graduate students are prepared to meet the present nationwide demand for nurses in advanced practice, leadership and education as well as to pursue doctoral study. The master’s program in nursing is fully accredited by the Commission on Collegiate Nursing Education.

Students in the program may specialize in a variety of roles. All specialties emphasize development of the nursing role through advanced theory and research. The program strives to instill in its graduates leadership responsibility, professional commitment, and a holistic approach to health and nursing care.

The number of credits required for the Master of Science in Nursing degree varies and reflects the number of hours in the core plus the hours required for certification in a specialty. The nurse anesthesia role option requires 83 credits. Nurse practitioner role options include family nurse practitioner (47 credit hours) and women’s health nurse practitioner (46 credit hours). There is a joint program with Shenandoah University in nurse midwifery that is 47 credits. The nurse administrator program web-based program requires 31 credit hours, Adult-Gerontology Clinical Nurse Specialist program is 45 credits and the web-based nurse educator program requires 36 credit hours.

Also available are, post-master’s programs for M.S.N. prepared nurses to obtain nurse practitioner, nurse anesthesia, nurse administrator and nurse educator preparation.

Admission to the Graduate Program

1. In addition to meeting University and college requirements, applicants must have:
2. Completed a baccalaureate degree with an upper-division major in nursing from a National League for Nursing accredited college or university program, or Commission on Collegiate Nursing Education accredited college or university program or the equivalent.
3. Demonstrated graduate potential by satisfactory scholastic achievement in the baccalaureate nursing program (grade point average of 3.00 on a 4.00 scale).
5. Completed a health assessment component (undergraduate)
6. Attained a satisfactory score on the Miller Analogies Test (MAT) or the Graduate Record Examination (GRE), taken within the past five years.
7. A current license as a registered nurse.
8. At least one year of recent clinical nursing experience. Applicants for the nurse anesthesia role must have at least a minimum of one year (2080 hours) of full time nursing experience in an intensive care unit within the 2 years prior to application.
9. Presented three letters of professional reference, including one from the dean or a member of the nursing faculty in the baccalaureate program in nursing and two from the most recent employer.
10. Completed the Supplementary Application for Admission to the Master of Science in Nursing Program, including the short essay (500 to 700 words) describing professional and academic goals, and how graduate study in nursing will contribute to the fulfillment of these goals.

An interview may be advised for prospective students. Also, students applying to the nurse anesthesia program should contact the director of the nurse anesthesia program at (757) 683-5068. For full consideration, applications for the nurse anesthesia program must be submitted by December 1 of the year prior to the August starting date.

Students applying to a post-master’s program must have a master’s degree in nursing.

Degree Requirements

In addition to general University requirements, the following apply to candidates for the Master of Science in Nursing degree:

1. Only degree-seeking students may take graduate nursing courses.
2. Full-time or part-time study is available for most roles. Part-time students are required to complete all program requirements within a six-year period. Some roles have only full-time programs. Contact the graduate nursing office regarding study options for each program at (757) 683-4298.
3. A written comprehensive examination covering the program of study is required by the final semester of study for students not electing to complete a thesis. A comprehensive examination in the role specialty is required for all postmaster’s students. A student must be registered in the semester the comprehensive exam is taken.
4. The student must make arrangements three months in advance to take a nursing course with a laboratory or practicum component to assure appropriate and available placement for the learning experience. Arrangements are made through the change to SON Student Clinical Services Coordinator.

5. The B grade (3.00) is the minimal acceptable grade for all courses with a NURS or NURA prefix or any course required for the degree for continuation in the master’s program. Satisfactory performance in the laboratory or practicum component of a nursing course is required. Students achieving less than a B grade (3.00) in a nursing course may request an opportunity from the role graduate program director to repeat the course once. Two course failures will result in termination from the nursing program. Students may not progress with an incomplete in prerequisite courses as listed in the curriculum plan.

Additional requirements such as physical exams, CPR certification, immunization requirements, professional liability insurance, computer competencies and technical standards and background checks for the School of Nursing are also available in the Nursing Student Handbook and on the School of Nursing web page.

Master of Science in Nursing – Women’s Health Nurse Practitioner Role
Kathleen Putnam, Graduate Program Director
The Women’s Health Nurse Practitioner track in the graduate nursing program is designed to provide students with education and experience to become primary care providers in women’s health. Graduates are qualified to take the Women’s Health Nurse Practitioner certification examination offered by the National Certification Corporation. Students participate in a variety of women’s health practice experiences with preceptors and are required to complete clinical practice in primary adult health. All courses in the previous semester must be completed before taking courses in the subsequent semesters unless admitted to the part-time curriculum. Course work may be completed according to the full-time or part-time curriculum. The following courses are prerequisites to all FNP content course and clinical courses.

WHNP Full Time Curriculum

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 610 Theoretical Foundations for Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 670 Advanced Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>NURS 671 Advanced Physical Assessment</td>
<td>1</td>
</tr>
<tr>
<td>NURS 672 Advanced Physical Assessment Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>NURS 661 Pharmacotherapeutics for Primary Health Care Providers</td>
<td>3</td>
</tr>
<tr>
<td>NURS 719 Family and Community Focused Primary Care</td>
<td>1</td>
</tr>
<tr>
<td>NURS 611 Research Design</td>
<td>3</td>
</tr>
<tr>
<td>NURS 663 Health Promotion and Maintenance</td>
<td>2</td>
</tr>
<tr>
<td>NURS 664 Primary Care for Women</td>
<td>3</td>
</tr>
<tr>
<td>NURS 658 Advanced Nursing Practice in Women’s Health I</td>
<td>2</td>
</tr>
<tr>
<td>NURS 762 Advanced Family Nursing I: Management of Acute Illnesses</td>
<td>3</td>
</tr>
<tr>
<td>NURS 613 Issues in Advanced Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 621 Aging in the 21st Century</td>
<td>3</td>
</tr>
<tr>
<td>NURS 659 Advanced Nursing Practice in Women’s Health II</td>
<td>3</td>
</tr>
<tr>
<td>NURS 787 Advanced Perinatal Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NURS 660 Advanced Nursing Practice in Women’s Health III</td>
<td>6</td>
</tr>
<tr>
<td>NURS 686 Synthesis of Advanced Practice Concepts in Adolescent Focus</td>
<td>3</td>
</tr>
<tr>
<td>NURS 690 M.S.N. Comprehensive Examination</td>
<td>0</td>
</tr>
<tr>
<td>Total Hours</td>
<td>46</td>
</tr>
</tbody>
</table>

Master of Science in Nursing – Family Nurse Practitioner Role
Micah Scott, Graduate Program Director
The family nurse practitioner (FNP) role prepares graduate students to provide a full range of primary care services to individuals and families throughout the life span. In collaboration with other health care professionals, graduate students provide health promotion, health maintenance and restorative care to well, at-risk, and chronically ill clients and their families. Student clinical experiences are provided in a variety of primary care settings. Successful completion of the program qualifies students to register for the AANP or ANCC examination for certification as a family nurse practitioner.

Degree Requirements
Full-time and part-time curricula are available. No FNP course may be taken unless admitted to the FNP program. Unless specifically stated, all courses in the previous semester must be completed before taking courses in the subsequent semesters unless admitted to the part-time curriculum. Course work may be completed according to the full-time or part-time curriculum. The following courses are prerequisites to all FNP content course and clinical courses.

FNP Full Time Curriculum

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 610 Theoretical Foundations for Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 661 Pharmacotherapeutics for Primary Health Care Providers</td>
<td>3</td>
</tr>
<tr>
<td>NURS 670 Advanced Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>NURS 671 Advanced Physical Assessment</td>
<td>1</td>
</tr>
<tr>
<td>NURS 672 Advanced Physical Assessment Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>NURS 719 Family and Community Focused Primary Care</td>
<td>1</td>
</tr>
<tr>
<td>NURS 611 Research Design</td>
<td>3</td>
</tr>
<tr>
<td>NURS 663 Health Promotion and Maintenance</td>
<td>2</td>
</tr>
<tr>
<td>NURS 664 Primary Care for Women</td>
<td>3</td>
</tr>
<tr>
<td>NURS 665 Advanced Family Nursing I Practicum</td>
<td>2</td>
</tr>
<tr>
<td>NURS 762 Advanced Family Nursing I: Management of Acute Illnesses</td>
<td>3</td>
</tr>
<tr>
<td>NURS 613 Issues in Advanced Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 621 Aging in the 21st Century</td>
<td>3</td>
</tr>
<tr>
<td>NURS 705 Primary Care Approaches for Children</td>
<td>3</td>
</tr>
<tr>
<td>NURS 764 Advanced Family Nursing II Practicum</td>
<td>4</td>
</tr>
<tr>
<td>NURS 613 Issues in Advanced Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 621 Aging in the 21st Century</td>
<td>3</td>
</tr>
<tr>
<td>NURS 705 Primary Care Approaches for Children</td>
<td>3</td>
</tr>
<tr>
<td>NURS 764 Advanced Family Nursing II Practicum</td>
<td>4</td>
</tr>
<tr>
<td>NURS 765 Advanced Family Nursing II: Management of Chronic Illnesses</td>
<td>3</td>
</tr>
<tr>
<td>NURS 767 Advanced Family Nursing III Practicum</td>
<td>5</td>
</tr>
<tr>
<td>NURS 768 Nursing Seminar in Complex Health Problems</td>
<td>1</td>
</tr>
<tr>
<td>NURS 690 M.S.N. Comprehensive Examination</td>
<td>0</td>
</tr>
<tr>
<td>Total Hours</td>
<td>47</td>
</tr>
</tbody>
</table>
Master of Science in Nursing – Nurse Anesthesia Specialty

Nathaniel Apatov, Graduate Program Director

The Master of Science in Nursing program in nurse anesthesia is an 83-credit, 28-month program beginning in late August. During the first year, the program is designed to introduce students to the basic theoretical knowledge and skills necessary for advanced nursing practice in nurse anesthesia. The first 12 months of the program are primarily didactic. The last 16 months of the program are the clinical component comprised of both general and regional anesthesia techniques for surgery and clinical specialties such as eyes, ears, nose and throat, neurosurgery, vascular surgery, open heart, obstetrics, trauma, and organ transplants. During this phase of the program, the student returns to the classroom on a weekly basis for extensive clinically related study.

Upon successful completion of the 28-month program, the graduate receives the M.S.N. degree, and becomes eligible to write the National Certifying Examination for Nurse Anesthetists given by the Council on Certification of Nurse Anesthetists. Graduates successfully completing this exam become Certified Registered Nurse Anesthetists (CRNAs).

A prerequisite for enrollment in the first year first semester is degree seeking status and admission to the MSN-Nurse Anesthesia track. Successful completion of courses in the previous semester is a prerequisite for enrollment in the next semester. All courses within a semester are corequisites and must be taken together.

Nurse Anesthesia Full Time Curriculum

First Semester (Fall)
- NURS 610 Theoretical Foundations for Nursing Practice 3
- NURS 646 Structure and Function for Advanced Nursing Practice I 3
- NURA 660 Pharmacotherapeutics for the Nurse Anesthetist 3
- NURA 650 Medical Physical Sciences 3
- NURA 654 Professional Aspects of Anesthesia 3

Second Semester (Spring)
- NURS 647 Structure and Function for Advanced Nursing Practice II 3
- NURA 651 Pharmacology of Anesthesia Drugs 4
- NURA 652 Principles of Anesthesia Practice I 4

Third Semester (Summer)
- NURA 694 Advanced Physical Assessment for Nurse Anesthetists 3
- NURA 653 Principles of Anesthesia Practice II 4
- NURA 754 Anesthesia Practicum 4
- NURA 648 Disease Processes for Advanced Practice 3

Fourth Semester (Fall)
- NURA 655 Principles of Anesthesia Practice III 4
- NURA 755 Clinical Practicum A 6

Fifth Semester (Spring)
- NURA 756 Clinical Practicum B 10

Sixth Semester (Summer)
- NURA 757 Clinical Practicum C 10

Seventh Semester (Fall)
- NURA 758 Clinical Practicum D 10
- NURS 690 M.S.N. Comprehensive Examination 0

Total Hours 83

Master of Science in Nursing - Adult-Gerontology Clinical Nurse Specialist/Educator Role

Kim Curry-Lourenco, Interim Graduate Program Director

Debra Murray, DNP, MHR, RN, C-PNP

The School of Nursing offers a curriculum leading to the degree of Master of Science in Nursing with an advanced practice area of Adult-Gerontology Clinical Nurse Specialist and Nurse Educator. The program of study prepares students as expert clinicians in the application of evidence-based knowledge within the realms of nursing interventions, teaching and research. Students also receive preparation as nurse educators, and are therefore dually prepared for clinical and academic roles.

The program requires course content in theory, research, education, Adult-Gerontology CNS professional and clinical cores, and the advanced practice area with a selected secondary focus. Applicants are admitted for either full-time or part-time study and can begin in fall. The curriculum is designed to prepare nurses as Adult-Gerontology Clinical Nurse Specialists with a secondary clinical focus in an area of their choice. Graduates of this program are eligible to sit for the American Nurses’ Association (ANCC) Adult-Gerontology Clinical Nurse Specialist Certification Exam.

Adult-Gerontology Clinical Nurse Specialist/Educator Full Time Curriculum

First Semester (Fall)
- NURS 610 Theoretical Foundations for Nursing Practice 3
- NURS 670 Advanced Pathophysiology 3
- NURS 671 Advanced Physical Assessment 1
- NURS 661 Pharmacotherapeutics for Primary Health Care Providers 3

Credit Hours 11

Second Semester (Spring)
- NURS 611 Research Design 3
- NURS 638 Adult-Gerontology Clinical Nurse Specialist I: Introduction to Practice 2
- NURS 639 Adult-Gerontology Clinical Nurse Specialist Practicum I: Role Socialization 3
- NURS 615 Ethics of Advanced Practice Nursing 2
- NURS 630 Nursing Curriculum Design and Program Evaluation 3

Credit Hours 13

Third Semester (Summer)
- NURS 656 Adult-Gerontology Clinical Nurse Specialist II: Transition to Practice 2
- NURS 657 Adult-Gerontology Clinical Nurse Specialist Practicum II: Role Transition 3
- NURS 676 Professional, Ethical and Legal Concepts of Nursing Education 3
- NURS 621 Aging in the 21st Century 3

Credit Hours 10

Fourth Semester (Fall)
- NURS 732 Health Care Populations, Diversity and Outcomes 3
- NURS 632 Instructional Delivery Methods and Learner Assessment 3
- NURS 634 Nurse Educator/Faculty Internship I Classroom Instruction 2
- NURS 703 Adult-Gerontology Clinical Nurse Specialist Practicum III: Role Synthesis 3
- NURS 690 M.S.N. Comprehensive Examination 0

Credit Hours 11

Total Credit Hours 45
**Master of Science in Nursing - Nurse Administrator Role**
Carolyn Rutledge, Graduate Program Director

The Nurse Administrator role prepares the graduate for leadership positions in an integrated delivery system. The curriculum is designed to provide the graduate with knowledge and advanced problem solving skills to address community and organizational issues. New models of health care delivery and the role of the advanced practice nurse in assuring effective organizations and healthy communities are analyzed.

Specialty courses focus on leadership skills in communities and organizations, needs assessments, group and organizational strategies, program development and health care evaluation. During internships students may investigate a variety of health problems or care delivery issues in either acute care or community-based settings.

**Nurse Administrator Full Time Curriculum**

<table>
<thead>
<tr>
<th>First Semester (Fall)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 610</td>
<td>Theoretical Foundations for Nursing Practice 3</td>
</tr>
<tr>
<td>NURS 616</td>
<td>Organizational Leadership: Transformational Strategies in Focus Area 2</td>
</tr>
<tr>
<td>NURS 732</td>
<td>Health Care Populations, Diversity and Outcomes 3</td>
</tr>
<tr>
<td>NURS 735</td>
<td>Organizational Leadership 3</td>
</tr>
<tr>
<td>Second Semester (Spring)</td>
<td></td>
</tr>
<tr>
<td>NURS 611</td>
<td>Research Design 3</td>
</tr>
<tr>
<td>NURS 617</td>
<td>Strategic Leadership: Transformational Strategies in Focus Area 2</td>
</tr>
<tr>
<td>NURS 740</td>
<td>Strategic Leadership 3</td>
</tr>
<tr>
<td>NURS 780</td>
<td>Financial Issues in Nursing Administration 3</td>
</tr>
<tr>
<td>Third Semester (Summer)</td>
<td></td>
</tr>
<tr>
<td>NURS 620</td>
<td>Professional Relationships and Human Resources Management 3</td>
</tr>
<tr>
<td>NURS 812</td>
<td>Evidence Based Management for Quality Healthcare 3</td>
</tr>
<tr>
<td>NURS 814</td>
<td>Competitive Resource Design and Utilization 3</td>
</tr>
<tr>
<td>NURS 690</td>
<td>M.S.N. Comprehensive Examination 0</td>
</tr>
</tbody>
</table>

**Total Hours** 31

---

**Master of Science in Nursing - Nurse Midwifery (cooperative program with Shenandoah University)**
Kathleen Putnam, ODU Graduate Program Director
Julianna Fehr, Shenandoah University Coordinator

The Master’s in Nursing, with specialization in nurse midwifery, is a joint program with Shenandoah University. The two-year program includes advanced practice nursing content offered by Old Dominion University in the Hampton Roads region at eight distance sites in Virginia during the first year. The second year in the midwifery program is at Shenandoah University. The Master of Science in Nursing is awarded by Old Dominion University and a certificate of midwifery specialty is awarded by Shenandoah University. Graduates are eligible to take the national midwifery certification examination. The program may be completed as a full-time or part-time program.

**Nurse Midwifery Full Time Curriculum**

<table>
<thead>
<tr>
<th>First Semester (Fall) (ODU)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 610</td>
<td>Theoretical Foundations for Nursing Practice 3</td>
</tr>
<tr>
<td>NURS 661</td>
<td>Pharmacotherapeutics for Primary Health Care Providers 3</td>
</tr>
</tbody>
</table>

---

**Post-Master’s Certificate Program**
This program of study is designed to provide Master of Science in Nursing prepared registered nurses with the knowledge and skills needed to register for an examination to certify as a family nurse practitioner, nurse anesthetist, and women’s health practitioner, nurse administrator and nurse educator. Individual programs of study are developed based upon the applicant’s previous experience and education. A written comprehensive examination in the role specialty is required for all postmaster’s students. A student must be registered in the semester the comprehensive exam is taken.

**Doctor of Nursing Practice (DNP) - Advanced Practice**
Carolyn Rutledge, Graduate Program Director

The Doctor of Nursing Practice (DNP) degree will provide additional education for advanced practice nurses in:

1. Advanced diagnostics and practice skills
2. Care of the underserved and increasingly diverse population
3. Incorporation of emerging care technologies. It is designed as a post MS or MSN degree. It can also be combined with the FNP, WHNP, CRNA and CNS MSN programs. The program may be completed as a full-time or part-time student and is distance friendly.

In order to graduate from Old Dominion University’s DNP Program, a student must have successfully completed all 36 post-masters credit hours of required course work, including an evidence-based capstone project and all clinical practice. It will take a full-time student four semesters (spring, summer, fall and spring) to complete the program. A part-time student will complete the DNP program in seven semesters (spring, summer, fall, spring, summer, fall, and spring.)

**DNP Advanced Practice Full Time Curriculum**

<table>
<thead>
<tr>
<th>First Semester (Spring)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 800</td>
<td>DNP Integrative Concepts I 2</td>
</tr>
</tbody>
</table>
BS to MSN-FNP/DNP Full Time Curriculum

**First Semester (Fall)**
- **NURS 690** The Business of Advanced Nursing Practice: 3
- **NURS 768** Advanced Nursing Practice in Women's Health: 3
- **NURS 621** Aging in the 21st Century: 3
- **NURS 764** Advanced Family Nursing II Practicum: 4
- **NURS 686** Clinical Practicum I: 2

**Second Semester (Spring)**
- **NURS 765** Advanced Family Nursing II: Management of Chronic Illnesses: 3
- **NURS 767** Advanced Family Nursing III Practicum: 5
- **NURS 768** Nursing Seminar in Complex Health Problems: 1
- **NURS 690** M.S.N. Comprehensive Examination: 0
- **NURS 800** DNP Integrative Concepts I: 2
- **NURS 802** The Business of Advanced Nursing Practice: 3
- **NURS 805** Clinical Research Methods: 2
- **NURS 865** Clinical Practicum I: 2

**Sixth Semester (Summer)**
- **NURS 800** DNP Integrative Concepts II: 3
- **NURS 806** Practice-Based Research/Evaluation: 4
- **NURS 866** Clinical Practicum II: 2

**Seventh Semester (Fall)**
- **NURS 803** Leadership/Management in Healthcare: 3
- **NURS 807** Informatics/Database Management: 3
- **NURS 867** Clinical Practicum III: 3

**Eighth Semester (Spring)**
- **NURS 809** Health Care Planning and Policy for Advanced Practice: 3
- **NURS 868** Clinical Practicum IV: 3
- **NURS 890** Nursing Capstone (DNP Capstone): 3

**Total Hours** 83

BS to MSN-WHNP/DNP Full Time Curriculum

**First Semester (Fall)**
- **NURS 610** Theoretical Foundations for Nursing Practice: 3
- **NURS 661** Pharmacotherapeutics for Primary Health Care Providers: 3
- **NURS 768** Advanced Nursing Practice in Women’s Health: 3
- **NURS 621** Aging in the 21st Century: 3
- **NURS 659** Advanced Nursing Practice in Women’s Health II: 3
- **NURS 787** Advanced Perinatal Nursing: 3
- **NURS 660** Advanced Nursing Practice in Women’s Health III: 6
- **NURS 686** Synthesis of Advanced Practice Concepts in Adolescent Focus: 3
- **NURS 690** M.S.N. Comprehensive Examination: 0

**Second Semester (Spring)**
- **NURS 800** DNP Integrative Concepts I: 2
- **NURS 802** The Business of Advanced Nursing Practice: 3
- **NURS 805** Clinical Research Methods: 2
- **NURS 866** Clinical Practicum II: 2
- **NURS 803** Leadership/Management in Healthcare: 3
- **NURS 807** Informatics/Database Management: 3
- **NURS 867** Clinical Practicum III: 3

**Third Semester (Summer)**
- **NURS 800** DNP Integrative Concepts II: 3
- **NURS 806** Practice-Based Research/Evaluation: 4
- **NURS 866** Clinical Practicum II: 2
- **NURS 809** Health Care Planning and Policy for Advanced Practice: 3
- **NURS 868** Clinical Practicum IV: 3
- **NURS 890** Nursing Capstone (DNP Capstone): 3

**Total Hours** 82

Doctor of Nursing Practice – Nurse Executive
Carolyn Rutledge, Graduate Program Co-Director
Michelle Renaud, Graduate Program Co-Director

The Nurse Executive role prepares top level nurse executives for leadership positions in a health system. The program outcomes are consistent with the American Organization of Nurse Executive guidelines for nurse executive practice. Content focuses on executive leadership skills, working with vulnerable populations, fiscal and human resource management, quality magnet achievement, emerging technology and organizational research in clinical issues. Students participate in executive internships throughout the program in their home area. Upon program completion, graduates are eligible to take the national certification examination.

**DNP Nurse Executive Full Time Curriculum**

**First Semester (Spring)**
- NURS 800  DNP Integrative Concepts I  
- NURS 805  Clinical Research Methods  
- NURS 810  Leadership in Complex Systems and Organizations  
- NURS 816  Nursing Executive Leadership I  

**Second Semester (Summer)**
- NURS 806  Practice-Based Research/Evaluation  
- NURS 812  Evidence Based Management for Quality Healthcare  
- NURS 817  Nursing Executive Leadership II  

**Third Semester (Fall)**
- NURS 807  Informatics/Database Management  
- NURS 814  Competitive Resource Design and Utilization  
- NURS 818  Nursing Executive Leadership III  

**Fourth Semester (Spring)**
- NURS 809  Health Care Planning and Policy for Advanced Practice  
- NURS 819  Nursing Executive Leadership IV  
- NURS 890  Nursing Capstone (DNP Capstone)  

**Total Hours** 36-44

---

### School of Physical Therapy

3118 Health Sciences Building  
757- 683-4519  
www.hs.odu.edu/physther/  

Martha Walker, Chair and Graduate Program Director

### Doctor of Physical Therapy Degree

The Doctor of Physical Therapy (http://hs.odu.edu/physther/) program is designed to professionally prepare students with the knowledge and clinical experiences to become licensed physical therapists who will enter general physical therapy practice. Upon graduation, students will be prepared to sit for licensure in any United States jurisdiction and practice in any health care setting where physical therapy is offered. The curriculum consists of 117 credit hours over a three-year period of time including summers. There are five full-time clinical internships totaling 40 weeks. The first three are completed over the second and third summers, with the final 16 weeks of clinical education occurring in the spring semester preceding graduation. A variety of clinical facilities locally, throughout Virginia, and the United States are used for internship experiences. Students are responsible for providing their own transportation to these off-campus clinical sites.

### Requirements for Admission

Students are admitted to the program after completion of a bachelor’s degree and prerequisite course work. The application deadline is November 1 of each year, and the program begins the last week in June. Specific procedures for admission must be followed including the verification of meeting the technical standards. Admission into the program is competitive.

An application to the University and a separate application to the Physical Therapy Centralized Application Service (PTCAS) must be submitted. The PTCAS website will be open to applicants August 1 each year at www.PTCAS.org (http://www.PTCAS.org). Please follow the directions for application found at the PTCAS site.

A competitive admission process is used for determining acceptance. Qualified high school students may apply for admission with guaranteed entry into the Doctor of Physical Therapy program. For criteria and additional information, please contact the Office of Admissions (800-348-7926 or 757-683-3685) or the College of Health Sciences advisor at (757) 683-5137.

### Degree Requirements

**Prerequisite courses include the following:**

- STAT 130M  Elementary Statistics  3
- BIOL 115N  General Biology I  4
- BIOL 250  Human Anatomy and Physiology I  4
- BIOL 251  Human Anatomy and Physiology II  4
- Two semesters of Chemistry, including labs  8
- Two semesters of Physics, including labs  8
- Psychology  3
- Social Studies Elective: 2nd Psychology, Sociology or Anthropology  3
- An introductory course in Biomechanics or Kinesiology recommended but not required

**Total Hours** 37

Students are required to pass written and oral comprehensive examinations prior to graduation. Comprehensive examinations take place in the final academic semester prior to the terminal two clinical internships.

### Curriculum Schedule

**Year 1**

**Summer**
- PT 621  Introduction to Physical Therapy  2
- BIOL 889  Gross Anatomy  6

**Fall**
- PT 627  Theory and Practice I  4
- PT 630  Concepts in Histology for Physical Therapy  1
- PT 634  Clinical Sciences I  3
- PT 640  Patient Evaluation I  3
- PT 655  Clinical Problem Solving I  2
- PT 665  Biomechanics/Kinesiology I  3
- PT 792  Neuroscience I  3

**Spring**
- PT 628  Theory and Practice II  4
- PT 635  Clinical Sciences II  3
- PT 641  Patient Evaluation II  3
- PT 656  Clinical Problem Solving II  2
- PT 666  Biomechanics/Kinesiology II  2
- PT 638  Exercise Physiology  2
- PT 793  Neuroscience II  3

**Year 2**

**Summer**
- PT 669  Clinical Internship I  4

**Fall**
- PT 810  Scientific Inquiry I  3
- PT 826  Theory and Practice III  4
- PT 836  Clinical Sciences III  3
- PT 842  Patient Evaluation III  3
- PT 857  Clinical Problem Solving III  2
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT 884</td>
<td>Clinical Teaching and Professional Communication</td>
<td>3</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT 822</td>
<td>Scientific Inquiry II</td>
<td>2</td>
</tr>
<tr>
<td>PT 827</td>
<td>Theory and Practice IV</td>
<td>4</td>
</tr>
<tr>
<td>PT 837</td>
<td>Clinical Sciences IV</td>
<td>3</td>
</tr>
<tr>
<td>PT 858</td>
<td>Clinical Problem Solving IV</td>
<td>2</td>
</tr>
<tr>
<td>PT 865</td>
<td>Prosthetics and Orthotics</td>
<td>3</td>
</tr>
<tr>
<td>PT 881</td>
<td>Management of Special Populations</td>
<td>2</td>
</tr>
<tr>
<td>PT 895</td>
<td>Topics in Physical Therapy I</td>
<td>1</td>
</tr>
<tr>
<td><strong>Year Three</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Summer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT 871</td>
<td>Clinical Internship II</td>
<td>4</td>
</tr>
<tr>
<td>PT 872</td>
<td>Clinical Internship III</td>
<td>4</td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT 892</td>
<td>Scientific Inquiry Seminar</td>
<td>2</td>
</tr>
<tr>
<td>PT 880</td>
<td>Psychosocial Aspects of Patient Care</td>
<td>2</td>
</tr>
<tr>
<td>PT 882</td>
<td>Practice Management</td>
<td>3</td>
</tr>
<tr>
<td>PT 890</td>
<td>Differential Diagnosis Seminar</td>
<td>3</td>
</tr>
<tr>
<td>PT 883</td>
<td>Professional Issues in Physical Therapy</td>
<td>2</td>
</tr>
<tr>
<td>PT 891</td>
<td>Seminar in Integrative Case Studies</td>
<td>3</td>
</tr>
<tr>
<td>PT 896</td>
<td>Topics in Physical Therapy II</td>
<td>1</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT 873</td>
<td>Clinical Internship IV</td>
<td>4</td>
</tr>
<tr>
<td>PT 874</td>
<td>Clinical Internship V</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td>117</td>
</tr>
</tbody>
</table>

### Center for Brain Research and Rehabilitation

The School of Physical Therapy has opened a 3,800 square foot research facility (http://hs.odu.edu/physther/resources/lab.shtml) with a large gait/movement assessment area, a room for virtual reality and rehabilitation studies, a multipurpose room for neurologic testing, and office space for faculty and graduate students. A primary research focus relates to neuromechanical basis of human movement under healthy and pathological conditions, with more clinically oriented studies on methods to improve gait and function in people with neurologic impairments. This research laboratory is designed for multidisciplinary use by faculty and graduate students in Physical Therapy, Human Movement Sciences, and Electrical and Computer Engineering. Collaboration among disciplines and with the Virginia Modeling and Simulation Center (VMASC) allows us to participate in exciting research projects exploring new technology in rehabilitation.
The college’s faculty of 160 highly skilled professional educators is devoted to guiding students toward an assimilation of the most current scientific theories, research, and practices.

**College Financial Aid**

The College of Sciences has established teaching and research assistantship stipends that range from $5,250 to $20,500. The responsibility for distributing these assistantship stipends lies in each department. In addition, each department has fellowship and tuition exemption funds available for competitive distribution.

**Dominion Graduate Scholars**

Programs in the College of Sciences offer a number of very competitive awards for graduate students newly admitted into Ph.D. programs. Some of these are Dominion Graduate Scholar appointments that carry a stipend of $18,000 for a 12-month period and full tuition exemptions. These Scholars must be enrolled in at least nine hours of graduate courses each semester, and three graduate credits during the summer to meet institutional eligibility requirements. These students are expected to be scholars in residence and spend full time in pursuit of their studies. Since the teaching or research experience will be more limited than for other awards, the Scholars will have sufficient time to devote to their academic studies.

All admission materials are considered as a part of the evaluation process. Students apply to specific graduate programs and may inquire about the Dominion Graduate Scholarship. After a student has been appointed to a Dominion Scholarship, the Graduate program director will submit a copy of their letter-of-offer, letter-of-acceptance and the awardee’s credential summary.

Minimum criteria for eligibility are as follows:

1. GRE scores of either:
   - 1200 combined verbal and quantitative, or
   - 1300 in any two of verbal, quantitative, or analytical.
2. Undergraduate GPA of 3.20 overall and 3.50 in the major, out of 4.00 maximum.
3. Evidence of research aptitude by undergraduate thesis/research, publications, M.S. thesis and/or letters of reference.
4. Information concerning the Dominion Graduate Scholar Program may be obtained from the graduate program director for the program of interest.
5. Written acknowledgment from a faculty member agreeing to serve as the student’s major advisor, if the student is accepted.

**Doctor of Philosophy - Biomedical Sciences**

Robert E. Ratzlaff, Graduate Program Director

In this interdisciplinary program all students are required to master a broad knowledge of the basic biomedical sciences. Integration of the basic sciences is reinforced by a rotation of laboratory experiences and by special seminars that highlight disciplinary interrelationships and approaches to biomedical research. The student progresses from a core of basic courses to in-depth study of specific biomedical problems. This includes advanced doctoral courses and the doctoral research project. Under the guidance of the graduate faculty, the student will integrate knowledge from the broad spectrum of biomedical disciplines into his or her focus on an area of specialization.

The program graduate will be a scientist with a broad biomedical education and a demonstrated ability to carry out original and creative research, cognizant of the disciplinary interfaces and implications and capable of pursuing and/or recommending continuing lines of study. He/she will be prepared to bridge the gap between practice and discovery in the art of medicine and the practice of science. The graduate is capable of serving in an industrial, governmental, or academic teaching or research setting, either independently or as a member of a team.
Admission
The requirements for admission to the biomedical sciences Ph.D. program are as follows:

1. A bachelor’s degree from an accredited college or university with a B (3.00) average. Students with advanced degrees are encouraged to apply.
2. Completion of the Graduate Record Examination (GRE); verbal + quantitative > 1,000 or 300 on the new GRE.
3. Prior training in biology (two years), calculus and/or statistics, and organic chemistry (one year). Additional courses in biology, chemistry, and physics are recommended.

Curriculum and Requirements
To accomplish the objectives of the program, the student:

1. Enrolls in the basic biomedical sciences courses to develop a broad foundation for more advanced course work and dissertation research;
2. Selects appropriate advanced course work approved by the guidance committee;
3. Completes at least 79 credit hours beyond the bachelor’s degree or 48 credit hours beyond the master’s degree;
4. Presents two seminars;
5. Passes either
   A. written and oral qualifying examinations on course work or
   B. an NIH-style grant proposal written on a research question in an area not specific to the planned research in the mentor’s laboratory and an oral exam on the grant proposal and on coursework;
6. Develops an interdisciplinary research proposal in NSF or NIH format that is accepted by the guidance committee;
7. Performs publishable research to demonstrate the ability to complete original and creative research projects; and
8. Prepares and successfully defends a dissertation.

Application Procedures
The completed application for the biomedical sciences Ph.D. program will include the following items:

Transcripts of all college course work. Transcripts will be official transcripts sent by the registrars of the colleges attended.

1. Graduate Record Examination (GRE) test scores, sent directly from the Educational Testing Service to the Old Dominion University Graduate Admissions Office. The Medical College Admissions Test (MCAT) can substitute for the GRE (minimum score 26).
2. A statement of personal goals and academic objectives.
3. Three letters of recommendation, preferably from faculty members at colleges attended who are familiar with the applicant’s academic and research capabilities.
4. A completed application form.
5. Receipt of the application fee. Checks should be made payable to Old Dominion University.
6. Test of English as a Foreign Language (TOEFL) test scores, sent directly from the ETS to ODU International Graduate Admission Office must accompany international applications for applicants with a degree issued outside of the United States.

Applications to Old Dominion University can be completed on-line http://admissions.odu.edu/home.php.

The applicant is responsible to ensure that all application materials are received and the application is complete in all respects.

Financial Aid
Sources of financial aid available to biomedical sciences Ph.D. students include

1. waivers of tuition,
2. research and teaching assistantships and
3. loans.

Department of Biological Sciences
110 Mills Godwin Building
Norfolk, Virginia 23529-0266
(757) 683-3595
http://sci.odu.edu/biology/
Wayne L. Hynes, Chair
Deborah A. Waller, Assistant Chair
Ian K. Bartol, Ecological Sciences Ph.D. Graduate Program Director
Robert E. Ratzlaff, Biology Master’s Graduate Program Director
Robert E. Ratzlaff, Biological Sciences Ph.D. Graduate Program Director

The Department of Biological Sciences provides a broad selection of course offerings. The degree program in biology allows for the selection of elective subjects most suited to the individual’s vocational interests.

Master of Science—Biology
Robert E. Ratzlaff, Graduate Program Director

The Department of Biological Sciences provides a broad selection of course offerings. The degree program in biology allows for the selection of elective subjects most suited to the individual’s vocational interests.

The curriculum for the Master of Science program is developed around one’s interests such as:

• botany,
• ecology,
• immunology,
• infectious diseases,
• marine biology,
• microbiology,
• physiology,
• reproductive biology,
• systematic biology, and
• zoology.

In addition, there are two specially designed concentration areas in:

• biotechnology and
• wetland ecology.

Facilities in the Department of Biological Sciences include:

• electron microscopy,
• terrestrial and aquatic animal care facilities,
• biomechanics,
• environmental pollution,
• marine benthic ecology,
• biotechnology,
• spectroscopy,
• cell culture,
• protein separation,
• DNA sequencing,
• GIS (Geographic Information System),
• digital imaging,
• a greenhouse,
• herbarium,
• zoological museum,
• animal facilities, and
• field science wet laboratories.

In addition, excellent opportunities exist for research and instruction off-campus at field research sites including:
• Blackwater Ecological Preserve,
• Virginia Coast Reserve—Long Term Ecological Research Site,
• Virginia Institute of Marine Sciences Eastern Shore Marine Laboratory, and
• other regional agencies and facilities.

Admission Information
Students who wish to enter this program should apply to the Master of Science in biology program and indicate their proposed field of study in the Statement of Interest, a required component of the application. Applications for admission can be obtained via the Internet at http://admissions.odu.edu/home.php or from:
Office of Graduate Admissions
Old Dominion University
Norfolk, VA 23529-0050
(757) 683-3685

Requirements for regular admission to the master’s program in biology are:
1. a bachelor’s degree in biology or a related field from an accredited college or university;
2. a grade point average of at least 3.00 on a 4.00 scale;
3. Satisfactory scores on the General portion of the Graduate Record Examination (Verbal+Quantitative 1000 or 300 on the new GRE) or at least a 24 on the Medical College Admission Test
4. two letters of recommendation;
5. an essay describing the area of biology of interest for graduate study, professional goals and motivation for graduate study in biology; and
6. written acknowledgment from a Department of Biological Sciences faculty member agreeing to serve as the student’s major advisor, if the student is accepted.

The Test of English as a Foreign Language (TOEFL) is required of all applicants whose native language is not English: minimum scores are 550 for the paper-based test, 213 for the computer-based or 79 on internet-based test.

Deadlines for application to the program are:
• February 1 for summer admission, early fall admission and consideration for a graduate teaching assistantship;
• June 1 for fall semester admission; and
• October 1 for spring semester admission.

Degree Requirements
Two degree options are available — thesis and non-thesis. A minimum of 31 semester hours of graduate credit is required of thesis students and 37 of non-thesis students; three-fifths of these credits must be at the 600-level or above. Research (BIOL 698) is required of all students. All students must deliver a scientific presentation in an appropriate public forum. For thesis students, the presentation should be at a scientific meeting. Course work, including any required courses, is selected according to the interest of the student, with the guidance and approval of the student’s faculty advisory committee. All students will complete a comprehensive exam (written or oral) that covers the student’s program of study. A substantial research project and a defense of the written thesis (BIOL 699) are required of students selecting the thesis option.

Master of Science - Biology
Many pertinent graduate courses are offered for the Master of Science in Biology programs that can be applied toward the degree requirements. A program of study is developed by the student with approval of advisory committee and the Graduate Program Director.

Master of Science - Wetland Biology Concentration
The wetland biology concentration has been structured to contain essential clusters in the following disciplines: plant identification, wetland and aquatic ecology, soils and hydrology, regulation, technical application, topical seminars, internships, and research and/or thesis. Recommended course are:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 519</td>
<td>Wetland Plants</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 550</td>
<td>Principles of Plant Ecology</td>
<td>4</td>
</tr>
<tr>
<td>OEAS 508</td>
<td>Introductory Soils</td>
<td>4</td>
</tr>
<tr>
<td>OEAS 622</td>
<td>Wetland Hydrology</td>
<td>3</td>
</tr>
</tbody>
</table>

Master of Science - Biotechnology Concentration
The biotechnology program is designed to enable the student to learn basic skills in cell and molecular biology, with the flexibility to develop a curriculum in the areas of infectious diseases, immunology, physiology, or environmental molecular biology.

Biotechnology students are required to take five core courses (below) in addition to the research and presentation requirements.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 523</td>
<td>Cellular and Molecular Biology</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 541</td>
<td>Biochemistry Lecture</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 543</td>
<td>Intermediate Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 671</td>
<td>Molecular and Immunological Techniques</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 755</td>
<td>Molecular Genetics</td>
<td>3</td>
</tr>
</tbody>
</table>

The remaining coursework is selected according to the interest of the student, with the guidance and approval of the student’s faculty advisory committee.

Master of Science in Education - Biology
Refer to the Darden College of Education section of this catalog (p. 97).

Doctor of Philosophy - Ecological Sciences
Dr. Ian K. Bartol, Graduate Program Director

Program Description
The primary goal of the doctoral program in ecological sciences is to provide advanced training in ecological, evolutionary and integrative biology.

The program has notable strengths in a broad range of biological subdisciplines, including:
• ecosystem studies,
• experimental ecology,
• community ecology,
• behavioral ecology,
• marine biology,
• molecular genetics,
• conservation biology,
• systematics,
Program faculty conduct studies in a variety of terrestrial, freshwater, and marine environments on several continents, and their research focuses on a broad spectrum of taxa, including, but not limited to:

- vascular plants,
- polychaetes,
- mollusks,
- crustaceans,
- insects,
- arachnids,
- birds,
- fishes,
- and amphibians.

Many faculty combine active field research with parallel laboratory studies. Quantitative approaches are encouraged and the opportunity exists to obtain a master’s degree in statistics while pursuing a doctorate in ecological sciences. The program is enhanced by excellent on-campus resources that include a scanning electron microscopy lab, genetic sequencing facilities, herbarium, aquatics laboratory, water tunnel and flow quantification facility, GIS facilities, greenhouse, and digital imaging facilities. Field research sites have been established in:

- the Virginia Coastal Reserve,
- Blackwater Ecologic Preserve,
- Great Dismal Swamp,
- Atlantic Ocean,
- Chesapeake Bay,
- and other areas.

Admission
Application forms for admission to the Ph.D. program in ecological sciences are available from the Office of Admissions and online (http://web.odu.edu/oduhome/admissions.shtml). The following should be sent to the Admissions Office:

1. the completed application form;
2. official transcripts from all universities attended;
3. Graduate Record Examination (GRE) scores;
4. test of English as a Foreign Language (TOEFL) score (from students whose native language is not English);
5. three letters of recommendation, including one from the applicant’s major advisor; and,
6. a statement of professional goals that includes specific research interests.

If an applicant is interested in requesting financial aid, an application for institutional graduate financial assistance should be completed during the application process (see Office of Admissions web page for form). The deadline for application to the program is February 1 for the subsequent fall semester. Students may be admitted during the spring and summer semesters as well, provided they obtain permission from the Graduate Program Director.

To qualify for admission, a student needs:

1. a satisfactory academic average (overall GPA score of at least 3.0 on a 4.0 scale, and overall GPA in the sciences of at least 3.0);
2. GRE scores near the 70th percentile on each of the examination sections (verbal, quantitative, and analytical) with a combined total of at least 1,000 to 1,200 preferred on the verbal and quantitative sections;
3. a TOEFL score of at least 550 (paper-based test), 213 (computer-based test), or 79 (internet-based test) for applicants whose native language is not English;
4. satisfactory letters of recommendation; and
5. a statement of professional goals as stated above.

A master’s degree is desirable but not required. The applicant is expected to have a background in the sciences, with an appropriate undergraduate degree and substantial course work in biology, chemistry or geology.

Applicants are strongly advised to contact the ODU faculty member closest to their area of interest prior to submitting an application to determine whether that faculty member is accepting new graduate students. No student, regardless of qualifications, is admitted to the Ecological Sciences Program without the approval of a specific faculty advisor. Potential applicants therefore should initiate a dialogue, preferably by email, with an appropriate member of the program faculty. Applicants should consult the list of faculty in the Department of Biological Sciences, which includes a brief description of their research interests. Applicants may also find it desirable to visit the campus for an interview with a potential advisor and the Graduate Program Director.

It is important for potential applicants to realize that many considerations enter into the decision to accept a student into the program. In addition to the strength of an applicant’s credentials (GRE scores, transcripts, and letters of recommendation), the availability of space in the appropriate faculty advisor’s lab and availability of adequate financial aid may influence the decision. Of these, space in an appropriate advisor’s lab is the most important consideration after an applicant’s academic qualifications. For this reason, applicants are strongly encouraged to contact a potential advisor directly.

Program Requirements
Program requirements are designed to provide a firm foundation in conceptual elements of ecological, evolutionary, and integrative biology, while moving students expeditiously toward their own research. In general, students must complete:

- 48 hours beyond the master’s degree or,
- in the absence of a master’s, 70 hours beyond the bachelor’s degree.

The student’s program of study should be broad and balanced. Course work varies with each student, depending on background and goals. Enrollment in a weekly ecology seminar is required, on average, one semester each year. Professional experience (environmental management or teaching) is encouraged. A five-member advisory committee of faculty is selected to guide the student through his or her course of study and to provide initial approval of the dissertation research. This committee also administers the comprehensive written and oral candidacy examinations, which are taken after all required course work is completed and the research skill requirement (proficiency on one foreign language or computer programming) is satisfied. The written exam must be passed before the oral exam may be taken. Once the candidacy exams are completed and a dissertation committee approves a written dissertation prospectus, the student advances to candidacy. At least three of the members of the original advisory committee, including the committee chair (student’s major advisor), will compose the dissertation committee. This committee approves a written dissertation prospectus and will supervise the research. At this time, the student’s attention turns almost exclusively to his or her own research. However, students continue to participate in seminar courses on a variety of topics, and an average of one seminar course per year of residency on campus is required. At the conclusion of their research, the student
submits a dissertation to the committee and presents a public defense of this work.

**Department of Chemistry and Biochemistry**

110 Alfriend Chemistry Building  
Norfolk, VA 23529-0126  
(757) 683-4078  
http://sci.odu.edu/Chemistry/  
Peter F. Bernath, Chair  
Craig A. Bayse, Graduate Program Director

**Master of Science – Chemistry**

The Department of Chemistry and Biochemistry offers a program of study leading to the degree of Master of Science in Chemistry. This program offers a sound academic background of coursework and research to prepare the student for further graduate study or employment in fields requiring an advanced degree. Areas of specialization within the program include: analytical chemistry, biochemistry, environmental chemistry, marine chemistry, materials chemistry, organic chemistry and physical chemistry.

**Admission**

An application (www.admissions.odu.edu), transcripts, two letters of recommendation from former college instructors, a resume, a writing sample, an essay about career goals and Graduate Record Examination (GRE) scores (general only) are required for consideration of admission to the program. Admission to regular status requires a grade point average of 3.00 in the major and 2.80 overall (on a 4.00 scale). General university admission requirements also apply. In addition, a Bachelor of Science degree (or equivalent) with a major in chemistry (or another science) is required, although applications from majors in all science disciplines are encouraged. Undergraduate courses in organic chemistry, inorganic chemistry, analytical chemistry (quantitative and instrumental analysis), physical chemistry and calculus are required for regular admission. Deficiencies in any of these areas will be identified and must be rectified by taking undergraduate coursework.

**Program Requirements**

**Writing Proficiency Policy**

The departmental graduate committee will request a writing sample from each new student. The graduate committee will refer students in need of remedial assistance to the Writing Center.

**Options**

Candidates for the master’s degree have two options in their program: the Research/Thesis option and the Non-Thesis option.

**Courses**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Thesis option, 30 hours minimum, including:</td>
<td>24</td>
</tr>
<tr>
<td>Research and Thesis</td>
<td>6</td>
</tr>
<tr>
<td>Total Hours</td>
<td>30</td>
</tr>
<tr>
<td>Non-thesis option, 33 hours minimum, including:</td>
<td>30</td>
</tr>
<tr>
<td>Independent study</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours</td>
<td>33</td>
</tr>
</tbody>
</table>

Up to 15 hours may be taken in related courses given by other departments pending approval from the Graduate Studies Committee of the Department of Chemistry and Biochemistry. At least 60 percent of the credit hours must be from 600-level courses or higher.

Students who earn grades of C+ or lower in any two graduate courses will not be allowed to continue in the M.S. program.

**Core Courses**

There are five core areas. These are:

- analytical chemistry,
- biochemistry,
- inorganic chemistry,
- organic chemistry and
- physical chemistry.

Students enrolled in the research/thesis option must take one course from three different core areas; non-thesis option students must take one course from each of the core areas.

**Seminar**

All students are required to register for seminar CHEM 690 (one credit, pass/fail) and attend departmental seminars for one semester. During the last semester of study, students are required to register for CHEM 691 (two credits, graded) and present a seminar on their research or independent study.

**Research and Thesis**

During their first semester (and not later than the end of their first academic year), students electing the Research/Thesis Option are required to interview the chemistry graduate faculty, choose a graduate faculty research advisor, and select a research committee in consultation with their advisor and the Graduate Program Director. Upon completion of their research, students must write a formal thesis describing their research and defend it to their research committee.

**Non-Thesis Option**

Not later than the end of their first academic year, students electing the Non-Thesis Option are required to interview the chemistry graduate faculty and choose an independent study advisor. Non-thesis students and their independent study advisor will then agree upon an independent study project. Upon completion of their independent study project, non-thesis students must write a formal Independent Study Report acceptable to their independent study advisor and the Graduate Studies Committee and pass an oral exam on their project.

**Master of Science in Education - Chemistry Major**

Refer to the Darden College of Education section of this catalog (p. 97).

**Doctor of Philosophy – Chemistry**

The Ph.D. program in Chemistry prepares students in the application of chemical principles to address many of society’s technical, environmental, and biomedical problems. Students will be able to provide leadership in industrial, governmental, and educational institutions in directing research and/or development to solve these problems. The Ph.D. degree in Chemistry is granted to students who have:

1. mastered advanced knowledge of definite sub-fields of chemistry
2. become familiar with research in these specific fields and developed perceptions of opportunities for further scientific advances
3. demonstrated the capacity to perform original, independent, and scholarly scientific investigation in their specific field and interpret their results.

All students admitted to the program must read and understand the regulations and policies described here and elsewhere throughout this catalog relevant to Old Dominion University’s requirements for Ph.D. degrees. The essential credit requirements for the Chemistry Ph.D. are:

A minimum of 78 credit hours beyond the Bachelor’s degree  
48 credit hours beyond the Master’s degree
Admission
An application (www.admissions.odu.edu), transcripts, three letters of recommendation from former college instructors, an essay about career goals and Graduate Record Examination (GRE) scores (aptitude section) are required for consideration of admission to the program. Admission to regular status requires a grade point average of 3.00 in the major and 3.00 overall (based on a 4.00 scale). General university admission requirements apply. In addition, a bachelor’s degree (or equivalent) with a major in chemistry (or another science) is required, although applications from majors in all science disciplines are encouraged. Undergraduate courses in inorganic chemistry, organic chemistry, analytical chemistry (quantitative and instrumental analysis), physical chemistry and calculus are required for regular admission. Deficiencies in any of these areas will be identified and must be rectified by taking undergraduate coursework in these areas.

Program Requirements
Writing Proficiency Policy
The departmental graduate committee will request a writing sample from each new student. If the graduate committee feels that remedial assistance in writing is needed, the student will be referred to the Writing Center.

Courses
A minimum of 78 semester hours beyond the undergraduate degree or 48 hours past the master’s degree is required by this program. The broad requirements for granting the Ph.D. are as follows:

• satisfactory performance in core and elective courses,
• successful completion of both written and oral portions of the Candidacy Examination,
• completion of the dissertation prospectus,
• and completion of a satisfactory dissertation and defense of the dissertation.

Students who earn grades of C+ or lower in any two graduate courses will not be allowed to continue in the Ph.D. program.

Core Courses
Students must choose one course from three different core areas. The core areas are:

• analytical chemistry,
• biochemistry,
• environmental chemistry,
• inorganic chemistry,
• organic chemistry, and
• physical chemistry.

Classes from each area are listed on the following pages.

Elective Courses
Students are required to take nine credit hours of elective courses. The courses are to be chosen upon consultation with their advisor and/or their guidance committee.

Teaching
Students are required to spend at least one semester as a teaching assistant.

Seminar
All students are required to register for seminar CHEM 890 (one credit, graded pass/fail) and attend departmental seminars throughout their graduate career. Twice during their career, students will register for (two credits) and present a seminar, which will receive a letter grade. In the second year, students will give a background literature talk on their research. The second semester of CHEM 891 may not be taken in the same semester as graduation.

Advisor Selection
During their first semester (and not later than the end of their first semester), students are required to interview the chemistry graduate faculty (a signed sheet of at least three faculty members is required), choose a graduate faculty research advisor, and select a guidance committee in consultation with their advisor and the Graduate Program Director.

Candidacy Examination
A student admitted to the Ph.D. program in chemistry becomes a candidate for the Ph.D. degree by passing the Ph.D. Candidacy Examination. This examination consists of a written portion and oral portion. The student is required to submit a written description of a novel research idea in the form of a grant proposal, and then present and defend the idea to his or her guidance committee.

Dissertation
The dissertation is the final and most important part of the work required for the Doctor of Philosophy degree in chemistry. The dissertation must be based on original research and make a contribution to existing knowledge of sufficient interest to warrant publication in a refereed journal. The candidate normally works closely with the research advisor, who is chair of the dissertation committee.

Dissertation Defense
The final examination of the candidate consists of the oral defense of the dissertation. This public examination is conducted by the dissertation committee with the research advisor serving as chair.

Department of Computer Science
Engineering & Computational Sciences Bldg.
4700 Elkhorn Ave, Suite 3300
Norfolk, VA 23529-0162
http://www.cs.odu.edu/
Desh Ranjan, Chair
Ravi Mukkamala, Graduate Program Director (MS Program)
Mohammad Zubair, Graduate Program Director (Ph.D. Program)

Programs
The Department of Computer Science offers programs leading to the Master of Science (M.S.) with a major in computer science, an accelerated five year combined B.S.C.S. and M.S. with a major in computer science and the Doctor of Philosophy in computer science. The Department of Computer Science also offers a Master of Science and Master of Engineering in computer engineering (jointly with the Department of Electrical and Computer Engineering in the Batten College of Engineering and Technology) and a Master of Science in computer science with a computer information sciences emphasis (jointly with the Information Technology Department in the College of Business and Public Administration).

Computer science traces its foundation to mathematics, logic and engineering. Studies in computer science encompass theory, experimental techniques, and engineering methodology. The computer science curriculum exposes students to aspects of each of these disciplines and fosters an appreciation and understanding of them. Students are exposed to the broad theoretical basis of computer science through lecture and laboratory experience. The Computer Science Department has a unique curricular model that applies computer science education to the real world. In addition, the Computer Science Department offers a set of courses to professionals who need supplementary experience. A graduate of the computer science program will have a broad fundamental knowledge of the field and in-depth knowledge in a particular subject area. To acquire breadth, graduate students in the department are required to take core courses which together with the undergraduate core courses cover major aspects of computers and computation. At the master’s level, the department supports in-depth study in the following areas:

• bioinformatics,
• data mining,
• digital libraries,
• high performance computing,
• networking,
• security,
• software engineering, and
• computational foundations.

At the Ph.D. level, areas of specialization are limited only by the interests of the available faculty. The department has an excellent state of the art computing facility. Please visit the department’s home page for details: http://www.cs.odu.edu.

Master of Science - Computer Science

Entrance Requirements

Students entering the Master of Science program in computer science should meet the minimum university graduate admission requirements (http://admissions.odu.edu/graduate.php?page=requirements). In addition, an applicant must have a strong background in computer science. Students who do not have a sufficient background in computer science may enter the graduate program as provisional students and make up for their deficiencies by taking appropriate courses. Applicants are required to take the GRE aptitude test; for the computer information sciences emphasis area (described below), the GMAT aptitude test may be used. Two letters of recommendation from faculty members of academic institutions are required in addition to all transcripts at the postsecondary level. For students whose native language is not English, either a TOEFL score of 550 (paper-based) and 79 (internet-based) or IELTS score of 6.5 is also required.

Requirements

The departmental requirements for the master’s degree are described below. All these requirements must be satisfied in addition to the University requirements outlined under the Academic Information section of this Catalog.

Core courses
As approved by the GPD from a list of courses such as:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 550</td>
<td>Database Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CS 555</td>
<td>Introduction to Networks and Communications</td>
<td>3</td>
</tr>
<tr>
<td>CS 517</td>
<td>Computational Methods and Software</td>
<td>3</td>
</tr>
<tr>
<td>CS 600</td>
<td>Algorithms and Data Structures</td>
<td>3</td>
</tr>
<tr>
<td>CS 665</td>
<td>Computer Architecture</td>
<td>3</td>
</tr>
</tbody>
</table>

Colloquium
Attend at least 10 colloquia as detailed below.

Course options
Three options are available for candidates for master’s degrees:

• thesis option,
• project option,
• and course-only option.

Thesis Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course work</td>
<td>24</td>
</tr>
<tr>
<td>Thesis research</td>
<td>6</td>
</tr>
<tr>
<td>Colloquium</td>
<td>1</td>
</tr>
<tr>
<td>Total Hours</td>
<td>31</td>
</tr>
</tbody>
</table>

A minimum of 31 credit hours is required. The candidate is required to write a thesis and make an oral presentation of the results.

Project Option

Course work 30
Project work 3
Colloquium 1
Total Hours 34

A minimum of 34 credit hours is required. The candidate is required to prepare a written report on the project and to present it orally.

Course-only Option

Course work 33
Colloquium 1
Total Hours 34

A minimum of 34 credit hours is required. In addition, the candidate is required to appear for an exit examination that requires a comprehensive written report and an oral examination.

Course restrictions
No more than six credits of the following courses may be counted towards the degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 697</td>
<td>Independent Study in Computer Science</td>
</tr>
<tr>
<td>CS 791</td>
<td>Graduate Seminar</td>
</tr>
<tr>
<td>CS 796</td>
<td>Topics in Computer Science</td>
</tr>
</tbody>
</table>

Total Hours 0

At least three credits counted toward the computer science degree must be taken at the 700-level from courses other than CS 791 and CS 796.

Time Limit
All requirements for the master’s degree must be completed within six years.

Master of Science - Computer Information Systems Emphasis

Requirements

This area, offered jointly with the Information Systems and Technology Department of the College of Business and Public Administration, is appropriate for students with either a bachelor’s degree in business administration with a major in information systems and a computer science minor or with a bachelor’s degree in computer science with a business administration minor.

Core courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 551</td>
<td>Software Engineering Survey</td>
<td>3</td>
</tr>
<tr>
<td>or IT 620</td>
<td>Systems Analysis and Design</td>
<td></td>
</tr>
<tr>
<td>CS 550</td>
<td>Database Concepts</td>
<td>3</td>
</tr>
<tr>
<td>or IT 650</td>
<td>Database Management Systems</td>
<td></td>
</tr>
<tr>
<td>CS 556</td>
<td>Database Administration I</td>
<td>3</td>
</tr>
<tr>
<td>or IT 660</td>
<td>Enterprise Information Systems</td>
<td></td>
</tr>
<tr>
<td>CS 557</td>
<td>Database Administration II</td>
<td>3</td>
</tr>
<tr>
<td>or IT 672</td>
<td>Information Architectures</td>
<td></td>
</tr>
</tbody>
</table>

Two must be taken from each department.

Colloquium
Attend at least 10 colloquia as detailed below.

Course options
Same as described above in the M.S. in computer science. For the course-only option, the 11th course must be a CS 600/700-level course.

Course restrictions
Same as described above in the M.S. in computer science.
Academic Information section in this Catalog: following requirements in addition to the university requirements outlined make them up.

A candidate for the doctoral degree in computer science must meet all of the Requirements enter the Ph.D. program with deficiencies in these areas will have to Computer Science and Operating Systems at an undergraduate level. Those Advanced Data Structures and Algorithms, Introduction to Theoretical Program Solving and Programming, Introduction to Computer Architecture, with that of a faculty member. Students are expected to show proficiency in master's degree. Prior to applying for admission, students are encouraged to (http://admissions.odu.edu/graduate.php?page=requirements). Students should meet the minimum university graduate admission requirements Admission Doctor of Philosophy - Computer Science

Entrance Requirements

An undergraduate degree in an Accrediting Board for Engineering and Technology (ABET)-accredited computer engineering program is an ideal preparation for the program, though students with degrees in either computer science or electrical engineering should be able to enter the program with very few deficiencies (typically no more than three courses) and are encouraged to apply.

Requirements

All students are required to take four core courses: CS 555, CS 665, ECE 544, and ECE 642. Students must also take four electives from an approved list of computer science, electrical and computer engineering, and mathematics courses with at least one selection from computer science and one selection from electrical and computer engineering. Each student must pass a written examination and/or oral comprehensive examination and a writing proficiency examination.

Master of Science

A minimum of 31 credits is required, including 24 credits of approved course work, six credits of research, and one credit of colloquium. The candidate is required to prepare a thesis.

Master of Engineering

A minimum of 31 credits is required, including 30 credits of approved course work and one credit of colloquium.

Doctor of Philosophy - Computer Science

Admission

Students entering the Ph.D. program in the Computer Science Department should meet the minimum university graduate admission requirements (http://admissions.odu.edu/graduate.php?page=requirements). Students may be admitted directly to the Ph.D. program with either a bachelor’s or a master’s degree. Prior to applying for admission, students are encouraged to visit the department’s website and ensure that their research interests match with that of a faculty member. Students are expected to show proficiency in Program Solving and Programming, Introduction to Computer Architecture, Advanced Data Structures and Algorithms, Introduction to Theoretical Computer Science and Operating Systems at an undergraduate level. Those entering the Ph.D. program with deficiencies in these areas will have to make them up.

Requirements

A candidate for the doctoral degree in computer science must meet all of the following requirements in addition to the university requirements outlined under the Academic Information section in this Catalog:

1. Pass the Ph.D. qualifying process that consists of breadth oral examination, research ability oral examination, and advanced course requirement.
2. Complete a minimum of 72 credit hours beyond the bachelor’s degree and 48 credit hours beyond the master’s degree.
3. Pass the candidacy examination.
4. Attend at least 20 colloquia as detailed below.
5. Successfully defend the dissertation.

The above must be completed within eight years after admission to the Ph.D. program. Note that students with a degree in a discipline outside of computer science will be required to take prerequisite undergraduate courses that will not be counted towards the 72 credit hours requirement.

Advisor

Upon admission to the Ph.D. program, a faculty advisor will be assigned to the student for general guidance. The student, however, is expected to find a dissertation advisor by the time he or she completes the qualifying process.

Course Requirements

Students with a master’s degree in computer science must complete coursework as specified below:

1. A minimum of 24 hours of post-master’s coursework at 800-level.
2. Complete the dissertation work of 24 credit hours or more.
3. A maximum of six hours may be transferred into the Ph.D. program from post-master’s coursework done elsewhere.

Students with an undergraduate degree in computer science must complete coursework as specified below:

1. 12 credit hours of core coursework approved by the GPD from a list of courses such as: CS 550, CS 555, CS 517, CS 600, and CS 665.
2. A minimum of 36 hours of coursework at 600-level or above, of which at least 24 credit hours must be at 800-level.
3. Complete the dissertation work of 24 credit hours or more.

Students with an undergraduate or master’s degree in a discipline outside computer science must complete the 72 credit hours of coursework as specified above. Additionally, these students need to demonstrate proficiency in Problem Solving & Programming, Introduction to Computer Architecture, Advanced Data Structures and Algorithms, Introduction to Theoretical Computer Science and Operating Systems at an undergraduate level.

Research Guidance Committee

A Research Guidance Committee will be formed after the student has passed the breadth oral examination of the PhD qualifying process. The duties of a Research Guidance Committee are:

1. To advise the student on the course preparation, in particular to help prepare a plan of study
2. To help define the research area of the student.
3. To prepare and administer the candidacy exam.

A Research Guidance Committee is formed according to the following procedure:

1. The student finds a regular faculty advisor. Note that a regular faculty advisor can be different from the temporary faculty advisor assigned to the student upon admission to the Ph.D. program.
2. The advisor selects the members of the Research Guidance Committee in cooperation with the student and the Graduate Studies Committee.
3. The Research Guidance Committee consists of the advisor, at least three full-time computer science faculty members and at least one full-time faculty member outside of the Computer Science Department. All members should hold the rank of assistant professor or higher. All the committee members must be approved graduate faculty as defined in the university faculty handbook. The current research interests of the computer science members of the committee should be related to the research goals of the student.
4. Additional members may be appointed to the committee.
Candidacy Examination

Upon completing coursework, before becoming heavily involved in dissertation work, and no later than three years after acceptance into the Ph.D. program (preferably during the first 18 months after admission into the program), the student must pass a candidacy examination. This examination is designed to test the student’s knowledge of background material related to the dissertation topic and to determine if the student is ready to proceed with the dissertation research. At least one week before the scheduled examination time, the student must provide the examination committee with the following documents:

• a comprehensive literature review on the dissertation topic (limited to 20 double-spaced pages, not including references) that should in particular discuss limitations of current approaches and open problems in the topic area
• a dissertation research proposal (limited to 30 double-spaced pages, not including references), which describes
  • the research problem
  • how the problem relates to other work in the field (can reference the separate literature critique)
  • the research plan, including proposed tasks and a timeline for completion
  • expected contributions

During the examination, the student must give a presentation of the literature review (15 minutes) and a presentation of the dissertation proposal (30 minutes) to be followed by questions from the committee regarding either document (45 minutes).

The presentations of the literature review and the dissertation proposal are open to the public and will be publicized by the GPD at least one week in advance of the exam. Once the presentations have concluded and the audience has asked general questions, the audience will be excused. The examination by the committee will be held in private, but graduate faculty members are welcome to observe the exam.

Dissertation Committee

After the candidacy exam has been passed and dissertation topic approved, the Research Guidance Committee’s responsibilities are completed. A new committee, the Dissertation Committee, is formed to supervise the dissertation research.

A Dissertation Committee is formed according to the following procedure:

1. The faculty advisor selects the members of the Dissertation Committee in cooperation with the student and the Graduate Studies Committee.
2. The Dissertation Committee consists of the advisor, at least three full-time computer science faculty members and at least one full-time faculty member outside of the Computer Science department. All these members should hold the rank of assistant professor or higher. All the committee members must be approved graduate faculty as defined in the university faculty handbook. The current research interests of the computer science members of the committee should be related to the research goals of the student.
3. Additional members may be appointed to the committee.
4. The committee must complete a Ph.D. Dissertation Committee Form. This form is submitted to the Graduate Program Director by the Graduate Studies Committee and to the Dean of the College of Sciences for approval.
5. The Associate Vice President for Graduate Studies is an ex-officio member of all Dissertation Committees.

Dissertation

A minimum of 24 credit hours of dissertation work is required. The work must represent an achievement in research and must be a significant contribution in the field. Students are required to publish (or have in the revision process) at least one paper in a refereed journal or refereed conference proceedings based on their dissertation work.

Dissertation Defense

The examination will be oral and the examination committee must have the completed dissertation at least two weeks before the examination date. In addition to the examination, students are required to give a public oral presentation on their dissertation results.

Time Requirement

Ph.D. students should normally be full-time. A full-time student can be expected to satisfy all the Ph.D. requirements in three to four years when entering with an M.S. degree or four to five years with a bachelor’s degree. No student (full-time or part-time) will be allowed to study for the Ph.D. degree beyond eight years from the date of admission into the program.

Colloquium

Students are expected to actively participate in the colloquium activities of their research area for at least four semesters.

Ph.D. Qualifying Process

Students who have been admitted to study toward the doctoral degree in computer science must complete the qualifying process which may take up to 18 months after a student has been admitted in the Ph.D. program. The Ph.D. qualifying process consists of three components.

1. Breadth Oral Examination
2. Research Ability Oral Examination
3. Advanced Course Requirement

Breadth Oral Examination

The examination should be passed no later than 12 months after admission into the Ph.D. program (preferably during the first 6 months after admission into the program). In case a student fails the examination, it is still expected that the student will pass the examination within 12 months of admission. The examination may be repeated at most once.

The scheduling of this examination will be on-demand. A student wanting to take the breadth examination will contact the GPD at least six weeks before the suggested date of the examination. Once a student has requested an examination, a committee of four faculty members will be formed that will be responsible for evaluating the student.

The examination will last for two hours. On the day of the examination, the student will be given an initial list of questions two hours before the oral examination. Note that this list will not contain follow-on questions which the committee is free to ask. Students will be evaluated on their familiarity with core computer science topics. We have organized these topics under the undergraduate computer science course categories. The list of courses is given below. For the most recent syllabi for these courses, please visit: http://www.cs.odu.edu.

- Problem Solving & Programming (CS 250)
- Introduction to Computer Architecture (CS 270)
- Advanced Data Structures and Algorithms (CS 361)
- Instruction to Theoretical Computer Science (CS 390)
- Operating Systems (CS 471)

Research Ability Oral Examination

The examination should be passed no later than 18 months after admission into the Ph.D. program (preferably during the first 12 months after admission into the program). In case a student fails the examination, it is still expected
that the student will pass the examination within 18 months of admission. The examination may be repeated at most once.

The scheduling of this examination will be on-demand. A student wanting to take the research ability examination will select one of the department approved areas and contact the GPD at least six weeks before the desired date of the examination. Once a student has requested an examination, the selected area committee members will be responsible for evaluating the student.

A student who has completed a master’s thesis and/or has publications accepted in referenced conferences/journals can apply to the GPD for exemption from the research ability examination. The exemption also requires an endorsement form an ODU CS faculty member who is willing to be the student’s Ph.D. advisor. Please contact the GPD for details.

The examination will last two hours. On the day of the examination, the student will be given an initial list of questions. The questions will last two hours before the oral examination. Not that this list will not contain follow-on questions, which the committee is free to ask. Students will be evaluated on their understanding of the reading list (list of papers, book chapters, etc.) maintained by each area committee.

**Advanced-level Course Requirement**

Ph. D. students are expected to take at least four 800-level regular courses. These four courses should be taught by at least three different faculty members. Ph.D. students are expected to maintain a minimum grade of B in each of these courses. If you have any doubt whether a course is a regular 800-level course and will be counted toward this requirement, please check with your GPD. This requirement should be completed no later than 18 months after admission into the program. Note that these courses will be counted toward the minimum 800-level credit hour requirement for Ph.D. students.

**Department of Mathematics and Statistics**

2300 Engineering and Computational Sciences Building
Norfolk, VA 23529
757-683-3882
http://sci.odu.edu/math/

J. Mark Dorrepaal, Chair
Richard D. Noren, Graduate Program Director
N. Rao Chaganty, Statistics Program Director

**Graduate Study in Computational and Applied Mathematics**

The master’s and doctoral programs in computational and applied mathematics offered by the Department of Mathematics and Statistics are designed to produce applied mathematicians and statisticians who can meet the growing demand for analytical and computational skills in traditional scientific and multi-disciplinary fields. Students in the program can choose to pursue an option in either applied mathematics, statistics or biostatistics.

**Applied mathematics** is the application of mathematics to the solution of non-mathematical problems. Such problems may originate in math-oriented fields (physics, chemistry, and engineering) as well as in such areas such as geology, oceanography, meteorology, biology, ecology, environmental health, economics, actuarial science, business (operations and market research), banking, and medicine. Students will learn to use methods of applied mathematics, probability, statistics, biostatistics, numerical analysis, and scientific computing in seeking solutions to such problems. For work in computational and applied mathematics, training in an additional field of application is a necessity.

The desire and ability to use mathematics to bring together various disciplines is the unique characteristic of an applied mathematician. Not only has mathematical modeling and solving of societal and scientific problems increased the demand for applied mathematicians, but the flexibility and breadth of knowledge inherent in this discipline make it attractive for those who do not want to become irreversibly specialized.

Old Dominion University is one of the few American institutions offering a program expressly in applied mathematics. There are approximately 22 graduate program faculty members in the Department of Mathematics and Statistics, and current enrollment in the program is about 50 students.

Areas of faculty research include analytical and numerical modeling in oceanography and meteorology, computational fluid dynamics and stability theory, elasticity and fracture mechanics, combustion theory, magnetohydrodynamics, mathematical biology, numerical analysis and approximation, optimization, applied probability, statistical inference, reliability, multivariate statistics, generalized linear models, estimating equations, biostatistics, nonparametric statistics, bioinformatics, and high performance computing.

Facilities within the metropolitan area include the NASA/Langley Research Center, the Virginia Modeling, Analysis and Simulation Center (VMASC), and the Eastern Virginia Medical School.

**Program Financial Aid.** Graduate assistantships in the Department of Mathematics and Statistics offer stipends ranging from $15,000 to $18,000. The level of award is determined on the basis of previous experience and performance as a graduate assistant and on the student’s academic achievement and potential in applied mathematics or statistics. In addition, a number of teaching and research positions are available for financial support of graduate assistants during the summer months (June and July).

**Writing Proficiency.** All students in the graduate program are expected to demonstrate an acceptable level of writing ability. Students needing help to remedy their writing deficiencies will be referred to the Writing Center for diagnosis and assistance. All M.S. candidates will enroll in MATH 632 or in STAT 632 for a master’s project.

**Master of Science - Computational and Applied Mathematics**

**Admission**

An applicant to the master’s program in computational and applied mathematics should have a bachelor’s degree in mathematics, statistics, computer science, or an application area with a strong mathematics component (e.g., physics or engineering). Undergraduate mathematics preparation should include coursework in linear algebra, advanced calculus, differential equations, probability, and numerical methods. Undergraduate averages of 2.80 overall (4.00 scale) and 3.00 in the major and related mathematics courses are required.

A student who does not fully meet all requirements for admission as a regular graduate student may be allowed, with permission of the program director, to enroll as a provisional graduate student. Students lacking adequate preparation will be required to make up their deficiencies by taking appropriate undergraduate courses in addition to those specified for the master’s program.

A formal application form, official transcripts and two letters of recommendation should be forwarded to the Office of Admissions. It is recommended that applicants supply Graduate Record Examination aptitude scores.

The following material should be mailed directly to the director of the graduate program in computational and applied mathematics, Department of Mathematics and Statistics: a list of all mathematics courses taken and other courses closely allied to the applicant’s primary interests in applied math or statistics along with the texts used (titles and authors), chapters studied or topics covered, and grades. This information should be enclosed with the financial aid application (if the applicant is submitting one).

Students may enroll in the program on either a full-time or part-time basis. Courses are offered on a regular basis during the late afternoon and early evening hours which allows part-time students to obtain master’s degrees or post-master’s graduate credit.
Requirements
The M.S. candidate must complete a minimum of 31 normal credit hours of course work designed to fulfill an option in either applied mathematics, statistics or biostatistics. With approval of the graduate program director, up to six of these credits may be chosen from a field of application (e.g., geology, oceanography, ecosystem analysis, computer science, economics, health sciences, operations research, physics and engineering mechanics) in which the student applies analytical and numerical techniques to another discipline. All programs of study must be approved by the graduate program director, and substitutions may be made only with his or her approval.

Master’s Project Requirement
The M.S. candidate will be assigned to a faculty advisor for a master’s project. Each student will enroll in MATH 632 or STAT 632 to complete his/her project. The master’s project is designed not only to broaden students’ analytical competency but also to enhance students’ writing and reporting skills on a technical subject.

Colloquium Requirement
In order to develop an appreciation for the breadth of contemporary research in applied mathematics and statistics, all M.S. candidates will attend and succinctly summarize and evaluate in writing at least eight professional seminars given by research faculty or external seminar visitors. The Richard F. Barry Colloquium Series is run by the department throughout the academic year. The department also conducts seminars jointly with other departments.

Prerequisites
Prerequisite courses for the applied mathematics option are:

At most, three from the following can be applied towards the 31-credit degree requirement:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 501</td>
<td>Partial Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 508</td>
<td>Applied Numerical Methods I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 509</td>
<td>Applied Numerical Methods II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 517</td>
<td>Intermediate Real Analysis I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 518</td>
<td>Intermediate Real Analysis II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 522</td>
<td>Applied Complex Variables</td>
<td>3</td>
</tr>
</tbody>
</table>

Prerequisite courses for the Statistics and Biostatistics options are:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 316</td>
<td>Introductory Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>STAT 431/531</td>
<td>Theory of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>STAT 532</td>
<td>Sampling Theory *</td>
<td>3</td>
</tr>
<tr>
<td>STAT 535</td>
<td>Design and Analysis of Experiments *</td>
<td>3</td>
</tr>
<tr>
<td>STAT 537</td>
<td>Applied Regression Analysis *</td>
<td>3</td>
</tr>
</tbody>
</table>

* Only these courses can be applied towards the 31-credit degree requirement.

Applied Mathematics Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 617</td>
<td>Measure and Integration</td>
<td>3</td>
</tr>
<tr>
<td>MATH 618</td>
<td>Applied Functional Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 622</td>
<td>Master’s Project</td>
<td>3</td>
</tr>
<tr>
<td>MATH 637</td>
<td>Tensor Calculus and Differential Geometry</td>
<td>3</td>
</tr>
<tr>
<td>MATH 693</td>
<td>Engineering Analysis III</td>
<td>3</td>
</tr>
<tr>
<td>MATH 622</td>
<td>Numerical Solutions to Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 721</td>
<td>Advanced Applied Numerical Methods I</td>
<td></td>
</tr>
</tbody>
</table>

And at least 15 additional credit hours of approved graduate course work

Total Hours 33

Statistics Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 505</td>
<td>Introduction to Data Handling</td>
<td>3</td>
</tr>
<tr>
<td>STAT 535</td>
<td>Design and Analysis of Experiments</td>
<td>3</td>
</tr>
<tr>
<td>STAT 537</td>
<td>Applied Regression Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT 625</td>
<td>Mathematical Statistics I</td>
<td>3</td>
</tr>
<tr>
<td>STAT 626</td>
<td>Mathematical Statistics II</td>
<td>3</td>
</tr>
<tr>
<td>STAT 627</td>
<td>Linear Statistical Models</td>
<td>3</td>
</tr>
<tr>
<td>or STAT 628</td>
<td>Applied Multivariate Analysis</td>
<td></td>
</tr>
<tr>
<td>STAT 632</td>
<td>Master’s Project</td>
<td>3</td>
</tr>
<tr>
<td>STAT 640</td>
<td>Survival Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

At least 6 additional credits of approved graduate course work 6

Total Hours 30

Biostatistics Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 505</td>
<td>Introduction to Data Handling</td>
<td>3</td>
</tr>
<tr>
<td>STAT 535</td>
<td>Design and Analysis of Experiments</td>
<td>3</td>
</tr>
<tr>
<td>STAT 537</td>
<td>Applied Regression Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT 540</td>
<td>Clinical Trials</td>
<td>3</td>
</tr>
<tr>
<td>STAT 550</td>
<td>Categorical Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT 625</td>
<td>Mathematical Statistics I</td>
<td>3</td>
</tr>
<tr>
<td>STAT 626</td>
<td>Mathematical Statistics II</td>
<td>3</td>
</tr>
<tr>
<td>STAT 627</td>
<td>Linear Statistical Models</td>
<td>3</td>
</tr>
<tr>
<td>or STAT 628</td>
<td>Applied Multivariate Analysis</td>
<td></td>
</tr>
<tr>
<td>STAT 640</td>
<td>Survival Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

And two 600-level courses from either the College of Health Sciences or the Eastern Virginia Medical School offerings in epidemiology, community health, or history of diseases. Also required is the master’s project, STAT 632, involving the use of statistical techniques in medical or health related real-life settings.

Certificate in Modeling and Simulation
The Department of Mathematics and Statistics at Old Dominion University plays an integral part in the University’s campus-wide initiative to promote its research in Modeling and Simulation. The Department of Mathematics and Statistics offers a certificate in Modeling and Simulation. In order to obtain a certificate in Modeling and Simulation, a student must complete four graduate courses that include MSIM 601 (Introduction to Modeling and Simulation). MSIM 601 is offered by the Department of Engineering Management and System Engineering. Students may select three other simulation courses from the following Modeling and Simulation courses.

Modeling and Simulation courses in Computational Mathematics
Select three from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 508</td>
<td>Applied Numerical Methods I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 509</td>
<td>Applied Numerical Methods II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 622</td>
<td>Numerical Solutions to Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 632</td>
<td>Master’s Project</td>
<td>3</td>
</tr>
<tr>
<td>MATH 721/821</td>
<td>Advanced Applied Numerical Methods I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 722/822</td>
<td>Advanced Applied Numerical Methods II</td>
<td>3</td>
</tr>
</tbody>
</table>

Modeling and Simulation courses in Statistics
Select three from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 535</td>
<td>Design and Analysis of Experiments</td>
<td>3</td>
</tr>
<tr>
<td>STAT 537</td>
<td>Applied Regression Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STAT 560</td>
<td>Statistical Simulation/Programming Using Statistical Software Packages</td>
<td>3</td>
</tr>
<tr>
<td>STAT 597/697</td>
<td>Topics in Statistics</td>
<td>1-3</td>
</tr>
<tr>
<td>STAT 630</td>
<td>Time Series Models</td>
<td>3</td>
</tr>
</tbody>
</table>
Statistics or Biostatistics Option

Complete one of the following options:

Applied Mathematics Option

- STAT 628: Applied Multivariate Analysis (3)
- STAT 630: Time Series Models (3)
- STAT 640: Survival Analysis (3)
- STAT 827: Statistical Inference I (3)
- STAT 828: Statistical Inference II (3)

Total Hours: 33

Master of Science in Education - Mathematics

Refer to the Darden College of Education section of this Catalog (p. 97).

Doctor of Philosophy - Computational and Applied Mathematics

Admission

Applicants who appear to be qualified for study at an advanced graduate level may be admitted to the doctoral program in computational and applied mathematics. These will be students with very strong backgrounds in mathematics, statistics, computer science, or application areas with a mathematics component (e.g. physics or engineering).

Students may be admitted directly to the Ph.D. program with either a bachelor’s or a master’s degree. A grade point average of 3.00 (4.00 scale) in the major and related mathematics courses is required.

Students are required to submit three letters of recommendation and GRE aptitude scores, if the student will not have completed a master’s degree by the intended date of admission.

Requirements

Course Requirements

A minimum of 55 normal credit hours of course work beyond the bachelor’s degree (24 credit hours beyond the master’s degree) and exclusive of doctoral dissertation work is required. Each student will be assigned a guidance committee, and together they will plan a complete program of course work designed to meet the student’s objectives and to fulfill an option in applied mathematics, statistics or biostatistics. The student is strongly encouraged to select courses in more than one of these option areas and in a field of application whenever such courses contribute appropriately to his or her program. Each program, however, must be directed and approved by the student’s guidance committee.

While the individual program will depend on the nature of the student’s preparation prior to entering, each participant will ordinarily be required to complete one of the following options:

Applied Mathematics Option

- MATH 605: Complex Variables I (3)
- MATH 617: Measure and Integration (3)
- MATH 618: Applied Functional Analysis (3)
- MATH 622: Numerical Solutions to Differential Equations (3)
- MATH 637: Tensor Calculus and Differential Geometry (3)
- MATH 638: Mathematical Theories of Continua (3)
- MATH 693: Engineering Analysis III (3)
- MATH 801: Asymptotic and Perturbation Methods (6)
  & MATH 802: and Integral Equations
- MATH 821: Advanced Applied Numerical Methods I (6)
  & MATH 822: Advanced Applied Numerical Methods II
- MATH 803: Advanced Applied Mathematics I (3)
  or MATH 825: Computational Fluid Dynamics and Solid Mechanics

Total Hours: 36

Statistics or Biostatistics Option

- MATH 517: Intermediate Real Analysis I (3)
- STAT 547: Analysis of Longitudinal Data (3)
- STAT 550: Categorical Data Analysis (3)
- STAT 625: Mathematical Statistics I (3)
- STAT 626: Mathematical Statistics II (3)
- STAT 627: Linear Statistical Models (3)

Dissertation

A doctoral dissertation representing an achievement in research and a significant contribution to the field is required. Students must register for Research 898 or 899 each semester in which they are doing substantial work on their dissertations. A minimum of 24 hours of such research credit is required.

Defense of Dissertation

This examination will be oral and must be completed at least four weeks before the date on which the degree is to be conferred. The dissertation committee members must have the completed dissertation at least two weeks before the date of the oral examination. Under normal circumstances, it is expected that the student will have had a research paper accepted for publication prior to the dissertation defense.

Department of Ocean, Earth and Atmospheric Sciences

406 Oceanography and Physics Building
Norfolk, VA 23529
757.683.4285
http://www.odu.edu/sci/oceanography/

H. Rodger Harvey, Chair
Peter N. Sedwick, Graduate Program Director

Mission
The Department of Ocean, Earth and Atmospheric Sciences acquires and disseminates knowledge of the earth system, including the relationships among the biological, chemical, geological, and physical components of our planet. It is critical that we understand both natural and human-induced processes that change this system so we are prepared to meet present and future challenges. With curiosity, creativity, scholarship, and respect as cornerstones of our philosophy, we strive to increase scientific knowledge and literacy through excellence in research, education, and service to the Commonwealth of Virginia and society in general.

General Description of Graduate Degrees
Two graduate programs are offered:

- Master of Science in ocean and earth sciences
- Doctor of Philosophy in oceanography.

The Master of Science degree has both thesis and non-thesis options. Areas of emphasis are biological, chemical, and physical oceanography and geological sciences. Interdisciplinary studies are encouraged. The curriculum is designed to prepare graduates for professional practice in their area of interest. Official transcripts, letters of recommendation, TOEFL scores (international students), and a statement of goals and interest for graduate study should all be submitted to the Office of Admissions by February 1 for full consideration. Scores on the GRE verbal, analytical, and quantitative sections are required.

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 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, Earth and Atmospheric Sciences is housed in three buildings. The Oceanography/Physical Sciences Building contains state-of-the-art teaching laboratories, computer facilities, and research laboratories for geological sciences and biological, chemical and geological oceanography. The Center for Coastal Physical Oceanography is located in ODU’s Innovative Research Park and houses all of the department’s physical oceanography laboratories. The Center for Quantitative Fisheries Ecology is housed close to campus. 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.

Graduate 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, 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). 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 are required to complete the 500-level courses.

I. Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 504</td>
<td>Digital Techniques for Remote Sensing</td>
</tr>
<tr>
<td>BIOL 519</td>
<td>Wetland Plants</td>
</tr>
<tr>
<td>BIOL 550</td>
<td>Principles of Plant Ecology</td>
</tr>
<tr>
<td>BIOL 555</td>
<td>Molecular Systematics</td>
</tr>
<tr>
<td>OEAS 511</td>
<td>Structural Geology</td>
</tr>
<tr>
<td>OEAS 526</td>
<td>Concepts in Oceanography for Teachers</td>
</tr>
</tbody>
</table>

II. Interpretive Analysis Courses (Select two from the following)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 502</td>
<td>Geographic Information Systems</td>
</tr>
<tr>
<td>GEOG 522</td>
<td>Coastal Geography</td>
</tr>
<tr>
<td>GEOG 590</td>
<td>Applied Cartography/GIS</td>
</tr>
<tr>
<td>OEAS 595</td>
<td>Special Topics</td>
</tr>
<tr>
<td>GEOG 595</td>
<td>Topics in Geography</td>
</tr>
</tbody>
</table>

III. Capstone Seminar

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 519</td>
<td>Spatial Analysis of Coastal Environments</td>
</tr>
<tr>
<td>OEAS 519</td>
<td>Spatial Analysis of Coastal Environments</td>
</tr>
</tbody>
</table>

Total Hours 15

Master of Science - Ocean and Earth Sciences
Peter N. Sedwick, Graduate Program Director

Admission
Applicants who have obtained a bachelor’s degree in a science (e.g., biology, chemistry, geology, physics), mathematics, or engineering, with a minimum 3.00 grade point average in their major and a 2.80 overall grade point average, are eligible for regular admission to the program. At least one semester of calculus is also required. Ocean and earth sciences are interdisciplinary; consequently, it is expected that applicants have science courses outside their major.

For students wishing to study geological sciences, an undergraduate major in geology is required for regular admission. Students wishing to study physical oceanography should have majored in physics, mathematics, engineering, computer science, meteorology or related physical sciences. Such applicants must have completed 36 hours in one of these fields and completed mathematics through partial differential equations.

An applicant who does not meet all requirements for admission as a regular graduate student may be admitted as a provisional graduate student. Students lacking adequate preparation for the program may make up deficiencies by taking appropriate undergraduate courses.

Requirements
The student shall meet all university requirements for graduate degrees outlined in the Requirements for Graduate Degree section in this catalog, including at least 30 hours of graduate study. A maximum of 12 hours of credit may be transferred into a graduate degree program from non-degree status at Old Dominion University or from another accredited institution, except in the case of an approved interinstitutional program. All students are expected to demonstrate competency in oral communication and proficiency in writing.
Course Distribution
A minimum of 12 hours of basic course work in the four sub-disciplines of oceanography is required of all M.S. students. This core program consists of:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEAS 604</td>
<td>Introduction to Physical Oceanography</td>
<td>3</td>
</tr>
<tr>
<td>OEAS 610</td>
<td>Advanced Chemical Oceanography</td>
<td>3</td>
</tr>
<tr>
<td>OEAS 620</td>
<td>Advanced Geological Sciences</td>
<td>3</td>
</tr>
<tr>
<td>OEAS 640</td>
<td>Advanced Biological Oceanography</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 12

A student must achieve a grade of B or better in each of the core courses. The remaining 18 credits are chosen from a list of graduate courses approved by the student’s guidance committee. At least 60 percent of all courses must be at the 600 level or above. For the non-thesis option, up to three hours of research may be used to meet course requirements. For the thesis option, up to six hours of research may be used to meet the course requirements.

Non-Thesis Option
A student in the non-thesis program must pass a written comprehensive examination testing breadth of knowledge in oceanography. The examination is given twice yearly, normally in October and March. The examination grades are fail, pass, or pass with distinction. A student who has failed the examination may retake it only once.

Thesis Option
Before a student embarks on thesis research, a thesis advisory committee must be formed. Further information on university guidelines for forming this committee can be found in the Requirements for Graduate Degrees section of this catalog. The student must also submit a thesis proposal which outlines the research to be undertaken and identifies the resources required for completion of the research. Guidelines for the preparation of the thesis proposal are available from the graduate program director. Any student whose thesis research requires departmental funding must obtain prior approval from the department chair and graduate program director. No funds will be given without this approval. The thesis proposal requires the approval of the graduate program director and the student’s thesis advisory committee.

As part of the thesis requirement, the student is required to present a public defense of the research. The public defense and approval of the thesis by the student’s Thesis Committee satisfy the comprehensive examination requirement. Students in the thesis program should consult the graduate program director regarding the preparation of the M.S. thesis, scheduling a thesis defense, and the final submission of the thesis.

Time Requirement and Field Work
Each student is required to have at least ten days of shipboard experience, fieldwork, or a combination of the two. Scheduled class field trips may not be counted toward this requirement.

Request to Graduate
The student should obtain a copy of the form Application for Graduation from the Registrar’s Office and complete the application. The deadline for submitting this application is listed in the class schedule each semester and normally falls near the end of the semester preceding the one during which graduation is anticipated. It is the student’s responsibility to meet these deadlines and submit the necessary paperwork for graduation.

Removal of Incompletes
At least one month prior to graduation, all incomplete grades should be cleared. An Academic Record Change form is used for this purpose, and the instructor of the course and the department chair need to sign this form.

Doctor of Philosophy - Oceanography
Peter N. Sedwick, Graduate Program Director

Admission
The doctoral degree in oceanography is granted to students who have:

1. mastered definite fields of knowledge, become familiar with research in these specific fields, and developed perceptions of opportunities for further advances;

2. demonstrated the capacity to do original, independent, scholarly investigation or creative work in their specific fields; and

3. shown the ability to integrate the field of specialization with the larger domains of knowledge and understanding.

All students are expected to demonstrate competency in oral communication and proficiency in writing.

All students in the oceanography Ph.D. program are responsible for reading and understanding the regulations and policies set forth here and throughout this catalog regarding requirements for the Ph.D. degree. The essential credit requirements for the Ph.D. are as follows. The student shall complete 48 credit hours beyond the master’s degree or 78 credit hours for students admitted to the program with a bachelor’s degree. Up to 24 credits can be granted for dissertation.

Requirements

Major Advisor and Guidance Committee
A major advisor must be identified to the graduate program director (GPD), at least provisionally, prior to admission to the program. After receiving admission to the program and enrolling, students consult with the GPD and their major advisor about initial course work. Before completion of nine semester hours (i.e. before the end of the student’s first semester), the student will form a guidance committee in consultation with the major advisor. Please see the graduate program director and the Requirements for Graduate Degrees section of this catalog for further information on forming a guidance committee.

Plan of Study—Curriculum Plan
Sometime in the first year of study, the student shall prepare a plan of study with the aid and approval of the guidance committee. Students should see the graduate program director and refer to the Requirements for Graduate Degrees section of this catalog for further information on preparing a plan of study.

Course Work Requirements
Students who do not have an M.S. degree in oceanography normally complete the following within the first year:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEAS 604</td>
<td>Introduction to Physical Oceanography</td>
<td>3</td>
</tr>
<tr>
<td>OEAS 610</td>
<td>Advanced Chemical Oceanography</td>
<td>3</td>
</tr>
<tr>
<td>OEAS 620</td>
<td>Advanced Geological Sciences</td>
<td>3</td>
</tr>
<tr>
<td>OEAS 640</td>
<td>Advanced Biological Oceanography</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours 12

However, waiving the requirement to take any of these core courses requires the approval of the graduate program director. Students must achieve a grade of B or better in each of the core courses. Any student receiving a C (2.0) or lower in any graduate course will be dropped from the program. In consultation with the advisor and guidance committee, students will plan a complete program of course work designed to meet their objectives (see the section above). Depending on the entry status of the student, the following credit hours are also required:

- Those entering the Ph.D. program with an M.S. degree in oceanography must complete any needed core courses (see above), and a minimum of 48 credit hours of lecture courses and dissertation research.

- Those entering the Ph.D. program with a B.S. or M.S. degree in a discipline outside of oceanography shall complete 12 credit hours of the core courses listed above, and a minimum of 66 hours of additional lecture courses and dissertation research, for a total of 78 credit hours.
A maximum of 12 graduate credit hours may be transferred into a graduate degree program from non-degree status at Old Dominion University or from another accredited institution, except in the case of an approved interinstitutional program.

Diagnostic Examination
The guidance committee shall administer a written and oral diagnostic examination during the first semester of residence (or before nine credit hours have been completed) for students entering the program with an M.S. degree in oceanography. For students matriculating with a bachelor’s degree or an M.S. degree in another field, the guidance committee shall administer the diagnostic examination no later than the third semester of residence (or before completion of 27 credit hours). The diagnostic examination will be prepared by the student’s guidance committee in consultation with the graduate program director. The results of this examination are used as guidance for the curriculum plan. The guidance committee may also recommend to the graduate program director, based on the student’s performance in the oceanography core courses, that the diagnostic examination be waived. This must be done in writing, in a memo signed by all members of the student’s guidance committee.

Computer Language Skills
To satisfy this requirement the student must either take a course in MATLAB programming (OEAS 595) or solve a substantial problem by writing an original computer program. The student’s advisor in consultation with the guidance committee develops the problem and a reasonable timetable for its completion. The problem must be solved independently with no help from others. The results will be evaluated by the advisor and guidance committee who will determine whether the student has solved the posed problem to their satisfaction. This computer language skills requirement should be completed before taking the candidacy exam.

Ship Time Requirement and Fieldwork
Each student is required to have at least ten days of shipboard experience, fieldwork, or a combination of the two. Scheduled class field trips may not be counted toward this requirement.

Candidacy Exam
Near the completion of course work and before becoming heavily involved in dissertation work, the student shall pass a candidacy examination designed to test scholarly competence and knowledge of oceanography. The exam has written and oral portions prepared by the guidance committee. Additional details on the structure, form and content of the candidacy exam are available from the graduate program director and in the Requirements for Graduate Degrees section in this Catalog.

Formation of a Dissertation Committee
After the candidacy examination has been passed and the dissertation committee formed, the guidance committee’s responsibilities are completed. The dissertation committee is a new committee and is formed to supervise the student’s dissertation research. Students must see the graduate program director or refer to the Requirements for Graduate Degrees section in this Catalog for further information on the formation of a dissertation committee.

Changes to the dissertation committee must be made in advance of the oral dissertation defense. Such changes are made only with the approval of the GPD and college dean.

Admission to Candidacy
Admission to candidacy is a formal step that occurs after the student has:
1. passed both parts of the Ph.D. candidacy examination;
2. filed a dissertation prospectus approved by the student’s dissertation committee; and,
3. completed all formal course work.

The student must be admitted to candidacy at least 12 months before the time the degree is expected to be received, but usually not before the completion of one-and-a-half years of graduate work.

Dissertation Preparation
General regulations and procedures governing the submission of a doctoral dissertation are given in the Guide for Preparation of Theses and Dissertations (obtained at http://sci.odu.edu/sci/about/information/thesis/index.shtml). Students should read this guide carefully before beginning to write their dissertation. Writing the dissertation as chapters that can be submitted for publication is encouraged.

Please note that the thesis and dissertation guide in place at the start of the semester will remain in force for the entire semester, and any changes made to the guide over the academic year (and the dates of these changes) will be listed on the cover page of the guide. Changes to the previous guide will also be noted on the cover page of the guide, or in a separate document that can be downloaded from the same site as the complete guide. For more information on dissertation preparation and approval in the College of Sciences, see http://sci.odu.edu/sci/about/information/thesis/index.shtml.

Dissertation Defense
The format of a dissertation defense is determined by the dissertation committee with the approval of the GPD. The defense is chaired by the director of the dissertation committee. The chair will act as moderator, ruling on questions of procedure and protocol that may arise during the defense. Students should see the graduate program director or refer to the Requirements for Graduate Degrees section in this catalog for further information on the format of the dissertation defense.

Satisfactory performance on this examination (oral dissertation defense) and adherence to all regulations outlined above complete the requirements for the Ph.D. degree. All requirements for the doctoral degree must be completed within eight calendar years from the date of initial registration in the program.

Dissertation Acceptance and Submission
Once the dissertation committee has approved the dissertation, the student and major advisor must go over the entire dissertation to ensure that it adheres to the format described in the Guide for Preparation of Theses and Dissertations before submitting the dissertation to the GPD for review. Three days should be allowed for this review. Once the GPD has approved the dissertation, the student submits the dissertation to the associate dean in the College of Sciences for approval. All approvals must be completed by the day before commencement. However, the associate dean generally requires that all dissertations be submitted prior to this deadline. Students should consult with the GPD for further details.

Request to Graduate
The student should obtain a copy of the form Application for Graduation from the Registrar’s Office and complete this application. The deadline for submitting this application is listed on the Registrar’s Office website at www.odu.edu/registrar and usually falls near the end of the semester preceding the one during which graduation is anticipated. It is the student’s responsibility to meet these deadlines and submit the necessary paperwork for graduation.

Removal of Incompletes
At least one month prior to graduation, all incomplete grades should be cleared. An Academic Record Change form is used for this purpose, and the instructor of the course and the department chair need to sign this form.

Department of Physics
306 Oceanography/Physics Bldg.
(757) 683-3468
http://sci.odu.edu/physics/
Charles I. Sukenik, Chair
Leposava Vuskovic, Graduate Program Director

The Department of Physics offers programs of study leading to both the M.S. degree in physics and the Ph.D. degree in physics. Primary focus is placed on the Ph.D. program, and most students enrolled for graduate study are enrolled in that program. Students have the opportunity to perform research in state-of-the-art facilities under faculty direction. Graduates are prepared for research at the highest levels in academia, government laboratories, and corporate laboratories.

Admission

Applicants for admission to graduate study must have an earned bachelor’s degree in physics or a closely related discipline from an accredited institution or an equivalent degree from a foreign institution. The applicant is normally required to have a minimum cumulative grade point average of 3.0 on a 4.0 scale. In addition, the general portion of the Graduate Record Examination (GRE) is required for application to either the master’s or the doctoral program; applicants to the doctoral program are strongly encouraged to take the GRE specialized physics test as well. The Test of English as a Second Language (TOEFL) is required of all nonnative speakers of English who have resided in the U.S. for less than ten years.

It is normally expected that most incoming graduate students will be supported as teaching assistants. Old Dominion University requires that all graduate teaching assistants who do not speak English as a first language pass a test of spoken English.

Admission decisions are based on undergraduate achievement, GRE scores, and personal reference letters. Graduate study may commence at the beginning of any academic term. Decisions regarding financial support for students entering in the fall term are normally made by April 15, so a student’s completed application must be received by January 15. Anyone who applies after January 15 should communicate directly with the Department of Physics concerning the availability of support.

Master of Science - Physics

Requirements

A student may select either the thesis or non-thesis option. For either option, each student’s course of study must have the advance approval of the graduate program director.

Non-Thesis Option

Thirty graduate credits that must include the following courses:

- PHYS 556 Intermediate Quantum Mechanics 3
- or PHYS 621 Quantum Mechanics I 3
- PHYS 603 Classical Mechanics 3
- PHYS 604 Classical Electrodynamics I 3
- PHYS 697 Seminar 1

No more than 12 credits numbered at the 500 level may be used to meet this requirement.

Up to 12 credits from other university departments may be used to meet this requirement if approved by the graduate program director.

Written Comprehensive Examination

In addition to these course requirements, the candidate must pass a written comprehensive examination. It is usually taken just before the student’s third semester of study. If a student fails this examination, he or she is allowed a second attempt, which must be at the time when the Written Exam is next given. In all but the most extraordinary circumstances, a student will not be allowed any additional attempts to pass this examination. Normally, this written examination is the same as the written portion of the Ph.D. Candidacy Examination, graded at the master’s level.

Foreign language requirement

None

Thesis Option

Thirty graduate credits that must include the following courses:

- PHYS 556 Intermediate Quantum Mechanics 3
- or PHYS 621 Quantum Mechanics I 3
- PHYS 603 Classical Mechanics 3
- PHYS 604 Classical Electrodynamics I 3
- PHYS 697 Seminar 1
- PHYS 698 Research 3
- PHYS 699 Research 3

No more than 12 credits numbered at the 500 level may be used to meet this requirement.

Up to 12 credits from other university departments may be used to meet this requirement if approved by the graduate program director.

Doctor of Philosophy - Physics

Requirements

The broad requirements for the Ph.D. degree are

1. satisfactory performance in a designated core of graduate courses,
2. successful completion of the Ph.D. Candidacy Examination, which has both written and oral parts,
3. successful completion of a teaching requirement, and
4. satisfactory completion of a dissertation.

Each student’s course of study must have the advance approval of the graduate program director.

Course Requirements

Seventy-eight graduate credits beyond the undergraduate degree or 48 graduate credits beyond the master’s degree must be taken and must include the following courses:

- PHYS 601 Mathematical Methods in Physics 3
- PHYS 603 Classical Mechanics 3
- PHYS 604 Classical Electrodynamics I 3
- PHYS 621 Quantum Mechanics I 3
- PHYS 697 Seminar 1
- PHYS 804 Classical Electrodynamics II 3
- PHYS 807 Statistical Mechanics 3
- PHYS 811 Computational Physics 3
- PHYS 821 Quantum Mechanics II 3
- PHYS 831 Advanced Seminar I 1
- PHYS 832 Advanced Seminar II 1

A minimum of six additional credits for specialized full-semester courses at the 800 level must be taken. A student may waive or substitute for any of these courses with the approval of the graduate program director.

Up to 12 credits from other university departments may be used to meet this requirement if approved by the graduate program director. A student may waive PHYS 832, with the approval of the graduate program director, if he or she presents a paper at a scientific meeting. Before formation of his or her dissertation committee, a student is formally advised about these courses and other academic matters by graduate faculty advisors. There is no foreign language requirement.

Ph.D. Candidacy Examination

A student admitted to the Ph.D. program in physics becomes a bona fide candidate for the Ph.D. degree by passing the Ph.D. Candidacy Examination. The purpose of this comprehensive examination is to determine if a student has the foundation and maturity to begin research in physics. A student who does not pass the Ph.D. Candidacy Examination within the allowed
number of attempts explained below will be dismissed from the Ph.D. program. However, that student would still have the opportunity to satisfy the requirements for the M.S. degree in physics.

The Ph.D. Candidacy Examination consists of two parts—the Written Examination and the Oral Examination. Each part must be passed independently in order to pass the Ph.D. Candidacy Examination.

**Written Examination**

The written examination is given two times each year—in late August and early January. A student admitted to the Ph.D. program must take this examination by the beginning of his or her third semester of graduate study. In circumstances such that the student has not had the appropriate courses to meet this deadline, he or she may petition the Graduate Program Committee for an extension. If a student fails this examination, he or she is allowed a second attempt, which must be at the time when the Written Examination is next given. In all but the most extraordinary circumstances, a student is dismissed from the Ph.D. program after failing the written examination twice.

**Oral Examination**

The Oral Examination is a one-hour presentation given by a student to an oral examination committee (normally consisting of his or her dissertation committee, minus the external member), meeting in closed session, normally on a topic relevant to the student’s dissertation research. This presentation must be made within one year and one semester after a student passes the written examination. A request for extension of the deadline must be made in writing to the Graduate Program Committee.

A student’s dissertation advisor, in consultation with the student, may choose from two possible formats for this presentation:

1. a presentation by the student directly on his or her dissertation research
2. a presentation on a specific topic that the student has been assigned to investigate for several months.

For either option, the student must write a short paper of 10 or fewer pages on his or her presentation topic and give it to all members of the oral examination committee at least two weeks before the scheduled date of the examination. The committee, by majority vote, will determine whether the student passes or fails the oral examination. A student who fails the oral examination will be allowed a second attempt. The student’s dissertation advisor will decide the format and timing of such a second attempt, with the provision that the second attempt must be completed within six months of the first attempt.

**Teaching Requirement**

Each candidate for the Ph.D. degree must earn a minimum of four teaching credits, which are defined in the following way:

- One such credit is awarded for teaching a one-hour recitation for one semester in the Department of Physics, and
- Two such credits are awarded for teaching a one-semester laboratory course in the Department of Physics.

The graduate program director may approve the substitution of an equivalent amount of teaching experience in the Department of Physics for this requirement.

**Dissertation**

The dissertation is the final and most important requirement that must be completed by a candidate for the Ph.D. degree in physics. It must be based on original research in physics that makes a contribution to existing knowledge and be of sufficient quality and interest to merit publication in a refereed physics journal. Research that is classified by the U.S. Government (in a way that restricts its distribution) is not a suitable basis for a dissertation, as one essential characteristic of a dissertation is that its contents must be disseminated freely.

The candidate’s dissertation research is supervised generally by his or her dissertation committee. Close supervision is provided by the candidate’s research advisor, who is a member of the dissertation committee and may be a tenured, tenure-track, research, or adjunct member of the graduate-certified faculty of the Department of Physics. If the research advisor is a tenured or tenure-track member of the faculty, he or she is the chair of the candidate’s dissertation committee. If the research advisor is an adjunct or research faculty member, a tenured or tenure-track graduate-certified faculty member must serve as co-advisor and also serve as chair of the dissertation committee. The dissertation committee is composed of five members, a majority of whom must be tenured or tenure-track members of the graduate-certified faculty of the Department of Physics and one of whom must be a tenured or tenure-track faculty member of the graduate-certified faculty in a department of Old Dominion University other than the Department of Physics. It is the responsibility of the research advisor and the candidate to nominate prospective members for the dissertation committee to the graduate program director, who must formally approve the membership of the dissertation committee.

The format of the dissertation is specified by the Guide for Preparation of Theses and Dissertations, and variations allowed within the Department of Physics are specified by the graduate program director.

**Dissertation Defense**

The final examination that a candidate must pass in order to receive the Ph.D. is an oral examination by the dissertation committee based on the candidate’s public presentation of the results contained in his or her dissertation. This defense is conducted in two phases:

1. a public presentation in front of the dissertation committee that is open to any person who may wish to attend and direct relevant questions to the candidate and
2. a closed session between the candidate and the dissertation committee in which the candidate is questioned further by that committee.

The dissertation committee determines by majority vote whether the candidate passes or fails this final oral defense. If the candidate fails, he or she is allowed only one additional attempt to pass at a later time.

**Applied Physics Endorsement**

A student who meets all other requirements for the Ph.D. in physics may receive an applied physics endorsement by completing PHYS 809 and PHYS 812.

**Department of Psychology**

Mills Godwin Bldg
Norfolk, VA 23529
http://sci.odu.edu/psychology/
Barbara Winstead, Chair

**Graduate Study**

The Department of Psychology offers a program of study leading to the degree of Master of Science with a major in psychology and programs leading to the Doctor of Philosophy with majors in applied experimental psychology, human factors psychology and industrial/organizational psychology.

The department also participates in a program leading to the degree of Doctor of Psychology in clinical psychology. This program, under the direction of the Virginia Consortium Program in Clinical Psychology, is a joint venture of the Departments of Psychology at Old Dominion University and Norfolk State University and the Department of Psychiatry and Behavioral Sciences at Eastern Virginia Medical School.

**Master of Science - Psychology**

Louis H. Janda, Graduate Program Director
The master’s program in psychology offers a course of study leading to the Master of Science with a major in general psychology. The master’s degree program is appropriate for students wishing to enter a doctoral program at Old Dominion or another university or for those seeking the master’s as a terminal degree. The curriculum is designed to provide a strong background in research methods and general psychology so that the student will have a wide range of choices for future professional development.

Graduate students are encouraged to work closely with members of the faculty and to participate in the research and other professional activities that are available within the department. Faculty are involved in research in the general areas of clinical, social, health, developmental, human factors, organizational, personnel, and community psychology. Currently, faculty and students are engaged in research projects on various topics including: personal relationships, coping with discrimination and bias, parenting, work-family conflict, driving behaviors, predictors and interventions for substance abuse and health risk behaviors, hindsight bias, response to alarms, medical modeling and simulation, telework, training of women and minorities in STEM fields, and internet-based training and education.

Admission

To qualify for admission, a candidate must meet the general university admission requirements. In addition, the candidate must present:

1. undergraduate courses in statistics and research methods and nine additional hours in psychology;
2. official scores on the aptitude section of the Graduate Record Examination (GRE) (applicants who do not have a bachelor’s degree in psychology must also take the advanced psychology GRE test); and
3. transcripts of all undergraduate and graduate work.

A brief statement by the student outlining personal goals and academic objectives and three letters of reference (at least two of which are from former college or university teachers) are requested. All credentials in support of applications should be sent to the Office of Admissions.

Requirements

To qualify for the Master of Science in psychology, a student must meet the following requirements:

1. The student must maintain a B average (3.00 on a 4.00 scale) in a minimum of 36 hours of course work.
2. The student is required to successfully complete a core of courses established by the faculty with at least a B (3.00) average in these courses. The core courses consist of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 713</td>
<td>Research Fundamentals</td>
<td>2</td>
</tr>
<tr>
<td>PSYC 727</td>
<td>Analysis of Variance and Experimental Design &amp; PSYC 728</td>
<td>8</td>
</tr>
<tr>
<td>PSYC 731</td>
<td>Human Cognition</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 741</td>
<td>Sensation and Perception</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 651</td>
<td>Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 749</td>
<td>Advanced Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

Completion of the core is a prerequisite for beginning work on the thesis (including registration for PSYC 698 and PSYC 699). Full-time students must complete the core courses in the first year, and part-time students must do so in the first two years.

In addition to completing the core requirements, students must complete a total of 30 hours of course work plus 6 hours of research and thesis. Prior to beginning the thesis research, the student will submit a request to the graduate program director to form a thesis committee. The student will identify two members of the committee and the GPD will appoint the third member. When the student has completed the research, a written thesis must be submitted to the thesis committee. Completion of the thesis depends on acceptance of the thesis by the thesis committee and the graduate program director, as well as passing an oral exam in a public defense of the thesis.

Areas of Concentration

Students receiving a master’s degree in psychology may choose to concentrate their studies in one of four possible areas. The student must complete 12 credit hours in courses relevant to the area and maintain a minimum GPA of 3.00 in those courses. Course credit hours to fulfill the core requirements may not be used toward an area of concentration. The following is a list of the four areas and relevant courses for each area.

Applied Cognitive Psychology

**Required**

- Only 3 credit hours count toward area of concentration
- PSYC 731 Human Cognition 3
- PSYC 741 Sensation and Perception 3

**Other relevant courses**

- PSYC 651 Developmental Psychology 3
- PSYC 663 Intellectual Assessment 3
- PSYC 749 Advanced Social Psychology 3
- PSYC 770 Human Factors Psychology 3
- PSYC 792 Advanced Seminar in Physiological Psychology 3

Clinical Psychology

**Required**

- Select one of the following: 3
  - PSYC 661 Psychopathology
  - PSYC 663 Intellectual Assessment
  - PSYC 664 Personality Assessment

**Total Hours** 3

**Other relevant courses**

- PSYC 651 Developmental Psychology 3
- PSYC 653 Personality Psychology: Theory and Research 3
- PSYC 745 Psychometric Theory 3
- PSYC 792 Advanced Seminar in Physiological Psychology 3

Industrial/Organizational Psychology

**Required**

- Select two of the following: 6
  - PSYC 745 Psychometric Theory
  - PSYC 750 Organizational Psychology
  - PSYC 763 Personnel Psychology

**Total Hours** 6

**Other relevant courses**

- PSYC 749 Advanced Social Psychology 3
- PSYC 836 Multilevel Models: HLM 3
- PSYC 846 Structural Equation Modeling 3
- PSYC 851 Micro Organizational Psychology 3
- PSYC 853 Macro Organizational Psychology 3
- PSYC 864 Human Resource Development 3
- PSYC 865 Advanced Personnel Psychology 3
- PSYC 867 Human Performance Assessment 3

Quantitative and Assessment

**Required**

- PSYC 745 Psychometric Theory 3

**Total Hours** 3
Doctor of Philosophy - Applied Experimental Psychology
Bryan Porter, Graduate Program Director

Admission
The graduate program in applied experimental (AE) psychology admits students at two levels: with a master’s degree or with a bachelor’s degree. Degrees held must be in psychology or a related field. Each applicant must submit:

1. Official scores on the General Test of the Graduate Record Examination (GRE); Applicants with degrees from fields outside psychology must also submit GRE scores for the Subject Test in psychology.
2. A brief statement outlining personal goals and academic objectives; three letters of reference, at least two of which are from former college/university teachers or research supervisors.
3. Transcripts of all prior academic work.
4. Applicants are encouraged to submit a writing sample.

Overview of Topical Areas
The AE program is designed to provide:

1. Broad doctoral training firmly based on psychological theory and basic behavioral science;
2. Great depth of knowledge broadly spread over the fundamental areas of experimental psychology; and
3. Concentration in an area of experimental psychology for applied settings.

The general philosophy and plan of the AE psychology program at Old Dominion University is to provide graduate training consisting of four phases:

1. A core of basic psychology, acquired primarily at the master’s level;
2. In-depth training in statistics, methodology, and grant and manuscript writing;
3. Research experience in a field of AE psychology; and
4. Completion of a dissertation representing a significant contribution to AE psychology. For example, two research fields with which numerous faculty members are involved are health psychology and developmental psychology.

Requirements
The Ph.D. degree in AE requires at least 84 semester hours of credit beyond the bachelor’s degree or at least 48 semester hours of post-master’s training. Students entering the program with a bachelor’s degree must complete the first phase of the program by meeting the requirements for the master’s degree in general psychology (i.e., 36 semester hours with appropriate course work). For the student with a bachelor’s degree, completion of the program requires approximately five years of study. For the student who holds the master’s degree upon entering the Ph.D. program, completion requires approximately three years. The student is required to complete a core of master’s-level courses with at least a B average.

The core courses consist of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 813</td>
<td>Research Project I</td>
<td>2</td>
</tr>
<tr>
<td>PSYC 827</td>
<td>Analysis of Variance and Experimental Design</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 828</td>
<td>Regressional and Correlational Design</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 845</td>
<td>Psychometric Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

- PSYC 651 Developmental Psychology
- PSYC 849 Advanced Social Psychology

Select one of the following:

- PSYC 831 Human Cognition
- PSYC 841 Sensation and Perception

Total Hours 19

Attaining the master’s degree requires two years of study. Following the master’s degree requirements, the student forms a guidance committee of graduate faculty members who assist in developing a plan of study tailored to the student’s needs and interests. The plan of study outlines the minimum of 48 hours of post-master’s training, including:

1. Completion of the remaining required course (PSYC 833, Grant and Manuscript Writing);
2. Completion of one additional quantitative course (3 credits);
3. Maintenance of a strong focus in research methods and statistics;
4. Completion of supplementary courses to support the chosen specialty (e.g., health-related courses to be taken by health specialists); and
5. Development of a viable research program.

Candidacy Examination
Prior to admission to candidacy (i.e., the beginning of formal work on the dissertation), each student is required to pass a written and oral candidacy examination. There are two options for this requirement.

1. Qualifying Exam: questions assess
   A. Core experimental psychology (statistics, methodology, experimental principles, ethics; four hours) and a specialty area (research program and relevant content knowledge; eight hours).
   B. An oral examination follows the written, during which the student defends answers to the written components (two hours).

2. Major Area Paper
   A. A review paper (quantitative or qualitative) or theoretical analysis of a research area designated by the student as an important area for contemporary applied experimental psychology.
   B. The resulting paper should define the student as an expert in that area, and be of publishable quality.
   C. The student must defend the work to the guidance committee, and submit the work for publication in a journal relevant to the student’s research specialty, as a book chapter, or as an approved grant proposal before this option is passed.

Research Emphasis
A major objective of the AE psychology program is to provide the student with substantial experience in planning, designing, conducting, and reporting results of independent research. Toward this end, a student is expected to engage in a variety of research activities. This expectation is reflected in the program’s few traditional classroom course requirements beyond the master’s degree. The time should be spent on mostly research-related activities (e.g., reading, individual study [research], and dissertation). The student is expected to acquire research experiences that go well beyond formal course requirements. These research experiences may take a variety of forms and occur in a variety of settings. For example, the student is encouraged to engage in both laboratory and field research related to the AE
specially, to serve as a member of a larger research team when appropriate or available (perhaps serving as a graduate research assistant on an externally sponsored grant), and to engage in independent non-sponsored research. The student is also encouraged to seek out opportunities to conduct research projects (including grants and contracts funded through the Old Dominion University Research Foundation) on his or her own and in collaboration with faculty members. The accumulation of these research experiences should result in presentation of papers at professional meetings, the publication of manuscripts in refereed journals, the publication of technical reports, and the submission of grant/contract proposals.

**Graduate Student Teaching**

Teaching a course is an experience that is worthwhile regardless of the eventual career role(s) that a student envisions, and the experience should be taken seriously for its professional value. Benefits associated with teaching a course include expanding and solidifying knowledge about general and AE psychology, polishing communication skills, and establishing professional identification. Although there are other ways to acquire these benefits (e.g., presentations at conferences, consulting experiences, organizing and conducting workshops), teaching a course systematically builds these experiences into a student’s Plan of Study. Moreover, any student who plans an academic career should teach one or more courses in preparation for that career. The student should also recognize that during the course of graduate training, financial support is often provided by the Psychology Department from graduate teaching assistant or adjunct teaching funds. This type of financial support almost always requires that the student be partially or fully responsible for teaching a course. The student should be prepared for an eventual obligation to teach a psychology course by enrolling in Teaching of Psychology (PSYC 815).

**Dissertation**

The doctoral dissertation must represent an achievement in research and a significant contribution to knowledge in the major area of study. It is equivalent to more than 24 semester hours of course work.

**Dissertation Defense**

An oral examination in defense of the dissertation is required. The aim of the defense is to explore with the candidate the methodological and substantive contributions of the completed dissertation.

**Research Opportunities**

AE faculty conduct numerous research projects on health and public health, quantitative, cognitive, developmental, social, and ethics topics. Students have access to laboratory facilities as well as field settings in which faculty work. Research is supported by a variety of funding agencies from federal (including the National Institutes of Health) to state agencies. Students are encouraged to become engaged in one of these research programs early in the process of their education.

**Doctor of Philosophy - Human Factors Psychology**

Bryan Porter, Graduate Program Director

**Admission**

The graduate program in human factors (HF) psychology, accredited by the Human Factors and Ergonomics Society, admits students with bachelor’s or master’s degrees from psychology or related fields. Each applicant must submit:

1. Official scores from General Test of the Graduate Record Examination (GRE). Applicants with degrees from fields outside psychology must also submit GRE scores for the Subject Test in psychology.
2. A brief statement by the student outlining the prospective student’s personal goals and academic objectives.
3. Three letters of reference, at least two of which are from former college or university teachers.
4. Transcripts of all prior academic work including grades for experimental methods and statistics courses or equivalent.
5. Applicants are also encouraged to submit a writing sample.

**Overview of the Topical Areas**

The HF doctoral program follows the scientist-practitioner model with emphasis on psychological theory and behavioral science, statistics and research methodology, practical experience, and fundamental and innovative areas of human factors/engineering psychology. The following is a partial list of these areas:

- aviation psychology
- behavioral modeling
- complex system operation
- display design
- driving and navigational performance
- ergonomics
- human-computer interaction
- perception and performance
- medical systems
- neuroergonomics
- simulation
- team performance
- training
- usability testing
- warnings and alarms
- virtual environments
- information processing and workload

**Requirements**

The program requires at least 84 semester hours of credit beyond the bachelor’s degree or approximately 48 hours of post-master’s education. For the individual entering with a bachelor’s degree, the general plan of graduate education consists of four phases:

1. A core of basic psychology, acquired while working toward the master’s degree;
2. Broad education in the general area of human factors psychology;
3. Research and applied experience in human factors psychology; and
4. Completion of a dissertation representing a significant professional contribution to human factors psychology.

For the individual entering with a master’s degree, a minimum of 48 hours of doctoral-level credits is required, based on the faculty’s and the Ph.D. program director’s review of the student’s educational background. Students who enter with a master’s degree will typically pursue a plan of study identical in spirit to the latter three phases of the plan of study followed by a student entering with a bachelor’s degree (see phases listed above).

For the student with a bachelor’s degree, completion of the program requires approximately five years of study. For the student who holds the master’s degree upon entering the Ph.D. program, completion will require approximately three years. A student entering the program with a bachelor’s degree must complete the first phase of the program by meeting the requirements for the master’s degree in general psychology (i.e., 36 semester hours with appropriate course work). The student is required to complete successfully a core of master’s-level courses, with at least a B average in these courses.

The core courses consist of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 813</td>
<td>Research Project I</td>
<td>2</td>
</tr>
<tr>
<td>PSYC 827</td>
<td>Analysis of Variance and Experimental Design</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 828</td>
<td>Regressional and Correlational Design</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 831</td>
<td>Human Cognition</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 841</td>
<td>Sensation and Perception</td>
<td>3</td>
</tr>
</tbody>
</table>
Completion of the first phase requires two years of study. Following the student’s second year, the student forms a guidance committee of graduate faculty members who assist in developing a plan of study tailored to the student’s needs and interests. The plan of study outlines the student’s minimum of 48 hours of post-master’s education.

Candidacy Examination
Prior to admission to candidacy (i.e., the beginning of formal work on the dissertation), each student is required to pass a qualifying examination covering the breadth of the general HF discipline as well as the student’s primary area of concentration. The examination consists of a written part (eight hours) and an oral part (two hours).

Publication and Application
Prior to graduation, students are required to demonstrate their ability to assume first authorship in a refereed journal, and to create an application of research methodology and/or computing skills. An example of such an application might include a data analysis program, a simulation program or a patentable technology innovation.

Practical Experience
The student must obtain professional practice experiences during the course of graduate education. An internship is one excellent option for meeting this requirement. However, the student can also meet the requirement by participating in at least two applied research projects or consulting activities under the direct supervision of a Ph.D. psychologist (or psychologists). The student’s guidance committee establishes the criteria for meeting the professional-practice experience requirement and judges the adequacy of the experiences.

Dissertation
The doctoral dissertation must represent an achievement in research and a significant contribution to knowledge in the major area of study. It is equivalent to no more than 24 semester hours of course work.

Dissertation Defense
An oral examination in defense of the dissertation is required. The aim of the defense is to explore with the candidate the methodological and substantive contributions of the completed dissertation.

Research Opportunities
Lab facilities are available for research in cognition, human perception and performance, modeling and simulation, and psychophysiology. Facilities include personal computers, local area networked testing stations, sound-attenuated testing chambers, driving simulators, flight simulators, and a human-computer interaction laboratory. Access to university computing and multimedia development facilities is also available. To complement the program’s emphasis on modeling and simulation, students also have access to the Virginia Modeling, Analysis and Simulation Center (VMASC). VMASC is an ODU-affiliated research and development center where scientists from a number of disciplines create and test computer models and simulation applications to benefit industrial, academic, and governmental interests.

Research is supported by private sector, local, state or federal governmental organizations (e.g., National Science Foundation, National Institutes of Health, NASA, etc.), or one of the military services. Doctoral students are encouraged to become engaged in one of these research programs early in the process of their education.
For the student with a bachelor’s degree, completion of the program requires approximately five years of study. For the student who holds the master’s degree upon entering the Ph.D. program, completion requires approximately three years. A student entering the program with a bachelor’s degree must meet the requirements for the master’s degree in general psychology (i.e., 36 semester hours with appropriate course work). The student is required to complete a core of master’s-level courses with at least a B average.

The core courses consist of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 813</td>
<td>Research Project I</td>
<td>2</td>
</tr>
<tr>
<td>PSYC 827</td>
<td>Analysis of Variance and Experimental Design</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 828</td>
<td>Regressional and Correlational Design</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 845</td>
<td>Psychometric Theory</td>
<td>3</td>
</tr>
</tbody>
</table>

**Select two of the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 850</td>
<td>Organizational Psychology</td>
</tr>
<tr>
<td>PSYC 863</td>
<td>Personnel Psychology</td>
</tr>
<tr>
<td>PSYC 651</td>
<td>Developmental Psychology</td>
</tr>
<tr>
<td>PSYC 831</td>
<td>Human Cognition</td>
</tr>
<tr>
<td>PSYC 841</td>
<td>Sensation and Perception</td>
</tr>
<tr>
<td>PSYC 849</td>
<td>Advanced Social Psychology</td>
</tr>
</tbody>
</table>

**Total Hours**

19

Attaining the master’s degree requires two years of study.

Following the student’s second year, the student must form a guidance committee of graduate faculty members who assist in developing a plan of study tailored to the student’s needs and interests. The plan of study outlines the student’s minimum of 48 hours of postmaster’s education.

**Candidacy Examination**

Prior to admission to candidacy (i.e., the beginning of formal work on the doctoral dissertation), each student is required to pass a candidacy exam. There are two methods a student might use to pass the candidacy exam:

1. The student publishes three manuscripts, at least one as first author, in peer-reviewed journals; or
2. The student completes a qualifying examination covering the student’s areas of specialization. The candidate is examined broadly in the areas, not merely in a single aspect of concentration. The examination consists of a written part (12 hours) and an oral part (two hours).

**Practical Experience**

The student must obtain professional practice experiences during the course of graduate education. An internship is one excellent option for meeting this requirement. However, the student can also meet the requirement by active involvement in applied research or consulting activities under the direct supervision of one or more Ph.D. psychologists. The student’s guidance committee establishes the criteria for meeting the professional-practice experience requirement and judges the adequacy of the experiences.

**Dissertation**

The doctoral dissertation is a significant and creative research achievement and a significant contribution to knowledge in I-O psychology. An oral examination in defense of the dissertation is required. The aim of the defense is to evaluate the doctoral candidate’s mastery of the methodological and substantive contributions of the completed dissertation.

**Research Opportunities**

Laboratory and field research programs are conducted by the I-O faculty on such diverse topics as selection systems, training systems, development and implementation of performance appraisal systems, team performance and assessment, work-family interface, workplace diversity and inclusion, organizational change, occupational safety and health, innovation management, telework, virtual teams, and international I-O issues. Research is supported by a variety of agencies such as the National Science Foundation; National Institutes of Health; National Institute for Occupational Safety and Health; the NASA/Langley Research Center; the Virginia Modeling, Analysis and Simulation Center; and the military services. Students are encouraged to become engaged in one of these research programs early in the process of their education.

**Doctor of Psychology - Clinical Psychology**

Robin Lewis, Graduate Program Director

The Department of Psychology participates in a program that awards the degree of Doctor of Psychology (Psy.D.) in clinical psychology. This program, offered through the Virginia Consortium Program in Clinical Psychology, is a joint venture of the Departments of Psychology at Old Dominion University and Norfolk State University and the Department of Psychiatry and Behavioral Sciences at Eastern Virginia Medical School. The combined efforts of these institutions give considerable breadth and depth to this unique program. The emphasis of the program is on the training of highly skilled psychologists. The program uses a “practitioner-scientist” model that emphasizes a balanced integration of clinical and scientific training. The program is accredited by the American Psychological Association.

**Admission**

Detailed information about the program and a downloadable application are available at the program’s website: http://www.sci.odu.edu/vcpcp. To be admitted to the Doctor of Psychology program, the student must have a baccalaureate degree and an acceptable background in psychology. In addition, the applicant must present:

1. Official scores on the Graduate Record Examination
2. A brief statement outlining personal goals and academic objectives
4. A personal interview is also required.

**Requirements**

The Doctor of Psychology program provides students with a high level of professional training. The program consists of a minimum of five years of post-baccalaureate training. The curriculum involves a specific sequence of required courses to ensure mastery of the knowledge and skills necessary for professional competence. The first two years (six semesters) provide for an intense program of basic behavioral science and clinical courses and practica. In the third and fourth years, students complete their advanced training practica and course work as well as an empirical doctoral dissertation. The one-year full-time clinical internship is completed during the fifth year. The internship is not provided by the Virginia Consortium.

**Student Evaluation**

Students are regularly evaluated in both course work and practicum activities. A formal evaluation of student’s progress is conducted annually. At the end of the second year, each student is evaluated through a written and oral comprehensive examination that covers both course and clinical competence.

**Dissertation Award**

The David Leigh Pancost Award is given to the student in the Virginia Consortium Program in Clinical Psychology with the outstanding doctoral dissertation.
Officers of the University

Officers of the Administration

John R. Broderick, M.S., President
Carol Simpson, Ph.D., Provost and Vice President for Academic Affairs
David F. Hargaye, M.Ed., Chief Operating Officer
Robert L. Fenning, M.P., Vice President for Administration and Finance
Mohammad A. Karim, Ph.D., Vice President for Research
Alonzo C. Brandon, B.S., Vice President for University Advancement
Ellen J. Neufeldt, Ed.D., Vice President for Student Engagement and Enrollment Services
September Sanderlin, M.S.Ed., Acting Vice President for Human Resources
Charles E. Wilson, Jr., Ph.D., Dean of the College of Arts and Letters
Gilbert R. Yochum, Ph.D., Dean of the College of Business and Public Administration
Linda Irwin-DeVitis, Ed.D., Dean of the Darden College of Education
Oktay Baysal, Ph.D., Dean of the Frank Batten College of Engineering and Technology
Shelley C. Mishoe, Ph.D., Dean of the College of Health Sciences
Chris Platsoucas, Ph.D., Dean of the College of Sciences
David Metzger, Ph.D., Dean of the Honors College and Interim Dean of Academic Enhancement
Virginia O’Herron, M.S.L.S., M.B.A., University Librarian
M’hammed Abdous, Ph.D., Assistant Vice President for Teaching and Learning with Technology
A. Osman Akan, Ph.D., Associate Dean, Frank Batten College of Engineering and Technology
Dana G. Allen, B.S., Assistant Vice President, Alumni Relations
Judith Araman, M.A., Site Director, New River Community College
Alireza Ardalan, Ph.D., Associate Dean, College of Business and Public Administration
Elizabeth A. Batu, M.S., Associate University Registrar
Deborah Blythe Bauman, M.D.H, Assistant Dean, College of Health Sciences
Pamela E. Beatty, B.A., Site Director, Naval Station Norfolk
Steven D. Bell, M.I.I.A, Director, Study Abroad Programs
Richard Benji, Ph.D, Associate Dean, College of Health Sciences
Mark Benson, B.A., Assistant Vice President for Athletic Development
Rick Berry, M.P.A, Executive Director of Construction and Procurement Services
Kenneth Blow, Director, Risk Management
Berndt H. Bohm, Ph.D, Assistant Dean, Frank Batten College of Engineering and Technology
To be Named, Director of Undergraduate Admissions
Judith M. Bowman, M.Ed, Assistant Vice President for Undergraduate Studies
Douglas Brown, M.S.Ed, Site Director, Wytheville Community College
Kenneth L. Brown, M.S., Senior Associate Athletic Director for Internal Operations
Victoria E. Burke, M.S. Director, Publications
Leigh L. Butler, Ph.D, Assistant Dean, Teacher Education Services, Darden College of Education
Andrew R. Casillo, M.S.Ed., Associate Vice President for Distance Learning
David L. Chase, M.Ed, Assistant Vice President for Site Operations and Military Programs
Lesa C. Clark, M.Ed, Assistant Dean, Intercultural Relations
Nancy Collins, M.A, Site Director, Eastern Shore Community College
Jeremiah F. Creedon, Ph.D, Director, Transportation Research
Robert F. Curry Jr., Ed.D, Director, Advising, Distance Learning
Jane H. Dané, M.Ed., Associate Vice President for Enrollment Management
Michael M. DeBowes, M.Ed., Director, Student Conduct and Academic Integrity
Chandra R. De Silva, Ph.D., Vice Provost for Program and Faculty Development
Kirk Dewyea, M.S, Site Director, Piedmont Virginia/Blue Ridge Community Colleges
Elisabeth V. Dickie, M.Ed., Acting Director, Office of Educational Accessibility
To be Named, Director, The Women’s Center
Frances Dolloph, Ed.D, Site Director, Germanna Community College
Lawrence G. Dotolo, Ph.D, Administrator of the Virginia Tidewater Consortium for Higher Education
James P. Duffy, M.P.A, Associate Vice President for Academic Affairs
To be Named, Director, Executive Development Center
Robert F. Dunker, M.D, Medical Director/Physician
ReNeé S. Dunman, J.D, Assistant Vice President for Institutional Equity and Diversity
Carolyn Eakin, M.A, Director, Technology and Data Analysis for Enrollment Management
Karen Eck, Ph.D, Director of Research Development
Bill Edmunds, M.B.A, Acting Administrative Operations Manager
To be Named, Director, Satellite Network and Technical Support
Elizabeth H. Esinhart, J.D, Director of Interdisciplinary Studies
Dale J. Feltes, M.B.A, Director of Design and Construction
To Be Names, Director of Financial Aid
William R. Fisher, III, B.S., CPA, Director of Financial and Workflow Operations
Jennifer Foss, M.S, Director, Student Health Center
George J. Fowler, M.S.L.S., Associate University Librarian for Information Resources
Anita Friedmann, Ph.D, Assistant Vice President for Development
Morel A. Fry, M.A.L.S, Administrative Services Librarian
Robbin Fulmore, M.Ed, Director, International Student and Scholar Services
Daniel J. Genard, III, M.Ed, Associate Vice President for Advancement
R. Dillard George III, M.S., PE, Director, Facilities Management
Ann Grandy, B.A., Executive Director, Community Development Corporation
Rhonda L. Harris, M.P.A., Director, Public Safety/Chief of Police
Patrick G. Hatcher, Ph.D, Executive Director, Virginia Coastal Energy Research Consortium
William T. Heffelfinger, M.S.Ed, Director of Graduate Admissions
Richard Heller, Ph.D, Executive Director, Frank Reidy Research Center for Bioelectrics
Deane A. Hennett, M.B.A., CPA, University Auditor
Carole S. Henry, M.S, Executive Director, Housing & Residence Life
Mary-Ann Heubusch, M.S, Site Director, Fort Myer and the Pentagon
Regenia L. Hill, M.S, Regional Director, Northern/Eastern Virginia, Distance Learning
Marena Hill-Bartos, M.A, Site Director, J. Sargeant Reynolds Community College
Jacqueline F. Hines, M.S, Director, Student Support Services Program
Carol R. Hudson, Jr., M.S, Director, Sports Information
Pamela E. Jackson, B.B.A, Interim Director, Institutional Equity and Equal Opportunity/Affirmative Action
Todd K. Johnson, M.S, Assistant Vice President for Auxiliary Services
Sharon L. Judge, Ph.D, Associate Dean, Graduate Education and Assessment, Darden College of Education
Janet Katz, Ph.D, Associate Dean, College of Arts and Letters
Nicole C. Kiger, M.S.Ed., Director, Student Activities and Leadership Programs
Brenda Neumon Lewis, Ph.D, Associate Vice President for Graduate Studies
Michael S. Little, M.S.Ed, Director, Computer Information Services
Judy Luedtke, M.S, Director, New Student and Parent Programs
To Be Named, Director, Recreation and Wellness
Sharon M. Martin, Ed.D, Site Director, Central Virginia Community College
Richard A. Massey, M.B.A, Associate Vice President, Foundations/Chief Investment Officer
Trinity P. Massey, B.B.A., Director of Donor Relations
Terri M. Mathews, Ph.D, Associate Dean, College of Sciences
To Be Named, Director of Parking and Transportation Services
218

OFFICERS OF THE ADMINISTRATION AND DEPARTMENT CHAIRS

David J. McMillan, M.S, Site Director, MCB Quantico/NSWC Dahlgren
Karen Meier, B.A, Assistant Vice President for Institutional Advancement/Director, University Events and Licensing
Constance L. Merriman, Ph.D, Assistant Dean, College of Business and Public Administration
Barry S. Miller, Ph.D., Director, Peninsula Higher Education Center
Susan C. Mitchell, M.S, Director, Webb University Center & Auxiliary Enterprises
David R. Morgan, M.S, Site Director, Langley Air Force Base
Jennifer Mullen-Collins, M.P.A, Assistant Vice President for Marketing and Communications
R. Earl Nance, J.D, Assistant Attorney General and General Counsel
John A. Nunnery, Ed.D., Executive Director, Center for Educational Partnerships
Melanie T. O’Dell, B.S., C.P.A, Director of Finance and Accounting Operations
Renee E. Olander, M.F.A, Director, Virginia Beach Higher Education Center
Christopher J. Osgood, Ph.D, Associate Dean, College of Sciences
Priya Panikkar, M.A, Director, Development Research
James R. Pearson, B.S, Director of Real Estate and Space Management
Ann H. Pettingill, M.S.L.S, Associate University Librarian
James Worth Pickering, Ed.D, Assistant Vice President for Institutional Research and Assessment
Deborah Polca, M.Ed, Senior Associate Athletic Director
Francis Puchalski, M.A, Director, Programs for Continued Learning and Co-Director, Career Switcher Program
Miguel Ramlatchan, M.E.M, Director, Engineering and Operations, Academic Technology Services
Terri W. Reddings, M.S, Site Director, Virginia Western Community College
Billie Reed, Ph.D., Executive Director, Virginia Commercial Space Flight Authority
Dawn M. Richardson, B.A, Director, The Dominion Fund
Steven M. Risch, M.S, Director of International Admissions
Jerry B. Robertson, M.S., PE, Associate Vice President, ODU Business Gateway
Nancy A. Rudolph, M.S, Site Director, Lord Fairfax Community College
Victoria A. Sager, M.A, Site Director, Olympic College
To Be Named, Director of Human Resources
Gloria Savage-Early, M.S, Site Director, Rappahannock Community College
Camden Wood Selig, Ed.D, Director of Athletics
Marcelo E. Siles, Ph.d., Executive Director, International Programs
David H. Silvis, M.A., Director, English Language Center
Martha Smith Sharpe, Ed.D, Vice Provost for Planning and Institutional Effectiveness
To Be Named, Director, Tri-Cities Center
John A. Sokolowski, Ph.D, Executive Director, Virginia Modeling, Analysis and Simulation Center
Ann L. Sorenson, M.B.A, Site Director, John Tyler Community College
Christy P. Spencer, M.A.Ed, Site Director, Patrick Henry Community College
Don Stansberry, M.Ed, Dean of Students
Bruce Stewart, J.D, Associate Athletic Director
Araceli Suzara, Ph.D, Director, Filipino American Center
Mary M. Swartz, M.Ed, University Registrar
Deborah L. Swiecinski, M.B.A, Associate Vice President for Administration and Finance
George W. Thompson, M.S.Ed, Director, Center for Major Exploration
Lenora Thompson, Ph.D, Director, Counseling Services
Ollie W. Tolliver, Ed.S, Director, Federal TRIO Programs/Upward Bound
Cecelia Tucker, M.S, Director, Community Relations
Linda L. Vahala, Ph.D, Associate Dean, Frank Batten College of Engineering and Technology
Elaine Ward, M.S.Ed, Site Director, Southwest Virginia/Mountain Empire Community Colleges
James R. Waterfield, B.S, Assistant Vice President for Computing and Communication Services
Sandra M. Waters, M.S, Assistant Dean for Advising and Transfer Services
F. Richard Whalen, M.S.A, Director, Military Affairs
Deborah H. White, M.S, Senior Associate Athletic Director
Robert Wojtowicz, Ph.D, Associate Dean for Research and Graduate Studies, College of Arts and Letters
Ronald R. Woodard, M.Ed, Director of Transfer Services, Distance Learning
James Wright, J.D, Associate University Counsel and Assistant Attorney General
Thomas Wunderlich, M.A, Assistant Dean, Career Management Center
Johnny W. Young, Ed.D., Associate Vice President for Student Engagement and Enrollment Services

Department and School Chairs
DOUGLAS E. ZIEGENFUSS, Ph.D, Accounting
DIANE DEBEIXEDON, M.F.A., Art
WAYNE L. HYNES, Ph.D, Biological Sciences
PETER F. BERNATH, Ph.D, Chemistry and Biochemistry
GARY C. SCHAFFRAN, Ph.D, Civil and Environmental Engineering
STEPHEN PULLEN, Ph.D, Communication and Theatre Arts
NICHOLAS G. BOUNTRESS, Ph.D, Communication Disorders and Special Education
DEANNE SHUMAN, Ph.D., Interim Chair, Community and Environmental Health
DESH RANJAN, Ph.D, Computer Science
DANICA G. HAYS, Ph.D, Counseling and Human Services
MICHELE M. DARBY, M.S, Dental Hygiene
CHRISTOPHER B. COLBURN, Ph.D, Economics
JAY P. SCRIBNER, Ph.D, Educational Foundations and Leadership
SHIRSHAK K. DHALI, Ph.D, Electrical and Computer Engineering
RESIT UNAL, Ph.D, Engineering Management and Systems Engineering
MILETA M. TOMOVIC, Ph.D, Engineering Technology
DANA HELLER, Ph.D, English
ANGELICA J. HUIZAR, Ph.D, Foreign Languages and Literatures
MOHAMMAD NAJAND, Ph.D, Finance
AUSTIN T. JERSILD, Ph.D, History
ROBERT J. SPINA, Ph.D, Human Movement Sciences
JEFFREY P. JONES, Ph.D., Humanities
G. STEVEN RHIEL, Ph.D, Information Technology/Decision Sciences
PAUL J. CHAMPAGNE, Ph.D, Management
ANUSORN SINGHAPAKDI, Ph.D, Marketing
J. MARK DORREPAAL, Ph.D, Mathematics and Statistics
JEN-KUANG HUANG, Ph.D., Mechanical and Aerospace Engineering
SOPHIE K. THOMPSON, M.H.S, Medical Laboratory and Radiation Sciences
BRIAN D. KERNS, M.A., Military Science and Leadership
ROLAND R. MIELKE, Ph.D, Modeling, Simulation and Visualization Engineering
JOHN F. TOOMEY, M. M, Music
THOMAS V. HALLEY, Jr., M.B.A., Naval Science
KAREN KARLOWICZ, Ed.D, Nursing
H. RODGER HARVEY, Ph.D, Ocean, Earth, and Atmospheric Sciences
DALE E. MILLER, Ph.D, Philosophy and Religious Studies
MARTHA L. WALKER, M.S, Physical Therapy
CHARLES I. SUKENIK, Ph.D, Physics
FRANCIS ADAMS, Ph.D, Political Science and Geography
BARBARA WINSTEDT, Ph.D, Psychology
PHILIP A. REED, Ph.D, STEM Education and Professional Studies
RANDY R. GAINERY, Ph.D, Sociology and Criminal Justice
CHARLENE FLEENER, Ph.D, Teaching and Learning
JOHN LOMBARO, Ph.D, Urban Studies and Public Administration
JENNIFER FISH, Ph.D, Women’s Studies
Faculty

Hussein M. Abdel-Wahab (1994; 1980). Professor of Computer Science. B.S., Cairo University (Egypt); A.M., Ph.D., University of Waterloo.

Eileen P. Abrahamsen (1985; 1979). Associate Professor of Communication Disorders and Special Education. A.B., Elmira College; M.S., State University of New York; Ed.D., Columbia University.

Karen Devissier Ackley (2012; 2012). Lecturer of Nursing. B.S.N., M.S.N., State University of New York Health Science Center at Syracuse.


Francis Adams (2011; 1995). Professor of Political Science and Geography. B.A., Saint Thomas College, M.A., Syracuse University; Ph.D., Cornell University. Designated as a University Professor.

Lynn S. Adams (2011; 2011). Instructor of Communication Disorders and Special Education. B.A., Wilkes University; M.S.Ed., Old Dominion University.


Vinod B. Agarwal (1992; 1981). Professor of Economics. A.B., Delhi University (India); A.M., University of Delhi; Ph.D., University of California at Santa Barbara.

A. Osman Akank (1989; 1982). Associate Dean of the Frank Batten College of Engineering and Technology and Professor of Civil and Environmental Engineering. B.S.C.E., Middle East Technical University (Turkey); M.S.C.E., Ph.D., University of Illinois; P.E.

Thomas E. Alberts (1999; 1986). Professor of Mechanical and Aerospace Engineering. B.S., M.S., University of Wisconsin-Milwaukee; Ph.D., Georgia Institute of Technology.

Sacharia Albin (1997; 1986). Professor of Electrical and Computer Engineering. B.Sc., M.Sc., University of Kerala (India); Ph.D., University of Poona (India).

Tami C. Al-Hazza (2010; 2003). Associate Professor of Teaching and Learning. B.S., Old Dominion University; M.Ed., Trenton State College; Ph.D., Old Dominion University.


Nana Amoah (2008; 2008). Assistant Professor of Accounting. B.Sc., University of Science and Technology (Ghana); M.B.A., Howard University; Ph.D., Morgan State University.


Nathaniel M. Apatov (2011; 2011). Associate Professor of Nursing. B.S.N., Pace University; M.H.S., Texas Wesleyan University; M.S.N., Ph.D., Uniformed Services University of the Health Sciences.


Ali Reza Ardalan (1995; 1983). Associate Dean, College of Business and Public Administration and Professor of Information Technology/Decision Sciences. B.Sc., University of Shiraz (Iran); M.B.A., Ph.D., University of Arizona.


Aaron D. Arndt (2008; 2008). Assistant Professor of Marketing. B.S., University of Oregon; M.B.A., Washington State University; Ph.D., University of Oklahoma.


Ivan K. Ash (2012; 2005). Associate Professor of Psychology. B.S., Central Michigan University; M.A., Ph.D., University of Illinois at Chicago.

Robert L. Ash (1976; 1967). Professor of Mechanical and Aerospace Engineering. B.S., Kansas State University; M.S., Ph.D., Tulane University; P.E. Designated as an Eminent Scholar.

Larry P. Atkinson (1985; 1985). Professor of Ocean, Earth, and Atmospheric Sciences and Slover Professor of Oceanography. B.S., M.S., University of Washington; Ph.D., Dalhousie University (Canada). Designated as an Eminent Scholar.

Michel Audette (2011; 2011). Assistant Professor of Modeling, Simulation and Visualization Engineering. B.E., McGill University; M.E., Ecole Polytechnique (Canada); Ph.D., McGill University.

Beth Backes (2009; 2009). Lecturer of English. B.S., Central Missouri State University; M.A., Old Dominion University.


Kathleen J. Bailey (2009; 2009). Lecturer of Nursing. B.S.N., Medical College of Virginia/Virginia Commonwealth University; Primary Care Nurse Practitioner Certificate. University of California – San Diego; M.A., Webster University; M.S.N., State University of New York – Stony Brook.

Cheryl S. Baker (2003; 1993). Senior Lecturer of Communication Disorders and Special Education. B.S., M.S., Ph.D., Old Dominion University.


Ian Baltisky (2005; 1996). Professor of Physics. M.S., St. Petersburg State University (Russia); Ph.D., St. Petersburg Nuclear Physics Institute (Russia).

Catherine M. Banks (2007; 2005). Research Assistant Professor, Virginia Modeling, Analysis and Simulation Center. B.A., B.A., Christopher Newport University; M.A., Ph.D., Old Dominion University.

Han P. Bao (1992; 1992). Professor of Mechanical and Aerospace Engineering and Mitsubishi Kasei Professor of Engineering Manufacturing. B.S., M.S., Ph.D., University of New South Wales (Australia); PE.

Barbara Bartkus (2003; 1997). Associate Professor of Management. B.S., M.B.A., Hawaii Pacific University; Ph.D., Texas A&M University. Designated as a University Professor.

Ian K. Bartol (2009; 2003). Associate Professor of Biological Sciences. B.S., University of Michigan; M.S., Ph.D., The College of William and Mary/Virginia Institute of Marine Science.

David R. Basco (1986; 1986). Professor of Civil and Environmental Engineering. B.S.C.E., M.S.C.E., University of Wisconsin; Ph.D., Lehigh University; P.E.

Deborah B. Bauman (1988; 1982). Assistant Dean of the College of Health Sciences and Associate Professor of Dental Hygiene. B.S.D.H., M.S., Old Dominion University.
Helmut Baumgart (2005; 2005). Professor of Electrical and Computer Engineering and Virginia Micro-Electronics Consortium Endowed Professorship in Microelectronics. B.S., University of Heidelberg (Germany); M.S., Purdue University; Ph.D., University of Stuttgart and Max Planck Institute of Solid State Research (Germany).


Frederick S. Bayerdorfer (1997; 1997). Instructor of Art and Assistant Dean for the Arts, College of Arts and Letters. B.F.A., M.A., Old Dominion University.

Oktay Baysal (1992; 1982). Dean of the Frank Batten College of Engineering and Technology and Professor of Mechanical and Aerospace Engineering. B.S., Technical University of Istanbul; M.S., University of Birmingham (U.K.); Ph.D., Louisiana State University; P.E. Designated as an Eminent Scholar.

Craig A. Bayse (2012; 2001). Professor of Chemistry and Biochemistry. B.S., Roanoke College; Ph.D., Texas A&M University.

Gary A. Beck (2011; 2011). Assistant Professor of Communication and Theatre Arts. B.A., M.A., University of Rhode Island; Ph.D., University of Texas at Austin.

Stephen J. Beebe (2007; 2007). Research Professor, Frank Reidy Research Center for Bioelectronics. B.S., Ohio University; Ph.D., Medical College of Ohio.

Joshua G. Behr (2010; 2001). Research Associate Professor, Virginia Modeling, Analysis and Simulation Center. A.B., M.A., California State University - Fullerton; Ph.D., University of New Orleans.

Lee A. Belfore II (2003; 1997). Associate Professor of Electrical and Computer Engineering. B.S., Virginia Polytechnic Institute and State University; M.S.E., Princeton University; Ph.D., University of Virginia; PE.

Richardan S. Benjamin (1995; 1989). Associate Dean of the College of Health Sciences and Associate Professor of Nursing. B.S.N., Armstrong State College; M.S.N., Medical College of Georgia; M.P.H., University of Pittsburgh; Ph.D., University of Texas.

Linda K. Bennington (2007; 2001). Senior Lecturer of Nursing. B.S., M.S., West Virginia University; B.S.N., M.S.N., Old Dominion University.

Peter F. Bernath (2011; 2011). Professor of Chemistry and Biochemistry. B.S., University of Waterloo (Canada); Ph.D., Massachusetts Institute of Technology.

Robin F. Bernath (2011; 2011). Visiting Assistant Professor of Biological Sciences. B.Sc., University of Toronto; M.A., Ph.D., Boston University.

Ali Beskok (2006; 2006). Professor of Mechanical and Aerospace Engineering and Batten Endowed Professor of Computational Engineering. B.S.M.E., Middle East Technical University (Turkey); M.S.M.E., Indiana University-Purdue University - Indianapolis; M.S.E., Ph.D., Princeton University.

Janet M. Bing (1996; 1982). Professor of English. A.B., Coe College; A.M., Stanford University; Ph.D., University of Massachusetts. Designated as a University Professor.

Jens F. Bischof (2001; 2001). Lecturer of Ocean, Earth, and Atmospheric Sciences. B.S., M.S., Ph.D., Christian Albrechts University (Germany).

Elizabeth C. Black (2011; 2011). B.A., University of Glasgow (United Kingdom); M.A., Ph.D., University of Illinois - Urbana-Champaign.


James D. Blando (2010; 2010). Assistant Professor of Community and Environmental Health. B.S., Rutgers University; M.H.S., Johns Hopkins University; Ph.D., Rutgers University.

James P. Bliss (2012; 2001). Professor of Psychology. B.S., M.S., Ph.D., University of Central Florida.


Robyn Bluhm (2008; 2008). Assistant Professor of Philosophy and Religious Studies. B.A., B.Sc., Laurentian University (Canada); M.A., McMaster University (Canada); Ph.D., The University of Western Ontario (Canada).


Jonna Linkous Bobzien (2010; 2008). Assistant Professor of Communication Disorders and Special Education. B.S., M.S.Ed., Ph.D., Old Dominion University.

Alexander B. Bochdansky (2010; 2004). Associate Professor of Ocean, Earth and Atmospheric Sciences. M.S., University of Vienna (Austria); Ph.D., Memorial University of Newfoundland (Canada).

Przemyslaw Bogacki (1996; 1990). Associate Professor of Mathematics and Statistics. M.S., Adam Mickiewicz University in Poznan (Poland); Ph.D., Southern Methodist University.


Stella Bondi (2008; 2007). Assistant Professor of Engineering Technology. B.S., M.E.M, Ph.D., Old Dominion University.

Timothy B. Bostic (2010; 2006; 2010). Assistant Professor of English. B.B.A., George Washington University; B.A., M.A., Old Dominion University; Ph.D., Virginia Commonwealth University.


Nicholas G. Bountress (1986; 1975). Professor of Communication Disorders and Special Education. B.S., Central Connecticut State College; M.S., Southern Connecticut State College; Ed.D., North Texas State University.

Christopher M. Boyle (2008; 2008). Instructor of Computer Science. B.S., Old Dominion University; M.S., Virginia Polytechnic Institute and State University.


John D. Branch III (2001; 1995). Associate Professor of Human Movement Sciences. B.A., Furman University; M.S., Ph.D., University of South Carolina.


Sandra Breeden (1996; 1996). Lecturer, College of Health Sciences. B.S., M.Ed., Indiana University; M.A. Webster University.


Bradley T. Brick (2009; 2009). Assistant Professor of Sociology and Criminal Justice. B.S., University of Wisconsin – La Crosse; M.A., Georgia State University; Ph.D., University of Missouri – St. Louis.


J. Christopher Brill (2009; 2009). Assistant Professor of Psychology. A.A., University of Cincinnati; B.A., Northern Kentucky University; M.A., University of West Florida; Ph.D., University of Central Florida.


Ann Bruhn (2011; 2010). Assistant Professor of Dental Hygiene. B.S.D.H., M.S.D.H., Old Dominion University.


Heather Bryant (2010; 2010). Lecturer of Art. B.F.A., Old Dominion University, M.F.A., Norfolk State University/Old Dominion University.


Stephen L. Büeltman (2007; 2003). Assistant Professor of Physics. University Physics Diploma, Ph.D., Bielefeld University (Germany).


Brandon M. Butler (2011; 2011). Assistant Professor of Teaching and Learning. A.A., Young Harris College; B.S., Georgia College and State University; M.A.T., Ph.D., University of Georgia.

Carroll M. Butler, Jr. (2006; 1997; 2006). Senior Lecturer of Communication Disorders and Special Education. B.S., M.S.Ed., Old Dominion University.

Mark J. Butler (2000; 1988). Professor of Biological Sciences. B.A., Wittenburg University; M.S., Ohio State University; Ph.D., Florida State University. Designated as an Eminent Scholar.

Ann Campbell (2001; 1996). Senior Lecturer of Nursing. B.A., Old Dominion University; B.S.N., Norfolk State University.

Lan Cao (2011; 2005). Associate Professor of Information Technology/Decision Sciences. B.E, Donghua University (China); M.S., Georgia Institute of Technology; M.S., Ph.D., Georgia State University.


Kent E. Carpenter (2005; 1996). Professor of Biological Sciences. B.S., Florida Institute of Technology; Ph.D., University of Hawaii.

Michelle Carpenter (2009; 2009). Instructor of Marketing. B.A./B.S., Miami University (Ohio); M.A., University of Louisiana – Monroe; M.B.A., Old Dominion University.


Robert W. Case (2002; 1996). Associate Professor of Human Movement Sciences. B.S., Brockport State College; M.A., Michigan State University; Ph.D., Ohio State University.

Mecit Cetin (2012; 2008). Associate Professor of Civil and Environmental Engineering. B.S., Bogazici University (Turkey); M.S., Ph.D., Rensselaer University.


Paul J. Champine (1993; 1980). Professor of Management. A.B., Providence College; A.M., University of Hartford; Ph.D., University of Massachusetts.

David W. Chapman (2011; 2009; 2011). Visiting Assistant Professor of Urban Studies and Public Administration. B.S., M.S., University of Virginia; Ph.D., Old Dominion University.

Thomas E. Chapman (2009; 2009). Assistant Professor of Political Science and Geography. B.A., Michigan State University; M.A., University of Toledo; Ph.D., Florida State University.

Allison T. Chappell (2011; 2005). Associate Professor of Sociology and Criminal Justice. B.S., East Carolina University; M.A., Ph.D., University of Florida.

Shanan L. Chappell (2011; 2011). Research Assistant Professor, Center for Educational Partnerships. B.A., Virginia Wesleyan College; M.Ed., Regent University; Ph.D., Old Dominion University.


Sushil K. Chaturvedi (1991; 1978). Professor of Mechanical and Aerospace Engineering. B.S., Indian Institute of Technology (India); M.S., Case Institute of Technology; Ph.D., Case Western Reserve University.

Chung-Hao Chen (2011; 2011). Assistant Professor of Electrical and Computer Engineering. B.S., M.S., Fu-Jen Catholic University (Taiwan); Ph.D., University of Tennessee.

Yeong-Jer Chen (2011; 2011). Research Assistant Professor, Frank Reidy Research Center for Bioelectronics. B.S.E.E., M.S., Ph.D., Texas Tech University.

Yi-Fan Chen (2008; 2008). Assistant Professor of Communication and Theatre Arts. B.A., National Cheng-Kung University (Taiwan); M.A.J., M.A., Marshall University; Ph.D., Rutgers University.


Andrey Chernikov (2011; 2010). Assistant Professor of Computer Science. B.S., M.S., Kabardino-Balkar State University (Russia); Ph.D., The College of William and Mary.

Nikos Chrisochoides (2010; 2010). Professor of Computer Science. B.Sc., Aristotle University (Greece); M.Sc., Ph.D., Purdue University.

Konstantin P. Cigularov (2010; 2010). Assistant Professor of Psychology. B.S., University of Economics (Bulgaria); M.S., East Central University; Ph.D., Colorado State University.


Michael L. Clemons (1999; 1993). Associate Professor of Political Science and Geography. B.A., M.A., University of Maryland-College Park; Ph.D., Atlanta University.

Sheri R. Colberg-Ochs (2009; 1997). Professor of Human Movement Sciences. B.A., Stanford University; M.A., University of California at Davis; Ph.D., University of California at Berkeley.

Christopher B. Colburn (1993; 1987). Associate Professor of Economics. B.A., M.A., University of Texas at Arlington; Ph.D., Texas A&M University.
Faye E. Coleman (1984; 1978). Associate Professor of Medical Laboratory and Radiation Sciences. B.S., Hampton Institute; M.S.M.T., St. John’s University.

Carol Considine (2005; 1999). Associate Professor of Engineering Technology. B.S., Virginia Polytechnic Institute and State University; M.S., University of California at Berkeley.

David P. Cook (2003; 1997). Associate Professor of Information Technology/Decision Sciences. B.S.B.A., M.B.A., Bowling Green State University; Ph.D., University of Kentucky.

Desmond C. Cook (1996; 1981). Professor of Physics. B.Sc. (Honors), Ph.D., Monash University (Australia). Designated as a University Professor.


Elena Craig (2011; 2011). Lecturer of Mathematics and Statistics. A.S., Orange County Community College (New York); B.S., M.S., Ph.D., Old Dominion University.


Filip D. Cuckov (2011; 2009). Lecturer of Electrical and Computer Engineering. B.S., M.S., Ph.D., Old Dominion University.


Gregory A. Cutter (1994; 1982). Professor of Ocean, Earth, and Atmospheric Sciences. B.A., Revelle College, University of California at San Diego; Ph.D., University of California at Santa Cruz.

Martha M. Daas (2008; 2002). Associate Professor of Foreign Languages and Literatures. B.A., University of Michigan; M.A., Ph.D., University of Texas - Austin.

Mengyan Dai (2011; 2011). Assistant Professor of Sociology and Criminal Justice. B.A., LL.B., University of Science and Technology of China; Ph.D., University of Cincinnati.


Mona Danner (2007; 1993). Professor of Sociology and Criminal Justice. B.A., University of Missouri-Kansas City; M.A., Sam Houston State University; Ph.D., The American University.

Dennis A. Darby (1988; 1974). Professor of Ocean, Earth, and Atmospheric Sciences. B.S., M.S., University of Pittsburgh; Ph.D., University of Wisconsin at Madison.


Daniel M. Dauer (1987; 1975). Professor of Biological Sciences. B.S., Old Dominion University; Ph.D., University of South Florida. Designated as an Eminent Scholar. Joint appointment with the Department of Ocean, Earth, and Atmospheric Sciences.
George J. Fowler (2011; 2011). Associate University Librarian for Information Resources and Librarian III. B.S., M.S.L.S., University of North Texas.


Michael Lance Frazier (2010; 2010). Assistant Professor of Management. B.S., Oklahoma State University; M.B.A., Oklahoma City University; Ph.D., Oklahoma State University.

Vaughan B. Frederick (2009; 2009). Lecturer of Women’s Studies. B.A., Georgia State University; M.A., Old Dominion University.


Robert A. Gable (1990; 1984). Professor of Communication Disorders and Special Education. B.S., Kutztown College; Ed.S., Ph.D., George Peabody College of Vanderbilt University. Designated as Eminent Scholar.

Holly Gaff (2007; 2007). Assistant Professor of Biological Sciences. B.S., Taylor University; Ph.D., University of Tennessee – Knoxville.


Joanna K. Garner (2011; 2011). Research Assistant Professor, Center for Educational Partnerships. B.S.c., M. Phil., University of Surrey (United Kingdom); Ph.D., The Pennsylvania State University.


David T. Gauthier (2008; 2008). Assistant Professor of Biological Sciences. B.S., Michigan State University; Ph.D., Virginia Institute of Marine Science of The College of William and Mary.

Gagik Gavilian (2007; 2007). Research Assistant Professor of Physics. B.Sc.; Yerevan State University (Armenia); M.Sc., Ph.D., University of New Hampshire.

Sabra B. Gear (2008; 2008). Lecturer of Communication Disorders and Special Education. A.A.S., Southside Virginia Community College; B.A., Mary Baldwin College; M.S.Ed., Ph.D., Old Dominion University.

Jennifer E. Georgen (2008; 2008). Assistant Professor of Ocean, Earth and Atmospheric Sciences. B.A., University of Virginia; Ph.D., Massachusetts Institute of Technology/Woods Hole Oceanographic Institute.

Anne M. Geyer (1993; 1993). Lecturer in the English Language Center. B.S., Ohio State University; M.A., Old Dominion University.

Adrian V. Gheorghie (2006; 2006). Professor of Engineering Management and Systems Engineering and Batten Endowed Chair in System of Systems Engineering. M.B.A., Academy of Economic Studies (Romania); M.Sc., M.Sc., Bucharest Polytechnic Institute (Romania); Ph.D., City University London (United Kingdom).

Elizabeth F. Giles (1999; 1994). Senior Lecturer of Physical Therapy. B.S., Medical College of Virginia; M.S., Ph.D., Old Dominion University.


Karen E. Higgins Gillikin (2010; 2010). Lecturer of Nursing. B.S.N., Old Dominion University; M.S., M.S.N., Virginia Commonwealth University/ Medical College of Virginia.


David M. Godden (2010; 2008). Assistant Professor of Philosophy and Religious Studies. B.A., Wilfrid Laurier University (Canada); M.A., York University (Canada); Ph.D., McMaster University (Canada).

Alexander L. Godunov (2011; 2005). Associate Professor of Physics. M.S., Ph.D., Moscow State University (Russia).


Edwin Gómez (2006; 2000). Associate Professor of Human Movement Sciences. B.S. Salem State College; M.S., Rochester Institute of Technology; Ph.D., Michigan State University.

Oscar R. Gonzalez (1993; 1988). Associate Professor of Electrical and Computer Engineering. B.S., University of Idaho; M.S., Ph.D., University of Notre Dame.

Mahesh Gopinath (2009; 2005). Associate Professor of Marketing. B.Tech., College of Engineering (Trivandrum, India); M.B.A., Institute of Rural Management (India); M.S., Ph.D., University of Michigan - Ann Arbor.


Andrew M. Gordus (2012; 2006). Associate Professor of Foreign Languages and Literatures. B.A., M.A., Bowling Green State University; Ph.D., Arizona State University.

Melva R. Grant (2010; 2010). Assistant Professor of STEM Education and Professional Studies. B.S., Coppin State University; B.S., University of Maryland – College Park; M.Ed., Ph.D., The Ohio State University.

Terri Grant (2011; 2008). Lecturer of Mathematics and Statistics. B.S. and M.S., Christopher Newport University; M.S., Ph.D., Old Dominion University.

Tonia Graves (2011; 2000). Electronic Resources Librarian and Librarian III. B.A., Old Dominion University; M.S.L.S., Catholic University of America.


William Steven Gray (2002; 1996; 1998). Associate Professor of Electrical and Computer Engineering. B.S., Purdue University; M.S., Ph.D., Georgia Institute of Technology.

Ashley Green (2011; 2011). Lecturer in the English Language Center. B.A., Louisiana State University; M.A., University of South Carolina.

Lesley Hope Greene (2012; 2006). Associate Professor of Chemistry and Biochemistry. B.S., Ph.D., University of Miami.


Richard V. Gregory (2003; 2003). Professor of Chemistry and Biochemistry. B.S., Old Dominion University; Ph.D., Clemson University.


John M. Griffith (2011; 1999). Professor of Finance. B.S., University of Southwestern Louisiana; Ph.D., University of Alabama. Designated as a University Professor.


Chester E. Grosch (1973; 1973). Professor of Ocean, Earth, and Atmospheric Sciences and Computer Science. M.E., M.S., Ph.D., Stevens...
Institute of Technology. Designated as an Eminent Professor. Joint appointment with the Department of Computer Science.

**Timothy J. P. Grothaus** (2011; 2005). Associate Professor of Counseling and Human Services. B.A., University of Notre Dame; M.S., Illinois State University; Ph.D., The College of William and Mary.

**Luis Guadano** (2011; 2011). Assistant Professor of Foreign Languages and Literatures. B.A., Universidad Complutense de Madrid (Spain); M.A., Texas A & M University - College Station; Ph.D., University of Minnesota - Twin Cities.

**Eli F. Guler** (2010; 2010). Instructor of English. B.A., Koç University (Turkey); M.A., Old Dominion University.

**Abha Gupta** (2003; 1997). Associate Professor of Teaching and Learning. M.Phil., University of Delhi (India); M.S., Ph.D., University of Arizona.

**Alexander Gurevich** (2011; 2011). Professor of Physics. B.S., M.S., Moscow Institute of Steel and Alloys (Russia); Ph.D., Institute of High Temperatures, USSR Academy of Sciences (Russia).

**George D. Haber** (2008; 2008). Assistant Professor of STEM Education and Professional Studies. B.S., M.S., George Mason University; Ph.D., The Pennsylvania State University.


**John R. Hackworth** (1996; 1988). Associate Professor of Engineering Technology. A.A.S., B.S.E.T., M.E., Old Dominion University. Designed as a University Professor.


**Russell Haines** (2010; 2004). Associate Professor of Information Technology/Decision Sciences. B.S., M.Acc., Brigham Young University; Ph.D., University of Houston.

**James M. Hall** (2011; 2006). Associate Professor of Music. B.M.E., University of Wisconsin – Stevens Point; M.M., University of Arizona; Ph.D., University of Minnesota.

**Maura E. Hametz** (2002; 1996). Associate Professor of History. B.A., Colgate University; Ph.D., Brandeis University.

**Katherine Hammond** (2009; 2006). Assistant Professor of Communication and Theatre Arts. B.A., University of Louisville; M.F.A., University of Georgia.

**Holly A. Handley** (2010; 2010). Assistant Professor of Engineering Management and Systems Engineering. B.S., Clarkson College; M.S., University of California at Berkeley; M.B.A., University of Hawaii at Manoa; Ph.D., George Mason University; PE.


**Julie Zhili Hao** (2012; 2006). Associate Professor of Mechanical and Aerospace Engineering. B.S., M.S., Shanghai Jiao Tong University (China); Ph.D., University of Central Florida.

**Barbara Y. Hargrave** (1995; 1989). Associate Professor of Biological Sciences. B.S., Hampton University; M.S., Medical College of Virginia; Ph.D., Bowman Gray School of Medicine. Joint appointment with the School of Physical Therapy.

**Carla J. Harrell** (2010; 2002). Senior Lecturer of Communication and Theatre Arts. B.S., M.A., Old Dominion University.

**Richard F. Harrington** (1987; 1987). Associate Professor of Engineering Technology. B.S., Virginia Polytechnic Institute and State University; M.S., Ph.D., Old Dominion University.

**Shannon T. Harrington** (2009; 2009). Lecturer of Nursing. B.S.N., Old Dominion University; M.S.N., University of Virginia. 

**Alexander Harris, Jr.** (2007; 2007). Lecturer in the English Language Center. B.S., M.A., Old Dominion University.

**Adrienne Grant Hartgerink** (2011; 2011). Lecturer of Nursing. B.S.N., James Madison University; M.S.N., Uniformed Services University of the Health Sciences; Ph.D., University of Minnesota - Minneapolis.

**Dennis L. Harvey** (2011; 2011). Instructor of Finance. B.S., Old Dominion University; M.B.A., M.H.R., Troy State University.

**H. Rodger Harvey** (2010; 2010). Professor of Ocean, Earth, and Atmospheric Sciences. B.S., Virginia Polytechnic Institute and State University; Ph.D., The University of Georgia.

**Frances Janet Hassencahl** (2010; 1976). Associate Professor of Communication and Theatre Arts. A.B., Goshen College; M.A., Ph.D., Case Western Reserve University.

**Lawrence J. Hatah** (1992; 1976). Professor of Philosophy and Religious Studies and Louis I. Jaffe Professor of Arts & Letters. A.B., A.M., Villanova University; Ph.D., Fordham University. Designated as a University Professor and an Eminent Scholar.

**Patrick G. Hatcher** (2005; 2005). Professor of Chemistry and Biochemistry and Batten Endowed Chair in Physical Sciences. B.S., North Carolina State University; M.S., University of Miami; Ph.D., University of Maryland - College Park. Joint appointment with the Department of Ocean, Earth and Atmospheric Sciences.

**Mark D. Havey** (1991; 1980). Professor of Physics. B.S., University of Maine; Ph.D., University of New Hampshire. Designated as an Eminent Scholar.

**Janice Hawkins** (2008; 2008). Lecturer of Nursing. B.S.N., University of South Carolina; M.S.N., Medical University of South Carolina.

**Danica G. Hays** (2009; 2006). Associate Professor of Counseling and Human Services. B.S., Kennesaw State University; M.S., Ph.D., Georgia State University.

**Jing He** (2009; 2009). Associate Professor of Computer Science. B.S., Jilin University (China); M.S., New Mexico State University; Ph.D., Baylor College of Medicine.

**Ingo K. Heidbrink** (2010; 2007). Professor of History. M.A., Ph.D., University of Hamburg (Germany); Dr. phil. habil., University of Bremen (Germany).


**Loree C. Heller** (2010; 2008). Associate Professor of Medical Laboratory and Radiation Sciences. B.S., Oregon State University; M.S., Long Island University; Ph.D., University of South Florida College of Medicine.

**Richard Heller** (2008; 2008). Professor of Medical Laboratory and Radiation Sciences and Executive Director of the Frank Reidy Research Center for Bioelectrics. B.S., Oregon State University; M.S., Long Island University – C.W. Post Center; M.S., Ph.D., University of South Florida College of Medicine.

**Laurie J. Henry** (1999; 1993). Associate Professor of Accounting. B. Envr. Design, North Carolina State University; M.P. Acct., Loyola College; Ph.D., University of Mississippi. Designated as a University Professor.

**James M. Henson** (2011; 2005). Associate Professor of Psychology. B.S., Truman State University; M.A., Ph.D., University of California at Los Angeles.

**Patricia Hentosh** (2005; 2005). Professor of Medical Laboratory and Radiation Sciences. B.S., The Ohio State University; S.M., Sc.D., Harvard University, School of Public Health.

Peggy P. Hester (2006; 1999). Professor of Communication Disorders and Special Education. B.S., Carson Newman College; M.A., Ph.D., George Peabody College of Vanderbilt University.


Edward L. Hill (2011; 2005; 2011). Assistant Professor of Human Movement Sciences. B.S., M.S.Ed., Old Dominion University; Ph.D., University of Utah.

Laura C. Hill (2011; 2005; 2011). Lecturer of Human Movement Sciences. B.S., M.S.Ed., Old Dominion University; Ph.D., University of Utah.

Tara M. Hill (2010; 2010). Assistant Professor of Counseling and Human Services. B.A., Otterbein University; M.A., Heidelberg College; Ph.D., University of Toledo.


Matthew C. Hoch (2011; 2011). Assistant Professor of Human Movement Sciences. B.S., East Stroudsburg University; M.S., Ohio University; Ph.D., University of Kentucky.

Joyce Hoffmann (2000; 1994). Associate Professor of English. B.A., Fairleigh Dickinson University; M.S., Boston University; Ph.D., New York University.


Juli Hooper (2011; 2011). Lecturer of Mathematics and Statistics. B.S., Virginia Polytechnic Institute and State University; M.S., Old Dominion University.

Lisa Horth (2010; 2004). Associate Professor of Biological Sciences. B.S., M.S., University of Maryland - College Park; Ph.D., Florida State University.

Gene J. W. Hou (1995; 1983). Professor of Mechanical and Aerospace Engineering. B.S., National Cheng Kung University; M.S., National Taiwan University; Ph.D., The University of Iowa.


Jennifer Leigh Hoyt (2008; 2008). Lecturer of English. B.A., University of Texas at Tyler; M.A., Old Dominion University.

Steve C. Hsiung (2009; 2003). Associate Professor of Engineering Technology. B.Ed., Kaohsiung Normal University (Taiwan); M.S., University of North Dakota; M.S., Kansas State University; Ph.D., Iowa State University.

Fang Q. Hu (2002; 1990). Professor of Mathematics and Statistics. B.S., M.S., Zhejiang University (China); Ph.D., Florida State University.

Qin Hu (2005; 2005). Assistant Professor of Electrical and Computer Engineering. B.S., M.S., University of Electronic Science and Technology of China; Ph.D., Old Dominion University.

Jen-Kuang Huang (1996; 1985). Professor of Mechanical and Aerospace Engineering. B.S., National Taiwan University; M.S., Ph.D., Massachusetts Institute of Technology.

Michael Hueles (1995; 1990). Associate Professor of History. B.A., Swarthmore College; M.A., Virginia State University; Ph.D., Purdue University.

Sylvia C. Hudgins (2004; 1989). Professor of Finance. B.A., Virginia Polytechnic Institute and State University; M.B.A., Old Dominion University; Ph.D., Virginia Polytechnic Institute and State University.


Angelica J. Huizar (2009; 2003). Associate Professor of Foreign Languages and Literatures. B.A., B.A., University of California at Irvine; M.A., Arizona State University; Ph.D., University of California at Irvine.


Charles Hyde (2002; 1993). Professor of Physics. B.A., University of California-San Diego; Ph.D., Massachusetts Institute of Technology.


Samir R. Ibrahim (1985; 1976). Professor of Mechanical and Aerospace Engineering. B.S., M.S., University of Alexandria (Egypt); Ph.D., University of Calgary (Canada); P.E.

Khan M. Iftekharuddin (2011; 2011). Professor of Electrical and Computer Engineering. B.S., Bangladesh Institute of Technology; M.S., Ph.D., University of Dayton.

Luisa A. Igloria (2010; 1998). Professor of English. B.A., University of the Philippines College; Ateneo de Manila University (Philippines); Ph.D., University of Illinois at Chicago.

Linda Irwin-DeVitis (2010; 2010). Dean of the Darden College of Education and Professor of Teaching and Learning. B.S., University of Tennessee; M.Ed., University of New Orleans; Ed.D., University of Tennessee.

Thomas L. Isenhour (2000; 2000). Professor of Chemistry and Biochemistry. B.S., University of North Carolina at Chapel Hill; Ph.D., Cornell University.

Isao Ishibashi (1986; 1986). Professor of Civil and Environmental Engineering. B.S., M.S., Nagoya University (Japan); Ph.D., University of Washington, P.E.

Denise Isibel (2007; 2007). Lecturer of Nursing. B.S.N., Villanova University; M.S.N., University of Texas Health Science Center at San Antonio.

Katherine Jackson (2010; 2002). Senior Lecturer of English. B.A., University of Virginia; M.F.A., Old Dominion University.


Beth Ernst Jamali (2002; 1997). Senior Lecturer of Physical Therapy. B.S., Russell Sage College; M.S., Ph.D., Old Dominion University.


Hueiwang Jeng (2010; 2004). Associate Professor of Community and Environmental Health. B.S., Kaohsuing Medical University (Taiwan); M.S.P.H., SC.D., Tulane University.

Austin Jersild (2001; 1995). Associate Professor of History. B.A., St. Olaf College; M.A., University of Michigan; Ph.D., University of California at Davis.
Shuiwang Ji (2010; 2010). Assistant Professor of Computer Science. M.S., Wuhan University of Science and Technology (China); Ph.D., Arizona State University.

Qiu Jin (2002; 1996). Associate Professor of History. B.A., M.A., Beijing Normal University (China); M.A., Ph.D., University of Hawaii.

Kavonia Hinton Johnson (2010; 2004). Associate Professor of Teaching and Learning. B.S., M.A., North Carolina Agricultural and Technical University; Ph.D., The Ohio State University.


Andrea D. Jones (2010; 2008; 2010). Lecturer of Mathematics and Statistics. B.S., Virginia Polytechnic Institute and State University; M.S., Ph.D., Old Dominion University.

Cynthia M. Jones (1998; 1993). Professor of Ocean, Earth, and Atmospheric Sciences. B.A., Boston University; M.S., Ph.D., University of Rhode Island. Designated as an Eminent Scholar.


Jeffrey P. Jones (2007; 2003). Associate Professor of Communication and Theatre Arts and Director of the Institute of Humanities. B.A., M.A., Auburn University; Ph.D., University of Texas at Austin.

Richard Jones (2009; 1994). Senior Lecturer of Engineering Technology. B.S., Oklahoma State University; M.S., United States Naval Postgraduate School.

Sookyung Joo (2010; 2010). Assistant Professor of Mathematics and Statistics. B.S., M.S., Ewha Womans University (South Korea); Ph.D., Purdue University.

Erin L. Jordan (2010; 2010). Associate Professor of History. B.A., Grinnell College; M.A., Ph.D., University of Iowa.

Ravindra P. Joshi (2001; 1989). Professor of Electrical and Computer Engineering. B.S., M.S., Indian Institute of Technology; Ph.D., Arizona State University. Designated as a University Professor and an Eminent Scholar.

Sharon L. Judge (2007; 2006). Associate Dean of the Darden College of Education and Professor of Communication Disorders and Special Education. B.A., University of Arizona; M.Ed., North Texas State University; Ph.D., University of California at Santa Barbara.

William Q. Judge, Jr. (2006; 2006). Professor of Management and E.V. Williams Endowed Chair of Strategic Management. B.S., Lehigh University; M.B.A., Ph.D., University of North Carolina – Chapel Hill.

Elaine M. Justice (1985; 1979). Associate Professor of Psychology. B.S., Northern Kentucky University; A.M., Marshall University; Ph.D., University of Cincinnati. Designated as a University Professor.


Osama A. Kandil (1985; 1978). Professor of Mechanical and Aerospace Engineering. B.S., Cairo University (Egypt); M.S., Villanova University; Ph.D., Virginia Polytechnic Institute and State University. Designated as an Eminent Scholar.

Deborah Kaneko (2006; 2006). Instructor of Computer Science. B.S., Salisbury University; M.S., Clemson University; M.C.S., Mississippi State University.

Hideaki Kaneko (1991; 1986). Professor of Mathematics and Statistics. B.S., College of Charleston; M.S., Ph.D., Clemson University.

Kiran Karande (2008; 1996). Professor of Marketing. B.S., M.B.A., University of Bombay (India); Ph.D., University of Houston.

Charity Karcher (2009; 2009). Health Sciences Reference Librarian and Librarian II. B.A., Eckerd College; M.L.I.S., University of South Carolina.

Karen Anne Karlowicz (2009; 1997). Associate Professor of Nursing. B.S., Johns Hopkins University; M.S.N., Catholic University of America; Ed.D., Nova Southeastern University.

Kimberly A. Karnes (2010; 2010). Assistant Professor of Political Science and Geography. B.A., Christopher Newport University; M.A., Ph.D., University of Maryland – College Park.


Regina C. Karp (1993; 1993). Associate Professor of International Studies. B.A., University of Keele (U.K.); Ph.D., University of Lancaster (U.K.).

Andrey Kasparov (2003; 1997). Associate Professor of Music. M.M. (Piano), M.M. (Composition), Moscow State Conservatory (Russia); D.M., Indiana University.


Janet E. Katz (1984; 1979). Associate Dean of the College of Arts and Letters and Associate Professor of Sociology and Criminal Justice. A.B., Kalamazoo College; A.M., Ph.D., State University of New York at Albany.

Charles B. Keating (2006; 1994). Professor of Engineering Management and Systems Engineering. B.S., United States Military Academy; M.A., Central Michigan University; Ph.D., Old Dominion University.


Michelle L. Kelley (2000; 1988). Professor of Psychology. B.S., M.S., University of Oklahoma; Ph.D., University of Houston.


Katharine Clark Kersey (1983; 1969). Professor of Teaching and Learning. A.B., Westminster College; M.S.Ed., Old Dominion College; Ph.D., University of Virginia. Designated as a University Professor.


Tahsin Khajah (2011; 2011). Lecturer of Engineering Technology. B.S., Razi University (Iran); M.S., Sharif University (Iran).

Asad J. Khattak (2006; 2006). Professor of Civil and Environmental Engineering and Batten Endowed Chair in Transportation Engineering. B.Sc., NWFP University of Engineering and Technology (Pakistan); M.S., Ph.D., Northwestern University.


Nak-Kyeong Kim (2008; 2008). Assistant Professor of Mathematics and Statistics. B.S., Seoul National University (Korea); M.S., Ph.D., Purdue University.

Sue Crownfield Kimmel (2010; 2010). Assistant Professor of Teaching and Learning. B.S., Guilford College; M.S.L.S., University of North Carolina at Chapel Hill; Ph.D., University of North Carolina at Greensboro.


Nancy K. Klein (1992; 1986). Associate Professor of Music. B.A., University of Richmond; M.M.Ed., Eastern Kentucky University; Ph.D., New York University. Designated as a University Professor.
John M. Klink (1996; 1989). Professor of Ocean, Earth, and Atmospheric Sciences. B.S., Clemson University; M.S., University of North Carolina; Ph.D., North Carolina State University.

Ryan L. Klinger (2011; 2011). Assistant Professor of Management. B.S., M.S., Ph.D., University of Florida.

Stephen B. Knisley (2009; 2009). Professor of Mechanical and Aerospace Engineering and Batten Endowed Professor of Biomedical Engineering. B.S.E., Duke University; Ph.D., University of North Carolina – Chapel Hill.


Miltiadis Kotinis (2008; 2008). Assistant Professor of Mechanical and Aerospace Engineering. Diploma, National Technical University of Athens (Greece); M.S.E., Ph.D., University of Michigan.

Karen Kott (2006; 2006). Associate Professor of Physical Therapy. B.S., State University of New York at Buffalo; M.S., State University College at Buffalo; Ph.D., State University of New York at Buffalo.


John E. Kroll (1981; 1976). Associate Professor of Mathematics and Statistics. B.S., M.S., University of California, Los Angeles; Ph.D., Yale University.


Terry Kubichan (2005; 1996). Senior Lecturer of Accounting. B.S., M.S., Old Dominion University; CPA, CMA.

Sebastian Kuhn (2003; 1992). Professor of Physics. Vordiplom (B.S.), University of Dusseldorf (Germany); Diplom (M.S.), University of Bonn (West Germany). Designated as an Eminent Scholar.

Sanjeev Kumar (2010; 2010). Assistant Professor of Civil and Environmental Engineering. B.S., M.S., Ph.D., Old Dominion University.


Vishnu Kumar K. Lakadawala (1989; 1983). Associate Professor of Electrical and Computer Engineering. B.E., Bangalore University; M.E., Indian Institute of Sciences; Ph.D., University of Liverpool (U.K.).


Rafael Landau (2009; 2003). Associate Professor of Engineering Management and Systems Engineering. B.S., Central Technological University (Venezuela); M.S., Ph.D., University of Central Florida.

Richard N. Landers (2009; 2009). Assistant Professor of Psychology. B.A., University of Tennessee–Knoxville; Ph.D., University of Minnesota – Twin Cities.

Drew Landman (2010; 1987). Professor of Mechanical and Aerospace Engineering. B.S., M.S., E., Lehigh University; Ph.D. Old Dominion University; PE.

Mark A. Lane (2011; 2011). Associate Professor of Finance. B.B.A., M.B.A., University of Central Arkansas; Ph.D., University of Missouri - Columbia.

Philip J. Langlais (2003; 2003). Professor of Psychology. B.A., Salem State College; M.A., University of Texas Medical Branch at Galveston; Ph.D., Northeastern University.


Mounir Laroussi (2008; 2002). Professor of Electrical and Computer Engineering. B.S., Technical University of Sfax (Tunisia); M.S., National School of Radio-Electricity (France); Ph.D., University of Tennessee – Knoxville.


Louis Steven Latham (2003; 2003). Instructor of Music. B.A., Old Dominion University; M.A., University of Virginia.

Cathy Lau-Barraco (2009; 2009). Assistant Professor of Psychology. B.A., M.S., Ph.D., University of Central Florida.

Carolyn J. Lawes (2001; 1993). Associate Professor of History. B.A., University of Santa Clara; M.A., Ph.D., University of California-Davis.

Roland W. Lawrence (2012; 2006). Associate Professor of Engineering Technology. B.S., M.S., Old Dominion University; Ph.D., North Carolina State University.


Amy H. Lee (2007; 2001; 2004). Senior Lecturer of Nursing. B.S.N., Niagara University; M.S.N., University of Virginia.

Guang-Lea Lee (2004; 1996). Associate Professor of Teaching and Learning. B.H.E., University of Suwon (South Korea); M.S., Chicago State University; Ph.D., University of Minnesota.

James Wei Fu Lee (2010; 2010). Associate Professor of Chemistry and Biochemistry. M.S., Ph.D., Cornell University.

Jinsun Lee (2009; 2009). Assistant Professor of Communication and Theatre Arts. B.A., Seoul National University (Korea); M.A., Yonsei University (Korea); Ph.D., Rutgers University.

Larry Duane Lee (1986; 1986). Associate Professor of Mathematics and Statistics. B.S., M.S., Illinois State University; Ph.D., University of Missouri-Columbia.

Soo-Hoon Lee (2010; 2004). Associate Professor of Management. B.B.A., National University of Singapore; Ph.D., University of Washington.

Lorraine Mary Lees (2007; 1979). Professor of History. A.B., Holy Family College (Pennsylvania); A.M., University of Wisconsin at Milwaukee; Ph.D., The Pennsylvania State University. Designated as a University Professor.

Jonathan I. Leib (2008; 2008). Associate Professor of Political Science and Geography. B.A., Mary Washington College; M.A., Ph.D., Syracuse University.

Margaret F. Lemaster (2008; 2008). Assistant Professor of Dental Hygiene. B.S., M.S., Old Dominion University.

Jonathan M. Lester (2011; 2011). Lecturer of Engineering Technology. B.S., Virginia Military Institute; M.S., Ph.D., West Virginia University; PE.

Robert A. Lucking (2005; 1974). Associate Professor of Computer Science. A.B., University of Chicago; A.M., University of Pittsburgh; M.S., Old Dominion University; Ph.D., University of Chicago.


Jiang (John) Li (2006; 2006). Assistant Professor of Electrical and Computer Engineering. B.S., Shanghai Jiao Tong University (China); M.S., Tsinghua University (China); Ph.D., University of Texas at Arlington.

Ling Xia (Lynn) Li (2007; 2001). Professor of Information Technology/Decision Sciences. B.A., Shanghai Normal University (China); M.B.A., University of Alaska; M.B.A., Ph.D., Ohio State University.

Shaomin Li (2005; 2002). Professor of Management. B.A., Peking University (China); Ph.D., Princeton University. Designated as an Eminent Scholar.

Yaohang Li (2010; 2010). Associate Professor of Computer Science. B.S., South China University of Technology; M.S., Ph.D., Florida State University.

Feng Lian (2010; 2010). Instructor of Economics. B.S., M.S., University of Electronic Sciences and Technology (China); M.A., Old Dominion University.


Travis Linnemann (2011; 2011). Assistant Professor of Sociology and Criminal Justice. B.S., Emporia State University; M.S., Ph.D., Florida State University.

Hua Liu (2008; 2007). Assistant Professor of Political Science and Geography. B.A., M.A., Wuhan Technical University of Surveying and Mapping (China); Ph.D., Indiana State University.

Yuping Liu (2008; 2002). Associate Professor of Marketing. B.A., Renmin University of China; Ph.D., Rutgers University.

Tatyana A. Lobova (2010; 2007). Lecturer of Biological Sciences. M.S., St. Petersburg State University (Russia); Ph.D., Komarov Botanical Institute, Russian Academy of Sciences.


Guido W. Lopez (2010; 2007). Associate Professor of Engineering Technology. B.S., M.E., National Polytechnic School (Ecuador); M.S., Ph.D., Northeastern University.

Jonathan W. Lopez (2010; 2010). Lecturer of Sociology and Criminal Justice. B.A., Christopher Newport University; M.A., Old Dominion University.

Kimberly A. Lott (2009; 2009). Lecturer of Nursing. A.S., Florida Community College at Jacksonville; B.S.N., California State University – Dominguez Hills; M.S.N., Old Dominion University.

Frederick A. Lubich (1997; 1997). Professor of Foreign Languages and Literatures. B.A. University of Stuttgart (Germany); M.A., University of Heidelberg (Germany); M.A., Cornell University; Ph.D., University of California at Santa Barbara.

Robert A. Lucking (1989; 1984). Professor of Teaching and Learning. B.S., M.S., Ph.D., University of Nebraska.

Nathan Luetke (2011; 2005). Senior Lecturer of Engineering Technology. B.S., M.S., Old Dominion University.

Li-Shi Luo (2009; 2004). Professor of Mathematics and Statistics. B.Eng., Fuzhou University (China); M.Sc., The University of Western Ontario; Ph.D., Georgia Institute of Technology.

Aundrea L. Lyons (2011; 2011). Lecturer of Human Movement Sciences. B.S., Florida State University; M.S., Mississippi State University; Ph.D., Florida State University.

Poornima Madhavan (2007; 2007). Assistant Professor of Psychology. B.A., Bangalore University (India); M.A., Bharathiar University (India); M.A., Ph.D., University of Illinois at Urbana-Champaign.

Scott R. Maggard (2008; 2008). Assistant Professor of Sociology and Criminal Justice. B.A., University of Central Florida; M.A., Ph.D., University of Florida.

George C. Maihafer (1988; 1982). Associate Professor of Physical Therapy. B.S., State University of New York - Syracuse; M.S., University of Kentucky; Ph.D., Old Dominion University.


Muhammad Arif Malik (2009; 2009). Research Assistant Professor, Frank Reidy Research Center for Bioelectronics. B.Sc., F.Sc., FG Science Degree College, Wah Cantt (Pakistan); M.Sc., M.Phil., Quaid-I-Azam University; Ph.D., Zhejiang University (China).

Kurt J. Maly (1985; 1985). Professor of Computer Science and Kaufman Professor of Computer Science. Diplom Ingenieur, Technische Universität (Austria); M.S., Ph.D., New York University. Designated as an Eminent Scholar.


Carol Leler Mansyur (2011; 2011). Assistant Professor of Community and Environmental Health. B.S., M.A., University of Houston; Ph.D., University of Texas School of Public Health.


Jingdong Mao (2012; 2006). Associate Professor of Chemistry and Biochemistry. B.Sc., M.Sc., Nanjing Agricultural University (China); Ph.D., University of Massachusetts at Amherst.

Mira H. Mariano (2002; 1997). Senior Lecturer of Physical Therapy. B.S., University of Pittsburgh; M.S., Ph.D., Old Dominion University.


Mary E. Marshall (2012; 2003). Senior Lecturer of Philosophy and Religious Studies. B.A., Old Dominion University; M.F.A., University of Arizona; M.A., Ph.D., University of Virginia.

Erika Marsilliac (2010; 2010). Assistant Professor of Information Technology/Decision Sciences. B.A., The Pennsylvania State University; M.B.A., Golley Beacham College; Ph.D., University of Toledo.

Sylvain Marsilliac (2010; 2010). Associate Professor of Electrical and Computer Engineering. B.S., M.S., Ph.D., University of Nantes (France).

Kimberly H. Martin (2011; 2009). Assistant Professor of Sociology and Criminal Justice. B.S., M.S., Georgia State University; Ph.D., University of Missouri – St. Louis.

Claudia A. Mazur (2011; 2011). Lecturer of English. B.A., Hunter College, City University of New York; M.A., Bucknell University; M.F.A., Old Dominion University.

Garrett J. McAuliffe (2004; 1988). Professor of Counseling and Human Services. B.A., City University of New York - Queens College; M.S., State University of New York-Albany; Ph.D., University of Massachusetts. Designated as a University Professor.


Megan McKittrick (2010; 1998; 2005). Associate Professor of Counseling and Human Services. B.A., Louisiana State University; M.Ed., University of Missouri-St. Louis; Ph.D., St. Louis University.

Gayle McCombs (2010; 1998). Professor of Dental Hygiene. A.S., Florida Community College at Jacksonville; B.S., University of West Florida; M.S., University of North Carolina at Chapel Hill. Designated as a University Professor.

John R. McConaugha (1988; 1980). Associate Professor of Ocean, Earth, and Atmospheric Sciences. B.S., University of Miami (Coral Gables); Ph.D.; University of Southern California.

Pinky A. McCoy (2003; 2001). Lecturer of Chemistry and Biochemistry. B.S., Philadelphia College of Pharmacy and Science; Ph.D., Old Dominion University and Eastern Virginia Medical School.


Megan McKittrick (2011; 2011). Instructor of English. B.A., California State University - Fresno; M.A., Old Dominion University.

John McManus (2008; 2008). Assistant Professor of English. B.A., Goucher College; M.A., Hollins University; M.F.A., University of Texas at Austin.

Michael K. McShane (2007; 2007). Assistant Professor of Finance. B.S., University of New Mexico; M.B.A., Western Kentucky University; Ph.D., University of Mississippi.

Gordon Melrose (1990; 1984). Associate Professor of Mathematics and Statistics. B.Sc., University of Glasgow; M.S., Ph.D., Old Dominion University.

Walter Lee Melvin (2011; 2011). Dentist/Lecturer of Dental Hygiene. B.S., University of Kentucky; D.M.D., University of Louisville.

Marie M. Melzer (2010; 2010). Lecturer of Chemistry and Biochemistry. B.S., University of North Carolina – Charlotte; Ph.D., Georgetown University.


David Metzger (2004; 1993). Dean of the Honors College, Interim Dean of Academic Enhancement and Professor of English. B.A.; M.A., Emporia State University; Ph.D., University of Missouri.


Linda Miller-Dunleavy (2006; 1998). Senior Lecturer of Communication Disorders and Special Education. B.S., M.S.Ed., Old Dominion University.

Katrina L. Miller-Stevens (2010; 2010). Assistant Professor of Urban Studies and Public Administration. B.A., Colorado State University; M.N.M.; Regis University; Ph.D., University of Colorado – Denver.

Tammi F. Miliken (2012; 2005). Associate Professor of Counseling and Human Services. B.S., M.S.Ed., Old Dominion University; Ph.D., The College of William and Mary.

Douglas J. Mills (2010; 2007). Lecturer of Biological Sciences. B.S., Virginia Polytechnic Institute and State University; M.S., University of Virginia; Ph.D., University of Maryland – College Park.

Moises O. Mina, Jr. (2011; 2011). Lecturer of Sociology and Criminal Justice. B.A., Saint Leo University; M.A., Old Dominion University.

Nancy Taylor Minguez (2006; 1995; 1997). Senior Lecturer of Foreign Languages and Literatures. B.A., Old Dominion University; M.A., Universidad de Salamanca (Spain); M.A., Old Dominion University.


Anna M. Mirkova (2010; 2010). Assistant Professor of History. B.A., Lawrence University; M.A., Ph.D., University of Michigan – Ann Arbor.

Shelley C. Mishoe (2011; 2011). Dean of the College of Health Sciences and Professor of Community and Environmental Health. A.A.S., B.S., SUNY Upstate Medical University; M.Ed., Augusta State University; Ph.D., University of Georgia.

Kevin A. Moherly (2009; 2009). Assistant Professor of English. B.A., Berry College; M.A., Ph.D., University of Louisiana at Lafayette.


Kenneth Mopper (2000; 2000). Professor of Chemistry and Biochemistry. B.A., Queens College, City University of New York; M.S., Massachusetts Institute of Technology; Ph.D., Massachusetts Institute of Technology/ Woods Hole Oceanographic Institute. Joint appointment with the Department of Ocean, Earth, and Atmospheric Sciences.


Suzanne F. Morrow (2006; 2006). Lecturer of Psychology. B.A., Auburn University; M.S., Old Dominion University.

Timothy J. Motley (2011; 2006). Associate Professor of Biological Sciences and J. Robert Stifler Distinguished Professor of Plant Science. B.S., M.S., Eastern Illinois University; Ph.D., University of Hawaii at Manoa.

Manuela Mourao (2001; 1994; 1997). Associate Professor of English. Licenciatura, University of Porto (Portugal); M.A., Eastern Illinois University; Ph.D., University of Illinois - Urbana-Champaign.

Moustafa R. Moustafa (1993; 1992; 1989). Associate Professor of Counseling and Human Services. B.A., German University at Cairo; M.S., Old Dominion University; Ph.D., University of Mississippi.
Richard C. Overbaugh
(2008; 2008). Assistant Professor of Teaching and Learning.

Chila N. Nicholson
(2009; 2009). Lecturer of Communication Disorders and Special Education. B.S., M.S.Ed., Old Dominion University.

Richard J. Nickel
(2007; 2002). Associate Professor of Art. A.S., Monroe Community College; B.S., State University College at Buffalo; M.A., Edinboro University of Pennsylvania.

Ahmed K. Noor
(2000; 2000). Professor of Modeling, Simulation and Visualization Engineering. B.S., Cairo University (Egypt); M.S., Ph.D., University of Illinois at Urbana-Champaign; PE. Designated as an Eminent Scholar.

Richard D. Noren
(1991; 1985). Associate Professor of Mathematics and Statistics. B.S., University of Connecticut; Ph.D., Virginia Polytechnic Institute and State University.

John A. Nunnery

Virginia O’Herron
(2000; 1993). University Librarian and Librarian IV. B.A., Fairleigh Dickinson University; M.S.L.S., Simmons College; M.B.A., University of Tampa.

Stephan Olariu
(1998; 1986). Professor of Computer Science. M.Sc., Timisoara University (Rumania); M.Sc., Ph.D., McGill University (Canada).

Daniel E. O’Leary

Emilia S. Oleszak
(2007; 2007). Associate Professor of Biological Sciences. B.S., M.S., Medical School of Wroclaw (Poland); Ph.D., Hirszfeld Institute of Immunology and Experimental Therapy, Polish Academy of Science.

Matthew Oliver

Timothy J. Orr

Jason W. Osborne
(2011; 2011). Associate Professor of Educational Foundations and Leadership. B.S., University of Rochester; M.S., Ph.D., State University of New York at Buffalo.

Christopher James Osgood
(1990; 1986). Associate Dean in the College of Sciences and Associate Professor of Biological Sciences. A.B., Ph.D., Brown University.

Richard C. Overbaugh

Jose Javier Padilla (2011; 2011). Research Assistant Professor, Virginia Modeling, Analysis and Simulation Center. B.S., Universidad Nacional de Columbia; M.B.A., Lynn University; Ph.D., Old Dominion University.


Vivian J. Paige (2011; 2011). Instructor of Accounting. B.S.B.A., M.B.A., Old Dominion University; CPA.

Andrei Pakhomov (2011; 2005; 2007). Research Professor, Frank Reidy Research Center for Bioelectrics. B.S., M.S., Ph.D., Medical Radiology Research Institute, Russian Academy of Medical Sciences.

Olga Pakhomova (2009; 2009). Research Associate Professor, Frank Reidy Research Center for Bioelectrics. B.S., M.S., Ph.D., Medical Radiology Research Institute, Russian Academy of Medical Sciences.

Kay L. Palmer (1983; 1979). Associate Professor of Nursing. B.S.N., DePaul University; M.S.N., Loyola University.

Iordaninka Panayotova (2007; 2007). Assistant Professor of Mathematics and Statistics. B.S., M.S., Ph.D., Sofia University (Bulgaria); University of Wisconsin at Milwaukee.

Yiannis E. Papelis (2007; 2007). Research Professor, Virginia Modeling, Analysis and Simulation Center. B.S., Southern Illinois University; M.S., Purdue University; Ph.D., University of Iowa.

Jong Chool Park (2010; 2010). Assistant Professor of Accounting. B.A., Seoul National University (South Korea); M.A., State University of New York at Buffalo; M.S., University of Chicago; Ph.D., Carnegie Mellon University.

Jason L. Parker (2012; 2005). Senior Lecturer of Psychology. B.S., M.S., Old Dominion University; Ph.D., Virginia Polytechnic Institute and State University.


James F. Paulson (2011; 2011). Associate Professor of Psychology. B.S., Appalachian State University; M.S., Ph.D., University of North Carolina at Greensboro.

Pilar Pazos-Lagos (2008; 2008). Assistant Professor of Engineering Management and Systems Engineering. B.S., M.S., University of Vigo (Spain); M.S., Ph.D., Texas Tech University.

Kathy L. Pearson (2002; 1992). Associate Professor of History. B.A., Clemson University; M.A., Northwestern State University of Louisiana; Ph.D., Emory University. Designated as a University Professor.


Yvette E. Pearson (2010; 2002). Associate Professor of Philosophy and Religious Studies. B.A., University of San Diego; M.A., Ph.D., University of Miami.


Yan Peng (2008; 2008). Assistant Professor of Mathematics and Statistics. B.Eng., M.Sc., Nanjing University of Aeronautics and Astronautics (China); Ph.D., National University of Singapore.


Ariel Pinto (2010; 2004). Associate Professor of Engineering Management and Systems Engineering. B.S., M.S., University of the Philippines; Ph.D., University of Virginia.

Chris D. Platsoucas (2007; 2007). Dean of the College of Sciences and Professor of Biological Sciences. B.S., University of Patras (Greece); Ph.D., Massachusetts Institute of Technology.

Patricia A. Pleban (1985; 1979). Associate Professor of Chemistry and Biochemistry. B.S., Kent State University; M.S., Ph.D., Cleveland State University.


Dimitrie C. Popescu (2012; 2006). Associate Professor of Electrical and Computer Engineering. Diploma, M.S., Polytechnic Institute of Bucharest (Romania); Ph.D., Rutgers University.

Bryan E. Porter (2002; 1996). Associate Professor of Psychology. B.S., Virginia Polytechnic Institute and State University; M.S., Memphis State University; Ph.D., University of Memphis. Designated as a University Professor.

Rebecca Deal Poston (2010; 2008; 2010). Lecturer of Nursing. B.S., B.S.N., University of Virginia; M.S.N., Old Dominion University.

Jennifer L. Poutsma (2006; 2000). Associate Professor of Chemistry and Biochemistry. B.S., University of Chicago; Ph.D., University of California at Los Angeles.

Ramamurthy Prabhakaran (1985; 1979). Professor of Mechanical and Aerospace Engineering. B.S., M.S., Indian Institute of Science; Ph.D., Illinois Institute of Technology. Designated as an Eminent Professor.


Shana Lee Pribesh (2011; 2004). Associate Professor of Educational Foundations and Leadership. B.S., University of Virginia; M.A.; Ph.D., The Ohio State University.

Gene Hill Price (2004; 1983). Senior Lecturer of Computer Science. B.S., United States Naval Academy; M.S., Old Dominion University.

Michael Provance (2010; 2010). Assistant Professor of Management. B.S., Massachusetts Institute of Technology; M.B.A., The Pennsylvania State University; Ph.D., George Washington University.


Kathleen Forst Putnam (2010; 2009). Assistant Professor of Nursing. B.S.N., Old Dominion University; M.S.N., Ph.D., Virginia Commonwealth University/Medical College of Virginia.
David Putney (1997; 1990). Associate Professor of Philosophy and Religious Studies. B.A., University of Washington; M.A., Ph.D., University of Hawaii at Manoa.

Shizhi Qian (2011; 2008). Associate Professor of Mechanical and Aerospace Engineering. Ph.D., Huazhong University (China); Ph.D., University of Pennsylvania.


Anatoly Radyushkin (1991; 1991). Professor of Physics. M.S., Ph.D., Moscow State University (Russia). Designated as an Eminent Scholar.

Balasubramanian Ramjee (2007; 2007). Assistant Professor of Chemistry and Biochemistry. B.Sc., Loyola College, University of Madras (India); M.S., Ph.D., Indian Institute of Science.


Robert E. Ratzlaff (1993; 1986). Associate Professor of Biological Sciences. B.S., Ph.D., University of South Dakota.

Sharon A. Raver-Lampman (1997; 1985). Professor of Communication Disorders and Special Education. B.A., University of South Florida; M.A., Ed.S., George Peabody College; Ph.D., University of South Florida. Designated as a University Professor.

Laura E. Ray (2010; 2010). Lecturer in the English Language Center. B.S., State University of New York College of Environmental Science and Forestry; M.A., Old Dominion University.

Anastasia M. Raymer (2006; 1996). Professor of Communication Disorders and Special Education. B.S., University of Wisconsin-Madison; M.A., Ph.D., University of Florida.

Zia Razzaq (1988; 1982). Professor of Civil and Environmental Engineering. B.E., University of Peshawar (Pakistan); M.A.Sc., University of Windsor (Canada); Ph.D., Washington University; P.E. Designated as a University Professor.

Billie M. Reed (1991; 1990). Assistant Professor of Engineering Management and Executive Director, Virginia Commercial Space Flight Authority. B.S.M.E., Auburn University; M.E.M., Ph.D., Old Dominion University.

Philip A. Reed (2006; 2002). Associate Professor of STEM Education and Professional Studies. B.S., Old Dominion University; M.A., University of South Florida; Ph.D., Virginia Polytechnic Institute and State University.

Mark C. Rehfuss (2011; 2011). Assistant Professor of Counseling and Human Services. B.A., Miami University (Ohio); M.A., M.Div., Ashland Theological Seminary; Ph.D., Kent State University.


Zhongtang Ren (2010; 2010). Lecturer of Foreign Languages and Literatures. B.A., Henan Normal University (China); M.S.Ed., Ph.D., Old Dominion University.

Michelle T. Renaud (2010; 2009). Assistant Professor of Nursing. B.S.N., University of Connecticut; M.S.N., University of Colorado; Ph.D., University of Washington.


G. Steven Rhiel (1983; 1977). Associate Professor of Information Technology/Decision Sciences. B.S., University of Wisconsin; M.S., Winona State University; Ph.D., University of Northern Colorado. Designated as a University Professor.

Corrin G. Richels (2010; 2010). Assistant Professor of Communication Disorders and Special Education. B.S., M.S., James Madison University; Ph.D., Vanderbilt University.


Lynn L. Ridering (2006; 2000). Associate Professor of Human Movement Sciences. B.S., Central Michigan University; M.A., Kent State University; Ph.D., The Ohio State University.

Stacie I. Ringleb (2008; 2007). Assistant Professor of Mechanical and Aerospace Engineering. B.S., Case Western Reserve University; M.S., Temple University; Ph.D., Drexel University.

John M. Ritz (1987; 1977). Professor of STEM Education and Professional Studies. B.S., Purdue University; M.S., University of Wisconsin-Stout; Ed.D., West Virginia University.


Timothy M. Robinson (2010; 2010). Assistant Professor of English. B.S., State University of New York College at Brockport; M.A., Ph.D., The Pennsylvania State University.


Julia E. Romberger-Depew (2012; 2005). Associate Professor of English. B.A., Pennsylvania State University; M.A., Kutztown University; Ph.D., Purdue University.

Kevin E. Romberger-Depew (2010; 2004). Associate Professor of English. B.A., M.A., California State University at Chico; Ph.D., Purdue University.

Donna L. Rose (2010; 2005). Senior Lecturer of Nursing. A.A.S., Tidewater Community College; B.S.N., M.S.N., Old Dominion University.


Bruce L. Rubin (1987; 1981). Associate Professor of Finance. B.S., New York University; M.A., Ph.D., Case Western Reserve University.

Lucinda Rush (2012; 2012). Education Reference Services Librarian and Librarian I. B.M., Longwood University; M.M.E., Shenandoah University; M.L.I.S., University of South Carolina.

Daniel M. Russell (2010; 2010). Assistant Professor of Physical Therapy. B.S., Manchester Metropolitan University (United Kingdom); M.S., Louisiana State University; Ph.D., The Pennsylvania State University.


Carolyn M. Rutledge (2002; 2002). Associate Professor of Nursing. B.S.N., Medical College of Virginia; M.S.N., Ph.D., Old Dominion University.

Burton Saint John, III (2011; 2005). Associate Professor of Communication and Theatre Arts. B.A., M.A., Wichita State University; Ph.D., St. Louis University.


Avi Santo (2006; 2006). Assistant Professor of Communication and Theatre Arts. B.F.A., Concordia University (Canada); M.A., Ph.D., University of Texas at Austin.


Joanne Scheiman (2006; 2000). Associate Professor of English. B.A., M.A., Ph.D., University of New Mexico. Designated as a University Professor.

Rocco Schiavilla (2002; 1993). Professor of Physics. Laurea, University of Pisa (Italy); M.S., Ph.D., University of Illinois. Designated as an Eminent Scholar.

Heidi Schlippphacke (2006; 2000). Associate Professor of Foreign Languages and Literatures. B.A., St. John’s College (Maryland); M.A., Ph.D., University of Washington.


Kathryn S. Schwartz (2011; 2011). Assistant Professor of Communication Disorders and Special Education. B.S., Miami University (Ohio); Doctor of Audiology, University of Louisville School of Medicine; Ph.D., University of Memphis.

Alan Schweitzer (2009; 1995). Professor of Counseling and Human Services. B.S., Virginia Polytechnic Institute and State University; M.S., Ph.D., Virginia Commonwealth University.

Mieah Scott (2011; 1998). Assistant Professor of Nursing. B.S.N., Old Dominion University; M.S., Medical College of Virginia; Ph.D., Hampton University.


Maurice Seaton (2006; 1994; 2006). Instructor of Economics. B.S., North Dakota State University; M.S., Virginia Polytechnic Institute and State University.

Scott R. Sechrist (1993; 1987). Associate Professor of Medical Laboratory and Radiation Sciences. B.S., M.S., Old Dominion University; Ed.D., The College of William and Mary. Designated as a University Professor.

Peter N. Sedwick (2008; 2008). Associate Professor of Ocean, Earth, and Atmospheric Sciences. B.S., Ph.D., University of Hawaii at Manoa.


Michael J. Seiler (2008; 2008). Professor of Finance and Robert M. Stanton Chair of Real Estate and Economic Development. B.S., University of South Florida; M.B.A., University of North Florida; Ph.D., Cleveland State University.

Gregory V. Selby (1999; 1983). Professor of Mechanical and Aerospace Engineering. B.S., University of Virginia; M.S., Ph.D., University of Delaware.


Stephen L. Shapiro (2008; 2008). Assistant Professor of Human Movement Sciences. B.S., M.S., University of Central Florida; Ph.D., University of Northern Colorado.

Pamela B. Sharp (2010; 2010). Lecturer of Nursing. A.S.N., Norfolk State University; B.S.N., M.S.N., Hampton University; Ph.D., Virginia Commonwealth University.

Jacqueline E. Sharpe (2008; 2006). Senior Lecturer of Community and Environmental Health. B.S.N., Winston-Salem State University; M.S.N., University of Maryland; Ph.D., Old Dominion University.


Yuzhong Shen (2012; 2006). Associate Professor of Modeling, Simulation and Visualization Engineering. B.S., Fudan University (China); M.S., Mississippi State University; Ph.D., University of Delaware.

Deanne Shuman (1989; 1976). Professor of Dental Hygiene. B.S., M.S., Old Dominion University.

Carol Simpson (2008; 2008). Provost and Vice President for Academic Affairs and Professor of Ocean, Earth, and Atmospheric Sciences. H.N.C., Swansea College of Technology (United Kingdom); B.Sc., University of Wales (United Kingdom); M.Sc., University of Witwatersrand (South Africa); Ph.D, Eidgenössische Technische Hochschule Zürich (Switzerland).


Donald Hugh Smith (1979; 1974). Associate Professor of Sociology and Criminal Justice. A.B., A.M., California State University at Long Beach; Ph.D., Emory University.


Thomas J. Socha (2011; 1989). Professor of Communication and Theatre Arts. B.A., Loyola University; M.A., University of Illinois-Chicago; Ph.D., University of Iowa. Designated as a University Professor.

John A. Sokolowski (2006; 2006). Associate Professor of Modeling, Simulation and Visualization Engineering and Executive Director of Virginia Modeling, Analysis and Simulation Center. B.S., Purdue University; M.E.M., Ph.D., Old Dominion University.

C. Thomas Somma (1984; 1978). Associate Professor of Medical Laboratory and Radiation Sciences. B.S.M.T., Baptist Medical Center, Jacksonville; M.S., Virginia Polytechnic Institute and State University; Ed.D., The College of William and Mary.


Andres Sousa-Poza (2006; 2000). Associate Professor of Engineering Management and Systems Engineering. B.Sc., University of Cape Town (South Africa); M.S., Ph.D., University of Missouri - Rolla.
Robert J. Spina (2006; 2006). Professor of Human Movement Sciences. B.S., C.W. Post College of Long Island University; M.S., Queens College; Ph.D., University of Pittsburgh.


Michael W. Stacey (2007; 2007). Research Associate Professor, Frank Reidy Research Center for Bioelectrics. B.S.C., University of Hull (United Kingdom); Ph.D., University of Birmingham (United Kingdom).


Michael Stein (2010; 2006). Professor of Accounting. B.A., Rutgers University; B.B.A., M.A., University of Pennsylvania; Ph.D., University of British Columbia.

Ralph W. Stevens (1992; 1986). Associate Professor of Biological Sciences. B.S., Michigan State University; M.S., Wayne State University; Ph.D., University of Texas Medical School at Houston. Designated as a University Professor.

Kim C. Stewart (2011; 2011). Assistant Professor of Human Movement Sciences. B.A., Mercer University; M.S., Virginia Polytechnic Institute and State University; Ph.D., University of Florida.


Sharon C. Stull (2011; 2006; 2009). Lecturer of Dental Hygiene. A.A.S., Coastal Carolina Community College; B.S.D.H., M.S.D.H., Old Dominion University.


Jennifer Sughrue (2010; 2010). Associate Professor of Educational Foundations and Leadership. B.A., University of California at Berkeley; M.A., California State University – Bakersfield; Ph.D., Virginia Polytechnic Institute and State University.

Stephanie K. Sugiyoka (2010; 2010). Lecturer of English. B.A., Goucher College; M.A., Johns Hopkins University; M.A., University of Wisconsin at Madison; Ph.D., Old Dominion University.

Yonghee Suh (2009; 2009). Assistant Professor of Teaching and Learning. B.S., M.S., Seoul National University (Korea); Ph.D., Michigan State University.

Charles I. Sukenik (2011; 1997). Professor of Physics. B.A., Cornell University; Ph.D., Yale University. Designated as a University Professor.

Christine Ann Sump (2010; 2010). Lecturer of Nursing. B.S.N., St. Joseph College; M.S.N., Old Dominion University.

Mervina T. Sumter (2006; 2000). Associate Professor of Sociology and Criminal Justice. B.A., M.C.J., University of South Carolina – Columbia; Ph.D., Florida State University.

Licheng Sun (2011; 2005). Associate Professor of Finance. B.A., Shanghai Teachers University (China); M.Econ., Shanghai University of Finance and Economics (China); Ph.D., University of Georgia.


Araceli Suzara (2001; 1999). Director of the Filipino American Student Cultural Center and Assistant Professor of Sociology and Criminal Justice. B.S., A.B., Assumption College (Philippines); M.A., Ph.D., Loyola University of Chicago.

David P. Swain (2001; 1993). Professor of Human Movement Sciences and Director, Wellness Institute and Research Center. B.A., University of South Florida; Ph.D., University of North Carolina Medical School-Chapel Hill. Designated as a University Professor.

R. James Swanson (1993; 1975). Professor of Biological Sciences. B.S., Wheaton College; B.S.N., Old Dominion University; M.S., Ph.D., Florida State University. Joint appointment with the School of Physical Therapy. Designated as a University Professor.

Donald J. P. Swift (1987; 1986). Professor of Ocean, Earth and Atmospheric Sciences. A.B., Dartmouth College; M.A., Johns Hopkins University; Ph.D., University of North Carolina – Chapel Hill. Designated as an Eminent Scholar.

Mariana Szklo-Coxe (2008; 2008). Assistant Professor of Community and Environmental Health. B.A., Brown University; M.H.S., Ph.D., Johns Hopkins University.

Althea L. Tait (2008; 2008). Assistant Professor of Women’s Studies. B.A., Oral Roberts University; M.A., University of Tulsa; Ph.D., Morgan State University.

Wayne Kenneth Talley (1983; 1972). Professor of Economics and Frederick Wharton Beazley Endowed Professor. A.B., University of Richmond; M.S., Virginia Commonwealth University; A.M., Ph.D., University of Kentucky. Designated as an Eminent Scholar.

Michael T. Tamburello (2004; 1998). Associate Professor of Physical Therapy. B.S., University of Florida; M.S., Medical College of Virginia; Ph.D., University of Virginia.

Arthur C. Taylor III (2002; 1989). Professor of Mechanical and Aerospace Engineering. B.S., Washington and Lee University; B.S., Old Dominion University; M.S., Ph.D., Virginia Polytechnic Institute and State University.

Gail S. Taylor (1999; 1993). Associate Professor of Teaching and Learning. B.S., Vassar College; M.S., Fordham University; Ph.D., Texas A&M University.


Sophie K. Thompson (2004; 1998). Associate Professor of Medical Laboratory and Radiation Sciences. B.S., M.H.S., Medical University of South Carolina.


William H. Thompson (2006; 2006). Lecturer in the English Language Center. B.A., West Virginia University; M.I.M., American Graduate School of International Management; M.A., M.T., University of Virginia.

Victoria M. Time (2003; 1997). Associate Professor of Sociology and Criminal Justice. LL.B., LL.M., University of Yaounde (Cameroon); M.C.L., George Washington University; M.S., The American University; Ph.D., Indiana University of Pennsylvania. Designated as a University Professor.

Andreas Tolk (2011; 2006). Professor of Engineering Management and Systems Engineering. Abitur, Beisenkamp Gymnasium (Germany); Diploma, Dr. rer.nat., University BwM (Germany).


Mileta M. Tomovic (2008; 2008). Professor of Engineering Technology. B.S., University of Belgrade (Yugoslavia); M.S., Massachusetts Institute of Technology; Ph.D., University of Michigan.
Stephen W. Tonelson (1995; 1981). Professor of Communication Disorders and Special Education. B.S., The College of William and Mary; M.S.Ed., Old Dominion University; Ed.D., University of Virginia.

John F. Toomey (2002; 1990). Professor of Music. B.S., Crane School of Music; M.M., Eastman School of Music. Designated as a University Professor.

Jeffrey G. Toussaint (2010; 2010). Lecturer of Sociology and Criminal Justice. B.S., M.A., Old Dominion University; Ph.D., Virginia Polytechnic Institute and State University.


Ruth Ann Tripplett (2006; 1999). Professor of Sociology and Criminal Justice. B.S., Old Dominion University; M.A., Ph.D., University of Maryland – College Park. Designated as a University Professor.


Kimberly Adams Tufts (2004; 2004). Associate Professor of Nursing. B.S.N., Ohio State University; M.S.N., D.N., Case Western Reserve University.

John Tweed (1977; 1974). Professor of Mathematics and Statistics. A.R.C.S.T., Royal College of Science and Technology; M.Sc., University of Strathclyde (Scotland); Ph.D., University of Glasgow (Scotland). Designated as an Eminent Professor.

Resit Ural (1999; 1986). Professor of Engineering Management and Systems Engineering. B.S., Middle East Technical University (Turkey); M.S., Ph.D., University of Missouri-Rolla.

Linda L. Vahala (1993; 1985; 1987). Associate Dean of the Frank Batten College of Engineering and Technology and Associate Professor of Electrical and Computer Engineering. B.S., University of Illinois; M.S., University of Iowa; Ph.D., Old Dominion University.

James Van Dore (2011; 2011). Lecturer of Philosophy and Religious Studies. B.A., University of Michigan; M.T.S., Calvin Theological Seminary; Ph.D., Claremont Graduate University.

Bonnie L. Van Luren (2006; 1999). Associate Professor of Human Movement Sciences. B.S., Castleton State College; M.S.Ed., Ph.D., University of Virginia.

J. Wallace Van Orden (1998; 1990). Professor of Physics. B.S., Utah State University; M.S., Ph.D., Stanford University.


Alok K. Verma (2005; 1981). Professor of Engineering Technology and Ray Ferrari Professor of Engineering Technology. B.T.A.E., Indian Institute of Technology (India); M.E., Ph.D.; Old Dominion University; PE.

Elizabeth J. Vincellette (2010; 2010). Lecturer of English. B.A., University of Virginia; M.A., Ph.D., Old Dominion University.

Jelmer Vos (2009; 2009). Assistant Professor of History. M.A., M.Sc., University of Amsterdam (Netherlands); Ph.D., University of London (United Kingdom).


Gary A. Wagner (2011; 2011). Professor of Economics. B.A., Youngstown State University; M.A., Ph.D., West Virginia University.

Steven R. Walk (2007; 2007). Assistant Professor of Engineering Technology. B.S.E.E.T., University of Pittsburgh at Johnstown; M.S.E.E., University of Pittsburgh, P.E.


Martha L. Wall (1992; 1986). Associate Professor of Physical Therapy. B.S., University of Oklahoma; M.S., Medical College of Virginia; Ph.D., Virginia Commonwealth University.


Deborah Ann Waller (1995; 1989). Associate Professor of Biological Sciences. B.A., George Washington University; Ph.D., University of Texas-Austin.

Eric L. Walters (2011; 2011). Assistant Professor of Biological Sciences. B.S., M.S., University of Victoria (Canada); Ph.D., Florida State University.

Jin Wang (2012; 2007). Associate Professor of Mathematics and Statistics. B.S., M.S., University of Science and Technology; Ph.D., The Ohio State University.

Xi Xi Wang (2011; 2011). Associate Professor of Civil and Environmental Engineering. B.S., M.S., Tsinghua University; Ph.D., Iowa State University; P.E.

Christine A. Ward (2010; 2010). Assistant Professor of Counseling and Human Services. B.S.B.A., Trinity University; M.Ed., University of North Florida; Ph.D., Texas A&M University – Corpus Christie.

Erin J. Warham (2011; 2003). Senior Lecturer of Teaching and Learning. B.A., Florida Atlantic University; M.S., Nova Southeastern University.


Silvana R. Watson (2006; 2000). Associate Professor of Communication Disorders and Special Education. B.A., Universidade Catolica de Pernambuco (Brazil); M.A., Ph.D., University of New Mexico.


Michele Clark Weigle (2012; 2006). Associate Professor of Computer Science. B.S., Northwest Louisiana University; Ph.D., University of North Carolina - Chapel Hill.

Joshua T. Weinhandl (2011; 2011). Assistant Professor of Human Movement Sciences. B.S., Greenville College; M.S., Ball State University; Ph.D., University of Wisconsin - Milwaukee.

Lawrence B. Weinstein (2003; 1992). Professor of Physics. B.S., Yale University; Ph.D., Massachusetts Institute of Technology. Designated as a University Professor and an Eminent Scholar.

Shannon L. Wells (2011; 2011). Lecturer of Ocean, Earth, and Atmospheric Sciences. B.S., Christopher Newport University; M.S., Ph.D., Old Dominion University.


Colm T. Whelan (2001; 2001). Professor of Physics. B.Sc., M.Sc., National University of Ireland; Ph.D., University of Cambridge (United Kingdom). Designated as an Eminent Scholar.

Ingrid P. Whitaker (2002; 1996). Associate Professor of Sociology and Criminal Justice. B.A., University of Illinois-Chicago; M.S.W., M.A., Ph.D., University of Michigan.

Garland Francis White, III (1979; 1973). Associate Professor of Sociology and Criminal Justice. B.S., M.S., Oklahoma State University; Ph.D., University of Washington.

George O. White, III (2010; 2010). Assistant Professor of Management. B.A., University of Alabama; J.D., Thomas M. Cooley Law School; LL.M., Emory University; M.B.A., Ph.D., University of Texas – El Paso.


G. Richard Whittecar (1985; 1979). Associate Professor of Ocean, Earth, and Atmospheric Sciences. B.S., University of North Carolina; M.S., Ph.D., University of Wisconsin. Designated as a University Professor.

Kideste Wilder-Bonner (2009; 2009). Lecturer of Sociology and Criminal Justice. B.S., M.A., Old Dominion University; M.A., Ph.D., City University of New York.

Lynn L. Wiles (2011; 1996). Assistant Professor of Nursing. B.S.N., Radford University; M.S.N., Marymount University (Virginia); Ph.D., Duquesne University.

Melanie Wilhelm (2009; 2009). Lecturer of Nursing. B.S.N., Bowling Green State University; M.S.N., Old Dominion University.


Charles Edgar Wilson, Jr. (2004; 1991). Dean of the College of Arts and Letters and Professor of English. B.A., West Georgia College; M.A., North Carolina State University; Ph.D., University of Georgia. Designated as a University Professor.

Corrine L. Wilson (2011; 2011). Lecturer of Mathematics and Statistics. B.S., Concord University; M.S., Ph.D., Old Dominion University.


Chris Wood (2011; 2011). Associate Professor of Counseling and Human Services. B.A., Gonzaga University; M.S., Eastern Washington University; Ph.D., Oregon State University.

Harris Wu (2011; 2005). Associate Professor of Information Technology/Decision Sciences. B.S., Nankai University (China); M.S., Florida State University; Ph.D., University of Michigan - Ann Arbor.

Shu Xiao (2008; 2008). Assistant Professor of Electrical and Computer Engineering. B.S., Gannan Teacher College (China); M.S., University of Science and Technology (China); Ph.D., Old Dominion University.

Li D. Xu (2003; 2001). Professor of Information Technology/Decision Sciences. B.S., M.S., University of Science and Technology of China; Ph.D., Portland State University. Designated as an Eminent Scholar.

Xiaohong Nancy Xu (2009; 1998). Professor of Chemistry and Biochemistry. B.S., M.S., Xiamen University (China); Ph.D., University of Mississippi.

Yin Xu (2007; 2001). Associate Professor of Accounting. B.S., University of Akron; M.Acc., Ph.D., University of South Carolina – Columbia; C.P.A.


Takeshi Yagihashi (2011; 2011). Assistant Professor of Economics. B.A., Keio University (Japan); Ph.D., University of California at Davis.

Xiushi Yang (2005; 1993). Professor of Sociology and Criminal Justice. B.S., Hangzhou University (China); M.A., Ph.D., Brown University.

Cherng-Jyh Yen (2008; 2008). Assistant Professor of Educational Foundations and Leadership. B.S., Tung-Hai University (Taiwan); M.S., Indiana University; Ph.D., University of Virginia.

Steven A. Yetiv (2004; 1994). Professor of Political Science and Geography. B.A., M.A., University of Akron; Ph.D., Kent State University. Designated as a University Professor.

Gilbert R. Yochum (1987; 1975). Dean of the College of Business and Public Administration and Professor of Economics. B.A., Indiana University of Pennsylvania; Ph.D., West Virginia University. Designated as a University Professor.

Jaewan Yoon (2002; 1995). Associate Professor of Civil and Environmental Engineering. B.E., Dongguk University (South Korea); M.S., Ph.D., North Dakota State University.

Jennifer M. Younkin (2010; 2003). Senior Lecturer of Psychology. B.S., M.S., Old Dominion University.

Kenneth K. Yung (2001; 1989). Professor of Finance. B.Soc.Sci., University of Hong Kong (China); M.B.A., State University of New York at Buffalo; Ph.D., Georgia State University.

Juita-Elena Yusuf (2008; 2008). Assistant Professor of Urban Studies and Public Administration. B.S., University of Notre Dame; M.B.A, Indiana University; Ph.D., University of Kentucky.

Elizabeth A. Zanoni (2011; 2011). Assistant Professor of History. B.A., University of Notre Dame; M.A., Western Michigan University; Ph.D., University of Minnesota - Minneapolis.

Alla P. Zareva (2009; 2009). Assistant Professor of English. B.A., College of International Tourism (Bulgaria); M.A., Veliko Turnovo University (Bulgaria); Ph.D., University of Georgia.

Noam Zeev (2008; 2008). Assistant Professor of Mathematics and Statistics. B.S., Simon Bolivar University (Venezuela); Ph.D.; University of Delaware.

Donald Jay Zeigler (1992; 1980). Professor of Political Science and Geography. B.S., Shippensburg State College; A.M., University of Rhode Island; Ph.D., Michigan State University.


Christian W. Zemlin (2011; 2011). Assistant Professor of Electrical and Computer Engineering. B.Sc., M.Sc., Technical University of Berlin (Germany); Ph.D., Humboldt University (Germany).

Qi (Harry) Zhang (2011; 2005). Associate Professor of Community and Environmental Health. B.A., Fudan University (China); M.A., Ph.D., The University of Alabama.
Haiwen Zhou (2009; 2002; 2005). Associate Professor of Economics. B.A., Nankai University (China); M.A., Zhongshan University (China); Ph.D., University of Maryland - College Park.

Ruhai Zhou (2009; 2004). Associate Professor of Mathematics and Statistics. B.S., M.S., Nanjing University (China); Ph.D., University of New Mexico.

Hongwei (Harry) Zhu (2012; 2006). Associate Professor of Information Technology/Decision Sciences. B.S., M.S., Tsinghua University (China); M.S., University of Cincinnati; M.S., Ph.D., Massachusetts Institute of Technology.

Xihe Zhu (2009; 2009). Assistant Professor of Human Movement Sciences. B.Ed., M.Ed., Shanghai Institute of Physical Education (China); Ph.D., University of Maryland – College Park.

Douglas E. Ziegenfuss (2001; 1988). Professor of Accounting. B.A., Mount Saint Mary’s College; M.S., American University; Ph.D., Virginia Commonwealth University; C.P.A., C.M.A., C.I.A.

Richard C. Zimmerman (2003; 2003). Professor of Ocean, Earth, and Atmospheric Sciences. B.S., M.S., Ph.D., University of Southern California.

Mohammad Zubair (2002; 1987). Professor of Computer Science. B.S., Delhi University (India); Ph.D., Indian Institute of Technology (India).


* The listing reflects the faculty as of June 1, 2012. The dates in parentheses indicate the following: the first date, the year in which the present rank was attained; the second date, the year when the individual was first appointed to the faculty; a third date, the year of reappointment.
Faculty Emeriti

Cephas J. Adkins, Professor Emeritus of Psychology
Abdel M. Agami, Professor Emeritus of Accounting
Robert Ake, University Professor Emeritus and Associate Professor Emeritus of Chemistry and Biochemistry
Dwight Allen, Eminent Scholar Emeritus of Educational Reform and Professor Emeritus
Betty Alexy, Associate Professor Emerita of Nursing
Claire J. Anderson, Associate Professor Emerita of Management
Michael C. Andrews, Eminent Scholar Emeritus and Louis I. Jaffe Professor Emeritus of English
Steven K. Atiyah, Assistant Professor Emeritus of Mathematics and Statistics
Roy E. Aycock, Professor Emeritus of English
William Bartolotta, Associate Professor Emeritus of Music
Nancy Topping Bazin, Eminent Scholar Emerita and Professor Emerita of English
Jacob Becher, Associate Professor Emeritus of Physics
Charles E. Bell, Professor Emeritus of Chemistry and Biochemistry
Maurice Berube, Eminent Scholar Emeritus and Professor Emeritus of Educational Leadership
Samuel Bieber, Professor Emeritus of Biological Sciences
Frank W. Billmyer, Professor Emeritus of Chemical Sciences
Carl Boyd, Eminent Scholar Emeritus and Louis I. Jaffe Professor Emeritus of History
Colin Box, Professor Emeritus of Community and Environmental Health
William Brown, Professor Emeritus of Educational Curriculum and Instruction
Violet Breneiser, Assistant Professor Emerita of Foreign Languages and Literatures
John P. Broderick, University Professor Emeritus and Professor Emeritus of English
Katherine T. Bucher, Professor Emerita of Educational Curriculum and Instruction
James L. Bugg, President Emeritus and Eminent Professor Emeritus of History
Charles O. Burgess, Professor Emeritus of English
Leslie G. Carr, Associate Professor Emeritus of Sociology and Criminal Justice
Marion Carroll, Assistant Professor Emeritus of Exercise Science, Physical Education and Recreation
Keith A. Carson, Associate Professor Emeritus of Biological Sciences
Thomas R. Cash, Professor Emeritus of Psychology
Wilkie Chaffin, Professor Emeritus of Information Systems and Decision Sciences
Robert Y. Cheng, Professor Emeritus of Civil Engineering
Kwang S. Choi, Associate Professor Emeritus of Finance
Kae H. Chung, Professor Emeritus of Management
Allen K. Clark, Professor Emeritus of Chemistry and Biochemistry
Forrest P. Clay Jr., Professor Emeritus of Physics
Glynn Coates, Professor Emeritus of Psychology
Charlie H. Cooke, Professor Emeritus of Mathematics and Statistics
Gary E. Copeland, Professor Emeritus of Physics
James L. Cox, Jr., Professor Emeritus of Physics
Edward M. Cross, Professor Emeritus of Information Systems/Decision Sciences
Ernest J. Cross, Jr., Professor Emeritus of Aerospace Engineering
Gary R. Crossman, Professor Emeritus of Engineering Technology
William H. Crouch, Associate Professor Emeritus of Information Technology and Decision Sciences
Jon R. Crunkleton, Associate Professor Emeritus of Finance
Gabriel T. Csanady, Professor Emeritus of Oceanography
Frederick W. Culpepper, Professor Emeritus of Occupational and Technical Studies
William G. Cunningham, Eminent Scholar Emeritus and Professor Emeritus of Educational Leadership and Counseling
Stephen G. Cupschalk, Associate Professor Emeritus of Mechanical Engineering
Ram C. Dahiya, Eminent Scholar Emeritus and Professor Emeritus of Mathematics and Statistics
Joseph C. Daniel, Professor Emeritus of Biological Sciences and Dean Emeritus of the College of Sciences
Walter F. Deal, III, Associate Professor Emeritus of Occupational and Technical Studies
Elizabeth S. DeBedts, Associate Professor Emerita of Library Science
Amin N. Dharamsi, Professor Emeritus of Electrical and Computer Engineering
Terry L. Dickinson, Professor Emeritus of Psychology
Leonard E. Dobrin, Associate Professor Emeritus of Sociology and Criminal Justice
Lynn Doyle, Associate Professor Emerita of Education Leadership
Chris Drake, Professor Emerita of Political Science and Geography
William A. Drewry, Professor Emeritus of Civil and Environmental Engineering
Perry M. Duncan, Associate Professor Emeritus of Psychology
Thomas H. Dunham, Associate Professor Emeritus of Ocean, Earth and Atmospheric Sciences
William Dunstan, Professor Emeritus of Ocean, Earth and Atmospheric Sciences
John L. Echtman, Eminent Scholar Emeritus of Physical Therapy
Natalie W. Etheridge, Associate Professor Emerita of Health, Physical Education and Recreation
John A. Fahey, Associate Professor Emeritus of Foreign Languages and Literatures
Joong Fang, Professor Emeritus of Philosophy
Anita C. Fellman, Professor Emerita of History
Lewis S. Ford, Louis I. Jaffe Professor Emeritus of Humanities and Professor Emeritus of Philosophy and Religious Studies
Stephen Foster, Professor Emeritus of Foreign Languages and Literatures
Willard C. Frank, 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
Ann E. Gargett, Professor Emerita of Ocean, Earth and Atmospheric Sciences
Glenn A. Gerdin, Associate Professor Emeritus of Electrical and Computer Engineering

Philip S. Gillette, Associate Professor Emeritus of Political Science and Geography

Billy J. Gilpin, Associate Professor Emeritus of Mathematics and Statistics

Albert S. Glickman, Eminent Professor Emeritus of Psychology

Albert L. Godden, Associate Professor Emeritus of Mechanical Engineering Technology

Fred W. Granger, Associate Professor Emeritus of Information Technology and Decision Sciences

William H. Graves, Professor Emeritus of Counseling and Human Services and Dean Emeritus of the Darden College of Education

David R. Hager, Professor Emeritus of Political Science and Higher Education Administration

Jane M. Hager, Professor Emerita of Teaching and Learning

Jean Halladay, Associate Professor Emerita of English

Hiroyuki Hamada, Associate Professor Emeritus of Exercise Science, Sport, Physical Education and Recreation

William J. Hanna, Professor Emeritus of Geophysical Sciences

Richard F. Harrington, Associate Professor Emeritus of Engineering Technology

D. Alan Harris, Associate Professor Emeritus of History

R. Baine Harris, Eminent Professor Emeritus of Philosophy and Religious Studies

Thomas L. Harris, Professor Emeritus of Educational Leadership and Counseling

Harold G. Hawn, Professor Emeritus of Music

Alex Hawryluk, Professor Emeritus of Management

John Heinbockel, Professor Emeritus of Mathematics and Statistics

Paul L. Heine, Associate Professor Emeritus of Exercise Science, Sport, Physical Education and Recreation and Associate Dean Emeritus of the Darden College of Education

Carl O. Helvie, Professor Emeritus of Nursing

Erleene Hendrix, Associate Professor Emerita of Communication and Theatre Arts

James D. Hendry, Associate Professor Emeritus of Electrical Engineering Technology

Elizabeth S. Henry, Associate Professor Emerita of Psychology

Louis H. Henry, Professor Emeritus of Economics and Dean Emeritus of the Honors College

Carol F. Hines, Associate Professor Emerita of Art

Carole P. Hines, Associate Professor Emerita of English

S. Philip Hines Jr., Associate Professor Emeritus of English

John F. Holley, Associate Professor Emeritus of Foreign Languages and Literatures

John Holsinger, Eminent Scholar Emeritus and Professor Emeritus of Biological Sciences

Paul J. Homsher, Professor Emeritus of Biological Sciences

Clare Houseman, Associate Professor Emerita of Nursing

Ian D. Howard, Professor Emeritus of Physics

Gilbert R. Hoy, Eminent Scholar Emeritus and Professor Emeritus of Physics

Jesse W. Hughes, Professor Emeritus of Accounting

James Jarrett, Professor Emeritus of Human Movement Sciences

Beverley B. Johnson, Associate Professor Emerita of Health, Physical Education and Recreation

David E. Johnson, Associate Professor Emeritus of Art

Roger A. Johnson, Associate Professor Emeritus of Educational Curriculum and Instruction

Ronald E. Johnson, University Professor Emeritus and Associate Professor Emeritus of Ocean, Earth and Atmospheric Sciences

Franklin Ross Jones, Professor Emeritus of Educational Leadership and Counseling and Dean Emeritus of the Darden College of Education

William B. Jones, Associate Professor Emeritus of Philosophy and Religious Studies

David I. Joyner, Professor Emeritus of Educational Curriculum and Instruction

Kenneth Karloff, Assistant Professor Emeritus of Educational Curriculum and Instruction

Allan H. Kaufman, Associate Professor Emeritus of Occupational and Technical Studies

Richard K. Keplar, Associate Professor Emeritus of Engineering Technology

Robert L. Kernell, Professor Emeritus of Physics

Govind S. Khandelwal, Professor Emeritus of Physics

Raymond H. Kirby, Professor Emeritus of Psychology

Paul W. Kirk, Professor Emeritus of Biological Sciences

Karl F. Knight, Professor Emeritus of English

Carl F. Koch, Professor Emeritus of Geological Sciences

Edgar A. Kovner, Professor Emeritus of Speech Communication and Theater Arts

Ralph V. LaHaie, Professor Emeritus of Speech Communication and Theater Arts

Mark Lesley, Associate Professor Emeritus of Mathematics and Statistics

Gerald Levy, Professor Emeritus of Biological Sciences

Linda Lane Lilley, Associate Professor Emerita of Nursing

Elizabeth Lipsmeyer, Associate Professor Emerita of Art

Christopher W. Lovell, Associate Professor Emeritus of Educational Leadership and Counseling

Cameron A. Lowe, Associate Professor Emeritus of Dental Hygiene and Dental Assisting

James G. Luton, Professor Emeritus of Dental Hygiene

Robert H. MacDonald, Professor Emeritus of Educational Curriculum and Instruction

Jean A. Major, University Librarian Emerita

Harold G. Marshall, Morgan Professor Emeritus and Professor Emeritus of Biological Sciences

Otto B. Martinson, Professor Emeritus of Accounting

A. Warren Matthews, Professor Emeritus of Philosophy and Religious Studies

R. Bruce McAfee, Professor Emeritus of Management

Vernon A. McCart, Fine and Performing Arts Reference Librarian and Librarian III Emeritus

Richard C. McCleary, Professor Emeritus of Philosophy and Religious Studies

Timothy C. McKee, Associate Professor Emeritus of Accounting
James J. McNally, Professor Emeritus of English
Griffith J. McRee, Associate Professor Emeritus of Electrical and Computer Engineering
John R. McSweeney, Professor Emeritus of Educational Leadership and Counseling
Chuh Mei, Emeritus Scholar Emeritus and Professor Emeritus of Aerospace Engineering
Regula A. Meier, Associate Professor Emerita of Foreign Languages and Literatures
Robert F. Michel, Associate Professor Emeritus of Engineering Technology
Peter J. Mikulka, Professor Emeritus of Psychology
Taj O. Mohieldin, Professor Emeritus of Engineering Technology
Raymond F. Morgan, Professor Emeritus of Educational Curriculum and Instruction
Ula K. Motekat, Professor Emerita of Accounting
G. E. Mullin, Professor Emeritus of Economics
Ali Nowroozi, Professor Emeritus of Ocean, Earth and Atmospheric Sciences
George F. Oertel, Professor Emeritus of Ocean, Earth and Atmospheric Sciences
Donald Ogdon, Professor Emeritus of Psychology
C. Michael Overstreet, Associate Professor Emeritus of Computer Science
Allan Owen, Associate Professor Emeritus of Music
Richard A. Palmer, Assistant Professor Emeritus of Chemistry and Biochemistry
Elizabeth G. Pappas, Associate Professor Emerita of Music
William W. Patterson Jr., Associate Professor Emeritus of Information Systems and Decision Sciences
Leland D. Peterson, Professor Emeritus of English
Victor A. Pickett, Professor Emeritus of Art
Norman H. Pollock, Associate Professor Emeritus of History
W. Maurice Pritchard, Professor Emeritus of Physics
Harold J. Protsman, Professor Emeritus of Music
Anthony J. Provenzano, Professor Emeritus of Ocean, Earth and Atmospheric Sciences
Usman A. Qureshi, Professor Emeritus of Economics
Philip Raisor, Professor Emeritus of English
John W. Ramsey, Professor Emeritus of Political Science
Anne Raymond-Savage, Associate Professor Emerita of Educational Curriculum and Instruction and Vice Provost Emerita for Distance Learning
William T. Reece, Professor Emeritus of Accounting
Lindsay Rettie, Professor Emerita of Dental Hygiene and Dental Assisting and Dean Emerita of the College of Health Sciences
Carolyn H. Rhodes, Professor Emerita of English and Women’s Studies
Ernest L. Rhodes, Professor Emeritus of English
John H. Richardson, Associate Professor Emeritus of Biological Sciences
Roger S. Richman, Professor Emeritus of Urban Studies and Public Administration
Betty R. Ricks, Associate Professor Emerita of Management
A. Sidney Roberts Jr., Professor Emeritus of Mechanical Engineering
Alfred B. Rollins Jr., President Emeritus and Professor Emeritus of History
Robert K. Rose, Professor Emeritus of Biological Sciences
Helen C. Rountree, Professor Emerita of Anthropology
Thomas C. Royer, Eminent Scholar Emeritus and Slover Professor Emeritus of Ocean, Earth and Atmospheric Sciences
Leonard I. Ruchelman, Eminent Scholar Emeritus and Professor Emeritus of Urban Studies and Public Administration
Murray Rudisill, Professor Emeritus of Educational Curriculum and Instruction
Joseph H. Rule, Professor Emeritus of Ocean, Earth and Atmospheric Sciences
Richard A. Rutyna, Associate Professor Emeritus of History
Annabel L. Sacks, Director of Student Services Emerita
Allen G. Sandler, Associate Professor Emeritus of Early Childhood, Speech-Language Pathology and Special Education
Kehar S. Sangha, Professor Emeritus of Economics
Clifford C. Saunders, Professor Emeritus of Sociology
Judith S. Schapiro, Professor Emerita of Child Study and Special Education
Henry Schmoole Jr., Associate Professor Emeritus of Vocational and Technical Education
Reiko M. Schwab, Associate Professor Emerita of Educational Leadership and Counseling
Karl H. Schoenbach, Eminent Scholar Emeritus and Professor Emeritus of Electrical and Computer Engineering
Ann V. Schwarz-Miller, Associate Professor Emerita of Economics
Joseph C. Sever, Jr., Associate Professor Emeritus of Communication Disorders and Special Education
William W. Seward, Professor Emeritus of English
Stephen P. Shao, Professor Emeritus of Management Information Systems and Decision Sciences
Stewart N. T. Shen, Professor Emeritus of Computer Science
David L. Shores, Professor Emeritus of English
J. Taylor Sims, Professor Emeritus of Marketing
Charles M. Smith, Associate Professor Emeritus of Educational Curriculum and Instruction
Theodore F. Smith, Associate Professor Emeritus of Marketing
Ronald W. Snapp, Associate Professor Emeritus of Art
Petra Snowden, Associate Professor Emerita of Educational Leadership and Counseling
Daniel Sonenshine, Professor Emeritus of Biological Sciences
Randall S. Spencer, Professor Emeritus of Ocean, Earth and Atmospheric Sciences
Ulysses Van Spiva, Professor Emeritus of Educational Leadership and Counseling and Dean Emeritus of the Darden College of Education
William D. Stanley, Eminent Professor Emeritus of Engineering Technology
Peter C. Stewar, Associate Professor Emeritus of History
John W. Stoughton, Professor Emeritus of Electrical and Computer Engineering
Raymond S. Strangways, Professor Emeritus of Economics
Cynthia Wright Swaine, Instructional Services Librarian Emerita
James R. Sweeney, Associate Professor Emeritus of History
John J. Swetits, Professor Emeritus of Mathematics and Statistics
J. Albert Tatem Jr., Associate Professor Emeritus of Health, Physical Education, and Recreation
William H. Thornton, Associate Professor Emeritus of Engineering Technology
Shunichi Toida, Associate Professor Emeritus of Computer Science
Alfred Townsend, Associate Professor Emeritus of Music
Charlie G. Turner, Associate Professor Emeritus of Economics
John E. Turner, Associate Professor Emeritus of Occupational and Technical Studies
Margaret Daugherty Van Damm, Associate Professor Emerita of English
Nancy L. Wade, Associate Professor Emerita of Biological Sciences
William Wagner, Associate Professor Emeritus of Art
Alice P. Wakefield, Associate Professor Emerita of Teaching and Learning
Stanley E. Weinstein, Professor Emeritus of Mathematics and Statistics
Thomas L. Wells, Associate Professor Emeritus of Political Science and Geography
Frederick D. Whitehurst, Professor Emeritus of Accounting
J. 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
Harold S. Wilson, Professor Emeritus of History
Jack H. Wilson, Professor Emeritus of English
Larry W. Wilson, Associate Professor Emeritus of Computer Science
Denny T. Wolfe Jr., Professor Emeritus of Educational Curriculum and Instruction
Lloyd Wolfmarger Jr., Professor Emeritus of Biological Sciences
George T. Wong, Professor Emeritus of Ocean, Earth and Atmospheric Sciences
Robert J. Wunderlin, Associate Professor Emeritus of Psychology
Betty J. H. Yarborough, Eminent Scholar Emerita and Constance and Colgate Darden Professor Emerita of Education
James H. Yuan, Professor Emeritus of Chemistry and Biochemistry
Helen Yura-Petro, Professor Emerita of Nursing
Michelle L. Zimmerman, Associate Professor Emerita of Nursing
# Index

**A**
- Academic Resources ................................................................. 16
- Accounting .................................................................................. 90

**B**
- Biological Sciences ....................................................................... 195
- Biomedical Engineering .................................................................. 162

**C**
- Campus Services ........................................................................... 58
- Chemistry & Biochemistry .............................................................. 198
- Civil & Environmental Engineering ................................................ 163
- College of Arts & Letters ............................................................... 65
- College of Business and Public Administration ............................. 84
- College of Health Sciences ............................................................. 179
- College of Sciences ........................................................................ 194
- Communication & Theatre Arts ....................................................... 65
- Communication Disorders & Special Education ............................... 98
- Computer Science .......................................................................... 199
- Counseling & Human Services ....................................................... 107

**D**
- Darden College of Education ........................................................ 97

**E**
- Economics ..................................................................................... 91
- Educational Foundations & Leadership .......................................... 110
- Electrical & Computer Engineering ............................................... 166
- English .......................................................................................... 66

**F**
- Faculty .......................................................................................... 221
- Faculty Emeriti ................................................................................ 241
- Financial Awards ............................................................................ 44
- Frank Batten College of Engineering & Technology ....................... 157

**G**
- Gene W. Hirschfeld School of Dental Hygiene ............................... 185
- General Information ...................................................................... 6
- Graduate Admission ....................................................................... 21
- Graduate Degree University Requirements .................................... 51
- Graduate Financial Aid ................................................................... 36
- Graduate Policies & Procedures ..................................................... 47
- Graduate Registration Requirements ............................................. 24

**H**
- History .......................................................................................... 73
- Human Movement Sciences ......................................................... 118

**I**
- Information Technology & Decision Sciences ................................. 91
- International Studies ...................................................................... 75

**M**
- Management & Systems Engineering ............................................ 168
- Mathematics & Statistics ............................................................... 203
- Mechanical & Aerospace Engineering .......................................... 172
- Modeling, Simulation, & Visualization Engineering ....................... 175
- Music ............................................................................................. 78

**O**
- Ocean, Earth & Atmospheric Sciences ......................................... 205
- Officers of the Administration and Department Chairs .................. 216

**P**
- Physics .......................................................................................... 208
- Policies and Procedures .................................................................. 15
- Political Science & Geography ....................................................... 79
- Psychology ..................................................................................... 210

**R**
- Research Resources ..................................................................... 19

**S**
- School of Community & Environmental Health ............................ 182
- School of Medical Laboratory & Radiation Sciences ...................... 186
- School of Nursing ........................................................................... 187
- School of Physical Therapy ............................................................ 192
- Sociology & Criminal Justice .......................................................... 79
- STEM ............................................................................................. 124
- Synopsis of Degrees & Programs .................................................. 63

**T**
- Teacher Education Services .......................................................... 154
- Teaching and Learning .................................................................. 133
- Tuition Fees & Financial Information ............................................ 32

**U**
- Urban Studies & Public Administration .......................................... 92

**W**
- Women's Studies .......................................................................... 82

---

OLD DOMINION UNIVERSITY 245